# ROLE OF SOCIAL HEALTH PROTECTION IN UNIVERSAL HEALTH COVERAGE:

# A CASE STUDY OF PAKISTAN


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## CERTIFICATE

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It is certified that the thesis entitled: **"Role of Social Health Protection in Universal Health Coverage: A case study of Pakistan"** Has been completed by Ms. Hira Siddiqui Registration No. PIDE2016FMPHILHE02 under my supervision. It is also certified has the thesis is based on original research work and meets all criteria and standards laid down for M. Phil degree.

The following areas have been critically monitored:

1. Conformance to APA format.
2. Precision & Correctness of the language.
3. Literature Review is relevant and comprehensive.
4. Relevance of references with the text.
5. Methodology and Estimation techniques are appropriate.

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Candidate of M. Phil Health Economics at the Pakistan Institute of Development Economics do hereby declare that the thesis: **"Role of Social Health Protection in Universal Health Coverage: A case study of Pakistan"** Submitted by me in partial fulfillment of M. Phil Degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

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بسم الله الرحمن الرحيم

***Dedicated to***

***My loving & caring parents and my Nani Jan***

***and the most honorable Dr. Fazli Hakim Khattak.***

***Without their support, guidance, and prayers the completion of this research work was not possible.***

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***Hira Siddiqui***

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| | |
|---|---|
| Antenatal Care | ANC |
| Benazir Income Support Program | BISP |
| Capacity to Pay | CTP |
| Catastrophic Health Expenditure | CHE |
| Gesellschaft für Internationale Zusammenarbeit | GIZ |
| Gross Domestic Product | GDP |
| Household Integrated Economic Survey | HIES |
| International Labor Organization | ILO |
| Lower Middle-Income Countries | LMIC |
| National Health Account | NHA |
| National Social Security Funds | NSSF |
| Non-Governmental Organization | NGO |
| Oral Rehydration Salt | ORS |
| Out of Pocket Expenditure | OoP |
| Pakistan and Living Standards Measurement | PSLM |
| Prenatal Care | PNC |
| Prime Minister National Health Program | PMNHP |
| Social Health Insurance | SHI |
| Social Health Protection | SHP |
| State Life Insurance Corporation | SLIC |
| Structure Equation Model | SEM |
| Sustainable Development Goals | SDGs |
| Tetanus Toxoid | TT |
| Universal Health Coverage | UHC |
| World Health Organization | WHO |

# ABSTRACT

The Sustainable Development agenda, which will be driving the development discourse of the world in the next fifteen years, has 17 goals and 169 targets. Goal 3 is related to health and it has 13 targets. Target 3.8 states "Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all". This target - related to universal health coverage (UHC) is considered the linchpin of all other health targets. Although more than 100 countries across the world are pursuing UHC reforms, there is no one-size-fits-all approach to achieving UHC. It has been recommended that governments should develop approaches that fit the social, economic, demographic, and political context of their countries. In conclusion, the scope of UHC is much more than just health, set with a primary objective of extending quality-assured essential health services in order to improve the health standards of the beneficiaries, without compromising the financial status of the family. Thus, by moving toward UHC through SHP, it will help nations to achieve equity and social inclusion.

# CHAPTER 1

## INTRODUCTION

Social Health Protection [1] (SHP) is a significant instrument for economic growth and development. A healthier population is more creative and productive; labor supply increases in the economy when morbidity and mortality rates lower. Conversely, the nonexistence or no access to necessary health care has significant social and economic outcomes, push people into poverty and out of the workforce, resulted in poor economic growth and development.

Responsive Social Health Protection system delivers Universal Health Coverage [2](UHC) to desirable health care that is affordable, available, of adequate quality and offers financial protection in time of need.

A country's SHP floor should guarantee access to essential health care and a minimum level of income protection in the case of illness, unemployment disability and maternity. These guarantees should be nationally defined and applied consistently to all, regardless of age, gender, ethnicity, income, employment status or geography in order to avoid inequities between formal and informal economy workers, and between the rich and the poor.

In Pakistan, where patients pay around 70% of their health expenditure out of pocket (Khalid and Sattar, 2016) and where access to SHP is scarce, health expenses are an important source of financial shocks. In the absence of SHP, illnesses or accidents often induce various negative outcomes in terms of health, adult and child labor, among others.

In 2008, the Government of Pakistan initiated the tax-funded Benazir Income Support Program (BISP) to provide basic Social Protection (SP) to those living under the poverty line. In 2012 BISP launched the Waseela-e-Sehat Micro Health Insurance Scheme (MHIS) to protect its beneficiaries from the financial risks of ill health. The

[1] SHP means a series of public or publicly organized and mandated private measures against social distress and economic loss caused by the reduction of productivity, stoppage or reduction of earnings or the cost of necessary treatment that can result from ill health.

[2] UHC means everyone, everywhere can access essential quality health care and services without facing financial hardship

management and detailed design of the scheme has since been entrusted to the State Life Insurance Corporation (SLIC).

### 1.1 Background of the Study

Affordable access to healthcare services is a key issue in many developing nations. The increasing costs, financial restrictions of public spending and economic considerations in regards to global effectiveness are calling for changes in SHP as a political need. In middle and low-income nations, guaranteeing reasonable SHP is high in the development plan where many individuals are lacking sufficient financial means to access health services around the world, more than 100 million individuals are pushed into poverty consistently because of healthcare payments for the effective services.

Denied access to basic healthcare facilities has an important social and financial effect: beside impacts on health and poverty, there is close link between population health, labor market this is because if morbidity and mortality percentage is lesser healthier workers produce resulted in higher productivity which increases the labor supply in the economy and economy of any country is more developed.

Out of pocket payments [3](OoP) is the most important requirement for access to health care services. World Health Organization [4](WHO) 2003 database in lower income countries 2/3 of total healthcare spending out of 1/3 of the worldwide.

Basic household expenditures like food, shelter, and clothing are reduced due to out of pocket health care expenditures. Even some of the household borrow money or sell their assets and utilized their saving to meet the need of their health care cost. These health care cost shocks push individuals or a household toward poverty. Furthermore, these OoP are the main hurdle at the time of seeking health care facilities because of their affordability (Adlung et al, 2006).

According to the WHO after paying for medical care 100 million population in the world pushed into poverty every year. Above 150 million people spend the half of

[3] OoP means medical expenses paid directly to the health care provider for seeking health care.it includes doctor's consultation fees, purchases of medication and hospital bills.

[4] A part of the United Nations that deals with major health issues around the world. The World Health Organization sets standards for disease control, health care, and medicines; conducts education and research programs; and publishes scientific papers and reports. A major goal is to improve access to health care for people in developing countries and in groups who do not get good health care. The headquarters are located in Geneva, Switzerland. www.who.int

their total income on medical and health care expenses main reason behind is because most of the countries in the world have no access to SHP schemes and also the lack of basic health services coverage. In the world, less developing countries poor people more spend on their medical expenses. On the other hand, developed nations like Germany affordable health insurance or SHP program establish for their nation. Germany average GDP is $32860 per capita and 100% population coverage through SHP. Only 10% of the total income they spend on healthcare facilities. Contrary Pakistan per capita is $1641(Pakistan Economic survey 2017-18) and 70% of the Pakistani population spend their money on the healthcare. These healthcare expenses paid directly by the household individual in the form of out of OoP.

### 1.2 Current Health Expenditure in Pakistan

In Pakistan Healthcare spending is low but over the time it's raising. The country is spending 0.5 to 0.8 percent of its GDP on health over the last 10 years. These percentages are less than the WHO benchmark of at least 6 percent of GDP required to provide basic and lifesaving services. During 2015-16, total expenditure increased by 13 percent over 2014-15, and during current fiscal year (July-March) 2016-17, the expenditure remains at 145.97 billion showing an increase of 9 percent over the same period of last year. According to the world Bank latest report, currently, Pakistan's per capita health spending is US $ 36.2 which is below than the WHO'S low-income countries benchmark of US$ 86 (Pakistan Economic Survey 16-17)

### 1.3 Out of Pockets Health Expenditure

Health care expenditure accrues on the basis of health care services utilization and illness (Australian Aid, 2012). According to WHO, OoP payments are those payments which are paid by the household directly to the doctors, pharmaceuticals and other medical personals. The basic aim of the OoP health payments is seeking health care at the time of need and restore the household health.

In Pakistan, as compared to 2007-2008 out of pocket payments from total health care expenditure decrease by 5% in 2009-2010, but in the form of monetary term, OoP increased from Rs 227,316 to Rs 271,757 demonstrating the decline in the GDP contribution to health (NHA, 2009). OOP as a percentage of private expenditures has also declined from 88.2% in 2009 to 86.3% in 2011 (Australian Aid,

2012). These OoP payments put families in the risk of vulnerability and also they have no access to the health care facilities (Tomini, Packard, Tomini, 2012).

### 1.4 Significance of the Study

After the 18th constitutional amendment, health is a provincial government mandate and provinces are setting up their local governments (National Health Vision[5] 2016-2020). All the provincial governments mutually agreed with each other for enhancing and improving the efficiency of the health system by increasing the public health spending in their geographical domains (National Health Vision 2016-2020). This research will be of interest to Ministries of Health, Ministry of Planning and Development, Pakistan Bureau of Statistics, Development Partners, Health Financing Practitioners, and Researcher; the Secretariat in the Parliament and Sustainable Development Goals [6](SDGs).

SHP is designed to alleviate the burden caused by ill health and reduce the indirect costs of disease and disability, such as lost years of income due to short and long-term disability, care of family members, lower productivity, and the impaired education and social development of children. Better health enables persons to work and generate income, and as such has the potential to break the cycle of ill health and poverty.

### 1.5 Literature Gap

Limited literature is available on SHP in Pakistan. Globally hundreds of studies have been comprehended are available, but socio-economic conditions being different in Pakistan does not fit for the SHP. A fewer Research Studies are available, infer the proposed thesis is significant to make an effort for the addition in the available literature.

### 1.6 Problem Statement

In the past, MDGs have not been achieved properly. Those were followed by the SDGs, particularly achievement of UHC. There were financial resources

[5] http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/pakistan/national_health_vision_2016-25_30-08-2016.pdf.

[6] SDGs: are the blueprint to achieve a better and more sustainable future for all. They address the global challenges face, including poverty, hunger, health, education, global warming, gender equality, water, sanitation, energy, urbanization, environment and social justice.

constraints responsible for non-achievement of the observed targets. Therefore the purpose of the study will evaluate the best efforts and identify the reasons for non-achievement of the targets.in light of the past shortfalls the study will discuss the application of SHP to achieve the UHC.

To analyse the current status of UHC in Pakistan regarding quick access to quality healthcare services, equity in access to health services and decreasing the level of financial risk protection. The gaps and hurdles in the achievements of UHC will be identified and solutions sort out in a policy framework.

### 1.7 Research Questions

- Does SHP contribute to the UHC in Pakistan?
- Does SHP help to achieve UHC with the affordable cost?
- Is SHP helpful to reduce OoP on health in Pakistan?

### 1.8 Objective of the Study

The main objectives of this study are to access the progress towards UHC through SHP.

1. Examine the progress towards UHC in term of essential health care services and financial protection coverage.
2. Evaluate the impact of SHP in poverty reduction due to OoP.

### 1.9 Structure of the Desertion

The organization of the study includes.

**Chapter 1** Introduction

**Chapter 2** includes the relevant literature about Social Health Protection? What is UHC and why Countries should invest in it?, Determinants of Catastrophic health expenditures (CHE) and UHC reforms, Performance for Universal Health Coverage, Success Stories of Different Countries.

**Chapter 3** Theoretical and Conceptual Framework of the Study.

**Chapter 4** Data and Methodology

**Chapter 5** Results

**Chapter 6** Analysis

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# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Introduction

SHP work as an economic stabilizer at the time of recession. SHP programs also work efficiently for the development of the economy. SHP is closely linked with the population health, labor market, and economic development. When it works as economy stabilizer result increase labor force in the labor market, increase productivity and efficiency of the labor, which bust-up the economy and its GDP. Conversely, no access to the basic and necessary healthcare facilities leads the population into the poverty and out of the workforce and also impact significantly on the social and economic conditions of a nation. (ILO, 2013a).

## 2.2 Definition of Social Health Protection (SHP)

"*Based on the core values of equity, solidarity and social justice, the ILO defines SHP as a series of public or publicly organized and mandated private measures against social distress and economic loss caused by the reduction of productivity, stoppage or reduction of earnings or the cost of necessary treatment that can result from ill health*".

### 2.2.1 What is SHP

According to Adlung (2014), the key issues of health disparity and discriminatory access to medicinal services identify with gaps in enactment, outline, and financing of social health protection plans and frameworks and the social and monetary status of the powerless. He inferred that gaps in Social Health Insurance (SHI) scope and powerful access to medicinal services are the real reasons for health (Adlung, 2014) imbalances, social and economic disparities existing beyond the health division contribute incredibly to the obstacles getting the moderate and adequate health services.

Kuhl et al (2012) state in study SHP coverage given by a mix of open plans, SP, and privacy protection. In low-wage nations, group-based plans or small scale protection are additionally found. The hidden outline of related frameworks and conspires and related financing components depend on presumptions of

"commonplace" financial examples, e.g. with respect to accessibility of pay to pay for client expenses or co-installments that may cause rapid disparities in access of those that don't coordinate them. In this way, some basic components natural in the plan and financing of social health assurance frameworks may constitute boundaries that create in disparities and constitute foundational shortcomings.

Ortiz (2014) Access to health protection is accordingly a key for both population health and for boosting the economy. Guaranteeing that everybody can go to quality health services is essential for maintainable advancement in view of value and comprehensiveness. To adequately address the worldwide health protection crisis, all-inclusiveness of health coverage must include equal access for all individuals wherever they live and work, in the country or urban zones, in the formal or casual economy, regardless that one is poor or rich, women or men, elderly or youngsters.

WHO Working Paper (2014) the criteria of affordability of medical services identifies with the non-presence of these financial obstacles are the main cause for people, population groups and societies to access the healthcare services. The accessibility of social insurance identifies with the physical presence of an arrangement of fundamental health facilities to the general public, health personnel like doctors, nurses, paramedic staff convey these services, foundation enabling people to access these health services without any constrains. Without at least one of these segments, viable access to satisfactory care won't be conceivable. He likewise clarifies that creating financing systems that give satisfactory assets is a key to advance towards UHC.

The WHO (2007) stipulated that as a base 9 % of the national spending plan ought to be allotted to health. Senegal passed this edge 5 years back, and the nation is appraised as the fourth in Africa for best execution regarding geographic access to human services and operational projects. The medicinal services framework was decentralized to make it nearer to districts and nearby groups, group cooperation in health panels has been sorted out and division programs were produced inside the system of a general health arrangement.

Serra et al (2011) Effective access to care, higher prominence of financial risk pooling, and higher levels and shares of pre-paid health spending are regarded as key dimensions of extended health system coverage. the potential link between system

coverage and population health status has played a crucial role in the aforementioned debate, the expected relationship between health outcomes and system coverage measured either by pre-paid spending (total, public or private) or health service utilization is ambiguous a priority.

Pakistani nation out of total income large number of the portion is financed through OoP payments for health care services and these payments approximately 55% of total health care cost (Habib, Perveen, & Khuwaja, 2016). Only 26 % of the population in Pakistan covered by the government, armed forces, corporate sector or other safety nets for its health care expenditures, this population covered practically not fully for health expenditures (Nishtar, 2010). Government expenditure on health per capita, Health expenditure per capita, and Health expenditure as a share of GDP were 10, 36, and 2.6% respectively (WHO report 2014).

### 2.3 What is Universal Health Coverage and why Countries should invest in it

Before highlighting the subject, it is focused that why the countries invest for better health to achieve the UHC targets. UHC describe that everybody receives the needed quality healthcare without enduring financial hardship at the time of receiving care (WHO 2010). The first objective is to ensure that needed health care, ranging from the promotion, prevention, treatment, rehabilitation, to palliative care, is accessible. Further, the care needs to be of sufficient quality to achieve the desired outcomes. Equity is emphasized in the UHC concept by including everybody. The second objective is to achieve financial protection; this entails compulsory prepaid pooled coverage for health expenditures so that people don't forgo care because of their inability to pay and in case of seeking care, they do not have to compromise their other basic social needs because of health expenditures.

The concept UHC has widely gained acceptance in the last one and a half decades. Emphasis on UHC reforms secured an eminent position in World Health Assembly resolution in 2005 World Health Report on primary health care in 2008, WHO on the path towards UHC in 2010, a World Health Assembly resolution in 2011, a United Nation General Assembly resolution on UHC in 2012, and presently is one of the targets for SDGs 2030 has to achieve UHC worldwide. More than 100 low- and middle-income countries, accounting for three fourth of the world's 6 billion population, have initiated UHC reforms in the last few years. Further, Brazil, Russia,

India, China, and South Africa (BRICS) home to half of the world's population are already pursuing large scale UHC reforms (First global monitoring report 2015).

The main arguments for countries' support for UHC are its health, economic, and political benefits.

Regarding health benefits, Lancet study in 2012, using data from over 150 countries, found that "broader health coverage generally leads to better access to necessary care and improved population health, with the largest gains accruing to poorer people". Moreover, the study demonstrated that an increase of 10% in pooled government spending on health resulted in decreasing 7.9 deaths per 1000 children under five. On the contrary, higher adult mortality was observed in the cases where out of pocket expenditures made a higher proportion of health expenditures. Similar evidence on improvements in health indicators because of broader health service coverage along with financial protection has been observed in case studies of Brazil and Niger (Amouzou A et al, 2012).

On the point of economic benefits of UHC, 267 renowned economists from around the world signed the "Economists Declaration on UHC" in 2015. They were of the view that economic returns on investments in UHC are more than ten times their costs. UHC accrues economic benefits in many ways. First, it protects people from making catastrophic and/or impoverishing out of pocket health expenditures at the time of receiving care through prepaid pooled financing (WHO, 2010).

A 10-year impact assessment of Thailand's Universal Coverage Scheme demonstrated that the scheme reduced the number of people falling below the poverty line because of healthcare payments to half (Evans et al, 2012). Secondly, household who are covered through prepaid pooled means, they have lesser worries to save money for future health needs and they can spend on their other needs, promoting more cash flow for the overall economy. Thirdly, UHC benefits the economy by providing a healthier workforce with better educational outcomes.

On the subject of political benefits of UHC, a handbook from WHO titled "Arguing for Universal Health Coverage" (Yates et al, 2013) has cited examples from 14 countries in which UHC reforms were driven by the political agenda. These countries represent a broad range of development spectrum and include United Kingdom (UK), Japan, South Korea, Brazil, South Africa, Thailand, Zambia,

Burundi, Nepal, Ghana, China, Sierra Leone, Georgia, and United States of America (USA). The timing of political reasons and UHC reform intersection ranges from UK's 1948 tax based financed National Health Service reform for UHC, USA's 2012 National Health Service reform to reduce the proportion of the uninsured population. It has been observed that majority of large scale UHC reforms have been forced by political leaders in their run-up to elections or soon after gaining the power. If planned carefully, with a focus on sustainability, UHC reforms can certainly ensure political benefits.

Acknowledging the benefits from the UHC WHO 2013 underscored the importance of research on the subject UHC. The report said, "Many questions about universal health coverage require local answers" (WHO Report 2013) and encouraged all the countries to be both producers and consumers of the research on UHC.

## 2.4 Determinants of Catastrophic Health Expenditures (CHE) and UHC Reforms

Along with health service coverage, financial protection is an equally important objective of UHC. In case of no or minimal prepaid pooled financing, out of pocket expenditures on health make more than 150 million people suffer financial catastrophe and push around 100 million below the poverty line globally every year (WHO, 2010).

A study from the Indian state of Gujrat reported that 88% of people falling below the poverty line cited health care payments as the main reason for their suffering (Yates et al, 2013). As countries are planning health financing reforms to extend financial protection, their policymakers often have to make tough choices with the limited resources available. The services to be covered in the benefits package, the costs to be shared with patients, and a segment of the population to be targeted for waivers are among a list of questions which pose everyday dilemmas for the policymakers (Saksena et al 2010).

To answer these questions many studies done in the past to investigate determinants of catastrophic health expenditures at the macro (health system) and micro (household) levels.

Catastrophic health expenditure (CHE) is considered a reliable measure of financial protection, as it has been well documented in various multi-country analyses (Xu,k et al 2013).

Three methodologies have been commonly used to assess whether a health expenditure is catastrophic or not. The most commonly cited is WHO's defines capacity to pay approach and this approach measure through subsistence needs of a household; if household's out of pocket health expenditure is more than 40% of its capacity to pay, the expenditure is labeled catastrophic (Xu K, 2003).

The second method is based on budget share approach; if household's out of pocket health expenditure is more than its 25% of its total expenditure, the expenditure is considered catastrophic (First Global Monitoring Report. 2015).

The third method is built on the capacity to pay based on food expenditure approach; if household out of pocket health expenditure is more than 40% its non-food expenditures, the expenditure is marked catastrophic (First Global Monitoring Report. 2015)

A multi-country analysis was done by the World Health Organization in 2010 to estimate the drivers of CHE (Saksena et al 2010).

Using World Health Survey data of 51 countries, the study assessed the incidence of CHE arising because of each type of out of pocket health expenditures (outpatient, inpatient, medicines) at a country level. Further, using a pooled cross-country regression model, the study explored association of incidence of CHE with the household characteristics (household quintile, urban/rural location, education level of household head, household with a disabled member and age composition of the household), country-level factors (OoP healthcare expenditures as percentage of total health care expenditures and the Gini coefficient of expenditure), and types of out of pocket expenditure (outpatient, inpatient, medicines). Building on this evidence, multiple studies have been published on determinants of CHE at the national level. Countries for which these studies are available to include Iran, Vietnam, China, Nepal, Georgia, Portugal, Nepal, Turkey, Tanzania, Botswana, Lesotho, Brazil, South Korea, and Thailand (Saksena et al 2010).

Nationally representative data sets were used in these studies to estimate the incidence of CHE at the sub-national level and to assess the association between

households' demographic, socioeconomic, health care need and utilization characteristics with the incidence of CHE. An important policy message of these studies for health financing policymakers has been the identification of household and health system level characteristics which make households more vulnerable for CHE.

### 2.5 Performance for Universal Health Coverage (UHC)

The World Health Report 2010 says "Health-care systems hemorrhage money". Conservative estimates suggest that 20-40% of resources spent on health are lost due to inefficiency. Even in advanced economies like the United States of America (USA), wastage of resources spent on health is rampant. Health Research Institute reported that more than half of the health expenditure in the US is wasted (Kelley, 2009); Thomson Reuters study found lesser but still reported a loss of 600-850$ billion per year (Serra, 2012). Thus, World Health Report 2010 advised that adequate health spending is not the only way for the countries to achieve UHC, but also emphasized improving the efficiency of health systems to achieve UHC. Efficiency in the context of UHC is usually measured by assessing how a health system is performing in producing quantity and/or quality of the outputs (health service coverage and financial protection) for a certain level of inputs (pooled health expenditure) (Periago M et al 2010). There is a variation in the efficiency of health systems between and within countries. A significant gap is found between what countries actually attain and what they could possibly attain with the same resources (WHO, Working Paper 2016)

A recent seminal paper by WHO titled "Spending targets for health; no magic number" presented a systematic analysis of how countries with similar levels of health spending perform on the two dimension of UHC (health service coverage and financial protection). In this paper, Jowett et al. contested the view that many policymakers have in lower-income countries that unless a health system meets a certain target of health spending, it cannot make progress on UHC; the key finding of the analysis - a large variation in performance for low levels of public spending, sends a strong signal that there is a large room for health systems in low and middle-income countries (LMICs) to improve their performance and make progress leads to UHC, even if their health care spending is low.

## 2.6 Success Stories of Different Countries

### 2.6.1 Germany

SHI and other socioeconomic factors contributed to achieving better health outcomes that lead to achieving UHC. Life expectancy increases and mortality rate decreased to 50%. Infant mortality rate declines up to 2.8 per 1000 births. The principle of social solidarity is followed by German's for a social security system. The first health insurance system was first recognized in 1883 by Otto von Bismarck. Full coverage was attained in 1995 with USD PPP 33,000 per capita income in 2009, the health insurance was made mandatory for everyone at that time. The per capita USD PPP was 39,000 in constant term. People having low income from a certain level need to be enrolled in Health Insurance while those who are above a certain level can have an option for private insurance.

90% of the population in Germany use public health care system offered at the time of oldest health care system where as 10% population goes for private insurance on voluntary bases. Germany also a country who have access the special services with immediate low OoP payments. Germany spent a lot on health care per capita as of America does the the difference is on the quality of services been provided.

### 2.6.2 Brazil

Brazil has introduced health improvement programs in 1988 to give protection to the poor and vulnerable group. Before this, the Unified health system (Sistema Único de Saúde - SUS ) was there but very few people have access to it but now the coverage is of around 140 million from 30 million (Jurberg et al 2010). Through SUS a notable improvement has been seen especially the fall in child mortality rate from 46 per 1000 live births in 1990 to 17.3 per 1000 live births in 2010.

Life expectancy also rises to 73 years in 2010 from 70 years in past 10 years and it also results in a reduction in inequalities. Health reforms have also been seen in some Sub-Saharan African countries that have implemented pro-UHC reforms. Such health reforms also become a cause of optimism in Brazil. When the government has started the health policies for coverage universally, free access to pregnant ladies and children and decentralized health and nutrition policies at that time the child mortality rate was 226 deaths per 1000 live births in 2000 that falls to 128 in 2009 (Amouzou et

al 2012). This was done to provide free services to pregnant women and children of under 5 age. Moreover, the government has introduced public financing and new performance-based health financing system to remove financial barriers which help in waterway the public funds and make the government meet the increased demand for services.

### 2.6.3 Thailand

Thailand has introduced UCS and it resulted in a reduction of OoP expenditures and CHE which was leading to impoverishment due to high healthcare cost. From 1996 to 2008, the fall of CHE of the poorest families was from 6.8% to 2.8% and the incidence of falling in poverty was declined up to 0.49% from 2.71% in 2000 (An independent assessment of the first 10 years 2001-2010)

From 2004 and 2009 it was reviewed that almost 292000 household was saved from impoverishment by declined OoP expenditures due to coverage been provided by UCS program. The essential services provided by UCS have increased the financial protection rate as of 31% outpatient service utilization and 28% usage of inpatient services and these were between 2003 and 2010 (An independent assessment of the first 10 years 2001-2010)

### 2.6.4 Mexico

Mexico has started Seguro Popular for its nationals to provide protection. It was mostly financed through the contributions of the rich people and general taxes. Almost 53 million people, largest portion was coming from a very poor and economically deprived group of society. Such change decreases the catastrophic expenditure to 2% from 3.1% of the population between the years 2000 to 2010 and also reduction in impoverishment rate from 3.3% to 0.8. This also resulted in the use of essential services leading to an improvement in health status. Due to the above mention health program, the child and maternal mortality rate reduced up to a sustained level. 5% reduction in child mortality was due to social security program while 11% was due to Seguro Popular program (Knaul F M et al 2012)

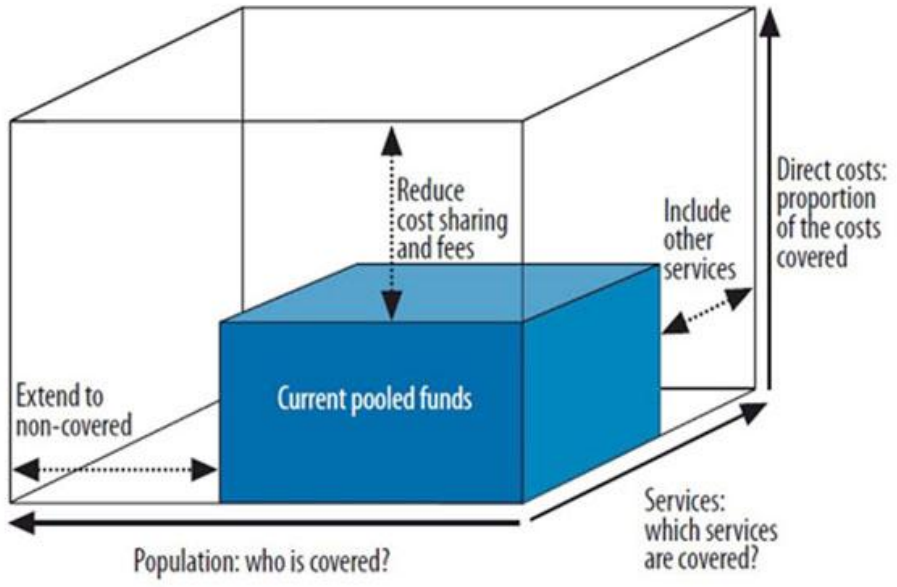
## 2.7 Conclusion

Social Health Protection leading to Universal Health Coverage exists when all people receive the quality health services they need without suffering financial hardship. UHC combines two key elements, the first relating to people's use of the health services they need and the second to the economic consequences of doing so.

# CHAPTER 3

## CONCEPTUAL FRAMEWORK

Using the 2010 World Health Report's three-dimensional framework for UHC as a starting point, a study conducted a literature review of research that addressed the measurement of one or more of the two dimensions. The service coverage dimension captures the aspiration that all people can obtain the health services they need, while the financial coverage dimension aims to ensure that they do not suffer financial hardship linked to paying for these services at the time they need them.




Source, WHO health report 2012, Geneva.

Monitoring progress towards UHC should focus on 2 things:

- The proportion of a population that can access essential quality health services.
- The proportion of the population that spends a large amount of household income on health.

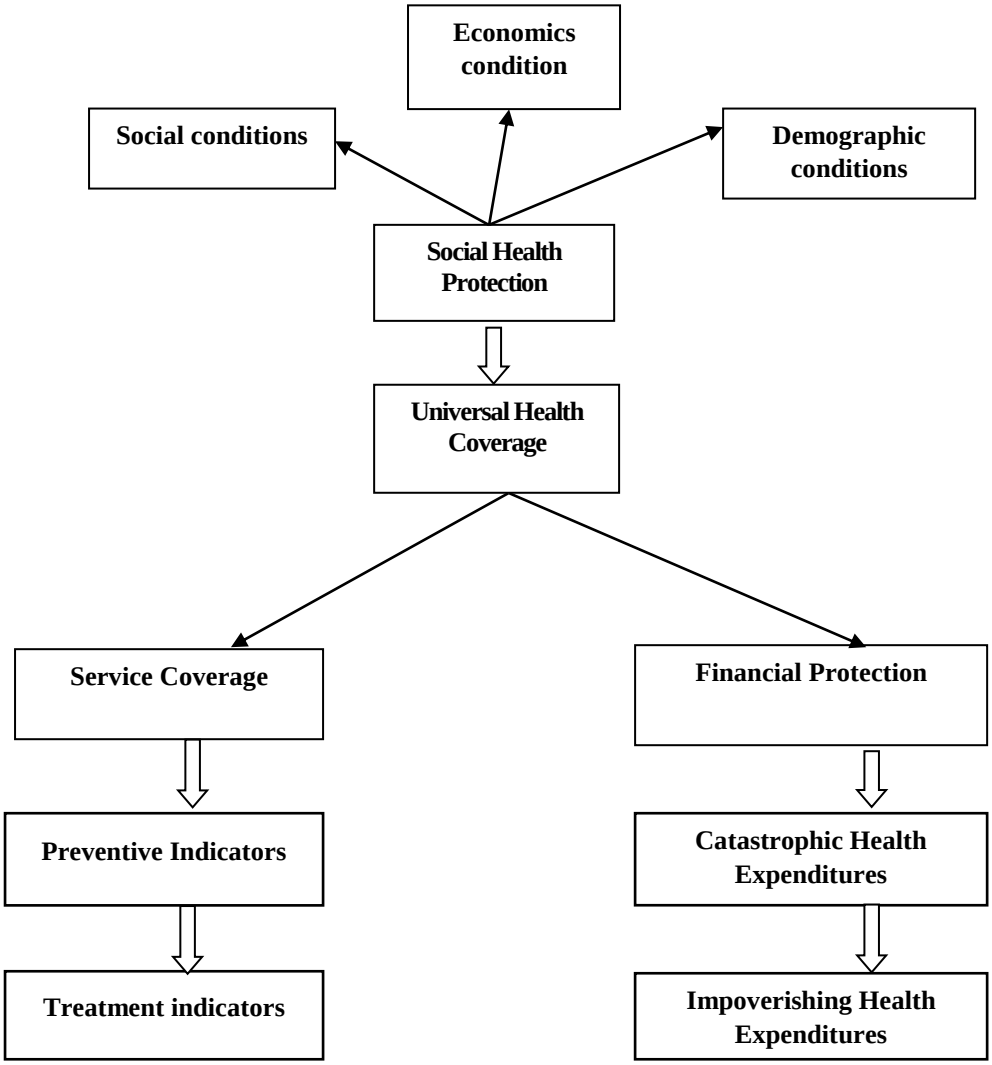
Together with the World Bank, WHO has developed a framework to track the progress of UHC by monitoring both categories, taking into account both the overall level and the extent to which UHC is equitable, offering service coverage and financial protection to all people within a population, such as the poor or those living in remote rural areas.

### 3.1 Conceptual Framework

Using the 2010 World Health Report's three-dimensional framework of UHC conceptual framework has been constructed. Variables required for this purpose is a social economic condition, income, age, family size, household food and non-food expenditure, health care expenditure, health service coverage, and financial protection indicators. Data related to these variables enable the researcher to access the performance of SHP for UHC.

To assess the performance of SHP for UHC Guidance was sought from "Tracking Universal Health Coverage. First Global Monitoring Report" for selecting tracer indicators related to both dimensions of UHC. For health service coverage, three preventive and three treatment indicators were selected. Preventive indicators included immunization coverage, prenatal consultation, family planning methods. Treatment indicators included skilled birth attendance, post-natal consultation, and treatment of diarrhea cases with Oral Rehydration Salt. For financial protection dimension, two recommended financial protection indicators were estimated: percentage of households with no catastrophic health expenditures and percentage of households with no impoverishing health expenditures.

### 3.2 Conceptual Framework Diagram



# CHAPTER 4

# DATA AND METHODOLOGY

Data and methodology chapter is the most import part of the research. It describes the detailed information regarding data and methodology. Chapter explain which type of data is used either primary or secondary, detail description about the variables used in the study. How these variables estimated and calculated. Which type of economic theory and an econometric model is used for the estimation and basis of these information finding and conclusion is to be made.

## 4.1 Data Collection Instrument and Description

### 4.1.1 Questionnaire

In this study, primary data is used through structured interviews. For this purpose, questionnaire is designed and this was cross-sectional study. A total sample of the study is 200 and these sample size was simple randomly selected.

The questionnaire is designed with modifications adopted from two Pakistan national represe3ntative surveys Household Integrated Economic Survey (HIES) and Pakistan Social and Living Standards Measurement Survey (PSLM). The main objective adopted questionnaire from these surveys was that finding and results of this research compared with the nationally presentative sources.

In the questionnaire, the first section contain basic information of the household like age, gender, marital status, education, family size, and occupation. The second section includes income, food expenditure, non-food expenditure and health care expenditure of a household. This section also includes either household receiving any social health protection or not. The third section includes service coverage related questions like immunization and diarrhea, mother health (prenatal, post-natal care, place of childbirth, who assist delivery, TT dose vaccine and multivitamins). Family planning coverage with modern methods and communicable and non-communicable diseases (prevalence, type, treatment).

### 4.1.2 Ethical Consent

- Ethical approval for the research obtained from the Health Department (PIDE).
- Official written letter by the institute gave to the hospital for data collection. Therefore Permission secured at all levels.
- After 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 kept confidential in every step of data collection, entry and estimation. The participant's names, address, 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 used only for research purpose.
- This study was non-interventional and it involved no invasive technique at all.

## 4.2 Methodology

### 4.2.1 Study Design

It was a Cross-sectional study to find out "Universal Health Coverage".

### 4.2.2 Duration of Study

This study was conducted over a period of 4 months Data collection, data analysis and data interpretation were completed during the period.

### 4.2.3 Study Area

Rawalpindi and Islamabad.

### 4.2.4 Study Population

Patients in Islamabad and Rawalpindi hospitals were selected.

- **Sampling**: Simple Random sampling technique used
- **Sample Size**: 200 sample size.

### 4.2.5 Data Analysis Plan:

SPSS and Microsoft Excel used to analyze the data and generate results. Where details are shown through tables.

## 4.3 Operational Definition of Variables

### 4.3.1 Out of Pocket Health Care Payments

OoP payments are defined as direct payments made by individuals to health care providers at the time of service use. This excludes any prepayment for health services, for example in the form of taxes or specific insurance premiums or contributions and, where possible, net of any reimbursements to the individual who made the payments (WHO).

### 4.3.2 Health Care Expenditure

Health spending consists of health and health-related expenditures. Expenditures are defined on the basis of their primary or predominant purpose of improving health, regardless of the primary function or activity of the entity providing or paying for the associated health services.

### 4.3.3 Household Consumption Expenditure

Household consumption expenditure comprises both monetary and in-kind payment on all goods and services and the money value of the consumption of home-made products.

### 4.3.4 Food Expenditure

Household food expenditure is the amount spent on all foodstuffs by the household plus the value of the family's own food production consumed within the household. However, it excludes expenditure on alcoholic beverages, tobacco, and food consumption outside the home (e.g. hotel and restaurants).

### 4.3.5 Household Subsistence Spending

The household subsistence spending is the minimum requirement to maintain basic life in a society.

### 4.3.6 Catastrophic Health Expenditure

Catastrophic health expenditure occurs when a household's total out-of-pocket health payments equal or exceed 40% of a household's capacity to pay or non-subsistence spending. The threshold of 40% could be changed according to countries' specific situation.

### 4.3.7 Impoverishment Health Care Expenditures

A non-poor household is impoverished by health payments when it becomes poor after paying for health services.

### 4.4 Variables used in the Study

| **Table 1: Health Service Coverage Indicators** | |
|---|---|
| • Children under 5 year of age that were received full immunization (based on record and recall). | • Skilled health care provider during the delivery |
| • Women who are pregnant and give birth between 3 years and visited healthcare facility for antenatal care (ANC) and check-up. | • Diarrhea cases for children who are under the 5 years and given Oral Rehydration Salt (ORS) to the child as the treatment. |
| • Women who received post-natal care (PNC) within 6 weeks after delivery. | • Diarrhea cases for children under the 5 years where a health facility was consulted for treatment |
| • Family planning coverage with modern methods (aged 15-49) | • Communicable and non-communicable diseases |

*Source: "Tracking UHC. First Global Monitoring Report"*

Table 1 shows that Service coverage related questions like immunization and diarrhea, mother health (prenatal, post-natal care, place of childbirth, who assist delivery, TT dose vaccine and multivitamins). Family planning coverage with modern methods and communicable and non-communicable diseases (prevalence, type, treatment). These indicators used to assess the UHC coverage through SHP.

| Table 2:Financial Protection Tracer Indicators | |
|---|---|
| • Catastrophic Health Expenditures | • Impoverishing health care expenditures |

*Source: "Tracking UHC. First Global Monitoring Report"*

Table 2 shows Financial Protection indicators. Financial Protection measure through catastrophic Health Expenditures and impoverishing health care expenditures. These indicators show how much people protected from the Health care cost.

### 4.5 Calculation of Important Variable

#### 1) Household subsistence spending

The poverty line is used to analyse the subsistence spending. The household subsistence spending is the minimum requirement to maintain basic life in a society. A poverty line is used in the analysis as subsistence spending.

There are many ways to define poverty. None of them are perfect considering the soundness in theory and feasibility in practice. Here we use a food share-based poverty line for estimating household subsistence. This poverty line is defined as the food expenditure of the household whose food expenditure share of total household expenditure is at the 50th percentile in the country. In order to minimize measurement error, we use the average food expenditures of households whose food expenditure share of total household expenditure is within the 45th and 55th percentile of the total sample. Considering the economy scale of household consumption, the household equivalence scale is used rather than actual household size. The equivalence scale is:

$$eqsize_h = hhsize_h^{\beta}$$

Where $hhsize_h$ is the household size. The value of the parameter β has been estimated from previous studies based on 59 countries' household survey data, and it equals 0.56.

**1st step**

Calculate food share:

Divide household's food expenditure by its total expenditure

$$foodexp_h = \frac{food_h}{exp_h}$$

**2nd step**

Calculate the equivalent household size for every household

$$eqsize_h = hhsize_h^{0.56}$$

**3rd step**

Equalized food expenditure

$$eqfood_h = \frac{food_h}{eqsize_h}$$

**4th step**

Identify the food expenditure shares of total household expenditure that are at the 45th and 55th percentile across the whole sample, name these two variables as food45 and food55. If the survey includes a household weighting variable, the percentile calculation should consider the weight.

**5th step**

$$pl = \frac{\sum w_h * eqfood_h}{\sum w_h}$$

Where $food45 < foodexp_h < food55$

**Lastly** subsistence spending

$$se_h = pl * eqsize_h$$

A household is regarded as poor (poor) when its total household expenditure is smaller than its subsistence spending.

$$poor_h = 1 \; if \; exp_h < se_h$$

$$poor_h = 0 \; if \; exp_h \geq se_h$$

**2) Household capacity to pay**

The household's capacity to pay defined as the non-subsistence effective income of the household. However, some households may report food expenditure that is lower than subsistence spending ($se_h > food_h$)

$$ctp_h = exp_h - se_h \quad if \; se_h <= food_h$$

$$ctp_h = exp_h - food_h \quad if \; se_h > food_h$$

### 3) Out of pocket expenditure

The burden of health payments is defined as the out-of-pocket payments as a percentage of a household's capacity to pay.

$$oopctp_h = {}^{oop_h}/_{ctp_h}$$

### 4) Catastrophic health expenditure

Catastrophic health expenditure occurs when a household's total out-of-pocket health payments equal or exceed 25% of a household's capacity to pay or non-subsistence spending. The threshold of 25% could be changed according to countries' specific situation.

$$cata_h = 1 \quad if \quad {}^{oop_h}/_{ctp_h} \geq 0.2$$

$$cata_h = 0 \quad if \quad {}^{oop_h}/_{ctp_h} < 0.2$$

### 5) Impoverishment

A non-poor household is impoverished by health payments when it becomes poor after paying for health services.

$impoor_h = 1 \quad if \;\; exp_h \geq se_h \;\; and \;\; exp_h - oop_h < se_h \;\; otherwise$

$impoor_h = 0$

## 4.4 Limitation of the Study

- UHC has three-dimensional framework of analysis. Service coverage, financial coverage, and equity in access. In this study, only 2 dimensions was covered because of time constraint.
- In services coverage indicators all the recommended indicators by WHO not included in the study only essential health care services included in this research.
- No mega SHP in Pakistan to analyze the study.

# CHAPTER 5

## RESULTS

In this section of the study results are categorized with different variables with focus on services coverage and financial protection indicators. So that objective of the study fulfill.

### 5.1 Age, Family Size, Household Income and Expenditure

Statistical table of the household income and expenditure shows that the mean value of a household respond age is 33.82 which is approximately 34 year. The most repeated value in age is 30 year, minimum and maximum of age in the table is 18:75 year respectively. Minimum age in the analysis shows that respondent of the study is conscious and well aware of what is being asked from them. Maximum value indicates that one of the respondents was availing health care services under the PMNHP, respond have multiple diseases (diabetes, hypertension and heart disease).

Mean value of a household family size is 6.3 members which are same the average size of Pakistan average family size, according to the HIES 2015-2016 average household size is 6.31 members. The analysis shows that richest household as compared to poor or middle-income groups has small family size. Poor people prefer a joint family system for saving purpose, they save and distribute their household expenditures in a joint family. The statistic shows the most repeating value of the household family size is 5, the minimum and maximum value of the family size is 3:15 respectively.

Household income depends upon the level of employment status. Monthly income of the household as mean value is Rs24137.50, which is also close to the average household income of Pakistan. HIES 2015-16 shows that average household income is 32578. Most repeating, the minimum and maximum value is Rs30000, Rs2200 and Rs85000 respectively. Minimum value in the analysis shows one of the households is very low because of the level of occupation, the household is a water supplier and his daily wages is less than Rs120 per day and this household is most vulnerable to fulfill their daily household need and health care services. Average income Mean value of cost reaching to the nearest health facility is around Rs291.005. Mode, minimum and maximum value of the cost Rs200.00, Rs0, Rs 2500.

| Table 3: Table of Age, Family Size, Household Income and Expenditure | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Averages/ Value** | **Age** | **Family size** | **Monthly income of the household** | **The cost in reaching the nearest health facility** | **Monthly food expenditures** | **Monthly non-food expenditure** [7] | **Health expenditures during the last month** |
| Mean | 33.82 | 6.3650 | 24137.50 | 291.005 | 12113.38 | 10681.4500 | 3734.596 |
| Mode | 30.00 | 5.00 | 30000.00 | 200.00 | 10000.00 | 3000.00 | .00 |
| Minimum | 18.00 | 3.00 | 2200.00 | .00 | 2100.00 | 1400.00 | .00 |
| Maximum | 75.00 | 15.00 | 85000.00 | 2500.0 | 80000.00 | 480000.00 | 200000.0 |

Monthly food expenditure shows the level of consumption pattern on food and depends upon also household family size, living stander and their income level. Substance food expenditure shows how much a household spend their income on basic needs and save their income for other needs like health care facilities. Mean value of monthly food expenditure of house hold is Rs12113.38, the most repeating value of the food expenditure is Rs10000, minimum and maximum value of food expenditure is Rs2100.00, Rs80000 respectively. Maximum value shows that household.

The analysis shows that household consumption pattern is also close to their income level. Mean value of the household non-food expenditure is Rs10681.45, mode, minimum and maximum value is Rs3000.00, Rs1400.00, Rs480000.00 respectively. Mean value of the health care expenditure during the last month is Rs3734.596, the most repeating value of the health care cost is Rs.00, the minimum and maximum value is Rs.00, Rs200000.0 respectively.

### 5.2 Occupation of a House Hold Head

Income and total household consumption expenditure explain the source of income of a household and consumption pattern. Statistical analysis of the study shows that most of the respondent are labor and they were on daily wages. Wages have a major part of household income which is 28.0%, this is also justifiable according to the HIES 2015-16 shows that in Pakistan major source of income by occupation is wages and salaries. These occupational groups are a more vulnerable

[7] Nonfood expenditure include (house rent, gas, telephone bill, water and electricity bills)

group of society because of the low level of income. Mostly their spending depends upon on subsistence food expenditures. Due to low-income expenditure on health care services become the burden for them, as it leads them to catastrophic expenditure which ultimately pushes them to impoverishment. A second major source of income of a household according to this study is other sources which are 22.0%.

A third major source is government employees 20.5%. Government employees have a secure job status and government-provided health allowances to them so they are less vulnerable as compare to daily wage earners.

**Table 4: Occupation of a House Hold Head**

| Occupation | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Farmer | 3 | 1.5 | 1.5 |
| Labor | 56 | 28.0 | 29.5 |
| Fruit Vendor | 4 | 2.0 | 31.5 |
| Armed Forces | 10 | 5.0 | 36.5 |
| Driver | 15 | 7.5 | 44.0 |
| Shop Keeper | 16 | 8.0 | 52.0 |
| Self Employed | 11 | 3.5 | 57.5 |
| Govt Employed | 41 | 20.5 | 78.0 |
| Other | 44 | 22.0 | 100.0 |
| Total | 200 | 100.0 | |

N200

### 5.3 Status of Education[8]

The education level of a household member analyzes the level of awareness. Statistical figures of education show that 24.1% people education lies in others (BS, BA.MSC) which indicate that these people are aware of their health needs and its importance. Education leads to more awareness that would result in healthcare service utilization.

[8] person education primary, middle, Secondary, high secondary, other

| Table 5: Education | | | |
|---|---|---|---|
| **Education level** | **Frequency** | **Valid Percent** | **Cumulative Percent** |
| Illiterate | 32 | 16.0 | 16 |
| Primary | 14 | 7.0 | 23.0 |
| Middle | 29 | 14.5 | 37.5 |
| Secondary | 35 | 17.5 | 55.0 |
| Higher secondary | 41 | 20.5 | 75.5 |
| Others | 49 | 24.5 | 100.0 |
| Total | 200 | 100.0 | |

N200

### 5.4 Mother have Immunization Card and Child Received Immunization

One of the primary objectives of the government in the health sector is to expand the coverage of immunization and also issue vaccination cards to keep track of vaccinations given to the child. However, measuring immunization coverage is not an easy task; parents often do not have the children's immunization/health cards with information/record on vaccinations received. Immunization rates based only on the information given on immunization cards categorized as 'record'. The alternative is to ask parents about their child's vaccination history, and calculate coverage rates using this information termed as 'recall'. This runs the risk that parents will not remember vaccinations and will confuse different types of vaccines or other injections with vaccinations. However, questions are asked in the questionnaire in a way to filter out such cases.

In this study, both of these measures are calculated for all children of the age under 5 years. Statistics show that 54% of the mother have immunization card and 45% mother don't have a card and this percentage indicates recall base information about the child immunization. Immunization coverage in this analysis is 54% because according to the data only those children included in immunization who are under 5 year of age. 45% with no immunization shows that children are above 5 years of age and they are in excluded from this question of immunization coverage.

| Table 6: Immunization | | | |
|---|---|---|---|
| **Child received immunization** | | | |
| | **Frequency** | **Valid percent** | **Cumulative percent** |
| No | 92 | 46.0 | 46.0 |
| Yes | 108 | 54.0 | 100.0 |
| Total | 200 | 100 | |
| **Facing diarrhea** | | | |
| No | 188 | 94.0 | 94.0 |
| Yes | 12 | 6.0 | 100.0 |
| Total | 200 | 100 | |

N200

Diarrhea is a condition that involves the frequent passing of loose or watery stools - it is the opposite of constipation and can have many causes, which may be infectious or noninfectious. Diarrhea can kill anyone by dehydration because diarrhea is watery in nature, it takes up a lot of the water in your body. Diarrhea can be dangerous in newborn and infants. In small children, severe diarrhea lasting just a day or two can lead to dehydration. Diarrhea disease is the second leading cause of death in children under five years old. Diarrhea can last several days and can leave the body without the water and salts that are necessary for survival. Most children who die from diarrhea actually die from severe dehydration and fluid loss. Childhood diarrhea has been a serious health problem in Pakistan.

Both its prevention, through improved water and sanitation, and the treatment of dehydration through oral re-hydration salt (ORS) are goals of the government. Home management of diarrhea through Oral Rehydration Salt (ORS) or a recommended home fluid (RHF) can prevent many of these deaths. Households were asked to report whether a child had diarrhea in the 30 days prior to the survey. If a child suffered from diarrhea in the last 30 days, a series of questions were asked whether they have consulted someone for it or not and whether ORS has been given to child or not. Overall six percent 6% of children who have suffered from diarrhea in the 30 days prior to the survey and this value is close to the PSLM survey. In PSLM 2014-2015 9% of the children face diarrhea.

### 5.5 Pre and Postnatal Care

Maternal health is a serious issue in developing countries including Pakistan. To reduce maternal mortality, the provision of quality pre-natal care can help to reduce the risk factors including pre-eclampsia, anemia, and sexually transmitted diseases. Pre-natal care also encourages women to learn the symptoms of pregnancy and delivery, to be immunized against tetanus, to know about infant care.

Tetanus Toxoid injections are given to women during pregnancy to protect infants from neonatal tetanus, a major cause of infant death that is primarily due to unsanitary conditions during childbirth. In addition, these injections protect women from developing tetanus themselves or suffering from sepsis. Two doses of tetanus Toxoid during pregnancy offer full protection. However, if a woman was vaccinated during a previous pregnancy, women may only need a booster dose to give full protection. Five doses are thought to provide lifetime protection. Pre-natal care during last pregnancy 96%. In Pakistan, most of the prenatal care i.e. 84 percent took place at a public hospital and 10% in private hospital/clinics while 5.2 percent took place at home. Overall 97% of women had received a tetanus toxoid injection during their last pregnancy.

Mother requires proper education regarding child health to maintain the quality of life, similarly, mother shall be aware of the problem like anemia (blood deficiency) to treat these timely and save their lives to provide proper pre and postnatal care.

| Table7: Pre and Postnatal Care | | | |
|---|---|---|---|
| **Pre-natal care during last pregnancy** | | | |
| | **Frequency** | **Valid Percent** | **Cumulative Percent** |
| No | 3 | 3.8 | 3.8 |
| Yes | 77 | 96.3 | 100.0 |
| Total | 80[9] | 100.0 | |
| **Source of prenatal care** | | | |
| Govt Hospital/RHU/BHU | 65 | 84.4 | 84.4 |
| Private Hospital/Clinic | 8 | 10.4 | 94.8 |
| Home | 4 | 5.2 | 100.0 |
| Total | 77[10] | 100.0 | |
| **TT dose during last pregnancy** | | | |
| No | 3 | 3.8 | 3.8 |
| Yes | 77 | 96.2 | 100.0 |
| Total | 80 | 100.0 | |
| **postnatal care with 6 week** | | | |
| Not received postnatal care | 33 | 41.2 | 41 |
| received postnatal care | 47 | 58.8 | 100 |
| Total | 80[11] | 100 | |
| **Source of postnatal care** | | | |
| Govt Hospital/RHU/BHU | 35 | 74.5 | 74.5 |
| Private Hospital/Clinic | 7 | 14.9 | 89.4 |
| Other | 5 | 10.6 | 100.0 |
| Total | 47 | 100.0 | |

N200

[9] Out of 200 women 80 patients got pregnant in last 3 years.
[10] Out of 80 pregnant women 77 got prenatal care was received from different sources and TT dose.
[11] Out of 80 pregnant women 47 women got postnatal care after delivery from different sources.

## 5.6 Currently adopted Family Planning Method

The results show that 24.4% of the respondents are using a condom as family planning methods and this is the most frequently used birth control method, according to spouse health and family income, followed by the other planning method, which is injectable. This is an easier way to cap the growing population, which is almost used by 21.6% of the respondents. Third most frequently used planning method is the usage of Pills, which is adopted by 18.8 percent of the respondents. Implant and IDU are not very common methods for family planning in Pakistan. These are rarely used method out of all is female sterilization, which is used by only 8.5 percent of the respondents in our case.

**Table 8: Family Planning Method**

| Method | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Pills | 33 | 18.8 | 19.4 |
| Implant | 25 | 14.2 | 33.0 |
| IDU | 22 | 12.5 | 45.5 |
| Condom | 43 | 24.4 | 69.9 |
| Injectable | 38 | 21.6 | 91.5 |
| Female Sterilization | 15 | 8.5 | 100.0 |
| Total | 176[12] | 100.0 | |

N 200

The respondents expressed concern about the quality of contraceptive, particularly its failure as blood complications and internal infections. Moreover injectable cause more bleeding during mensuration/menses. It's concluded from the observations of the respondents that all contraceptives shall be high quality to avoid compilations and provide these contraceptives as kind to needy couples.

Education regarding the use of these contraceptives methods also an important factor to avoid complications.

[12] Out of 200 respondent 176 use different family Planning Methods.

### 5.7 Family member have any C&NCDs include hypertension, cardiovascular, Diabetes, hepatitis, TB, others

Hypertension is the most frequently found disease in family members of our respondents, which is around 30.9% household members. The second most commonly found disease is Diabetes, which is found in 23.7 percent of families. The results show that 16.5 percent of the respondents' family members have multiple diseases, which are hypertension and diabetes and some other minor illness together on a single time in multiple family members. Only 8 persons out of 97 have hepatitis, which is not a minor disease and it has cost them a significant percentage of their income. A reasonable percentage of respondents' families are going through cardiovascular problems, which accounts for 12 percent of families in our data set. TB is found in just 2 percent respondent's family members, but this is a very critically dangerous disease, which affects family life of the victim. It has both the costs, social cost and financial cost, where social cost is more significant in most of the cases because friends start ignoring the victim and people stop eating with you and the interaction reduces to the level, where depression is the only cause of death from such kind of illness in most of the cases.

**TABLE 9:COMMUNICABLE &NON COMMUNICABLE DISEASES**

| Diseases | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Hypertension | 30 | 30.9 | 30.9 |
| Cardio Vascular | 12 | 12.4 | 43.3 |
| Diabetes | 23 | 23.7 | 67.0 |
| Hepatitis | 8 | 8.2 | 75.3 |
| Tb | 2 | 2.1 | 77.3 |
| Other | 6 | 6.2 | 83.5 |
| Multiple Diseases | 16 | 16.5 | 100.0 |
| Total | 97[13] | 100.0 | |

N 200

[13] Out of 200 respondent 97 have different diseases. While other 103 having no disease.

### 5.8 Source of Financial Assistance for Treatment

The results show, that OoP is the most utilized source for financial assistance in case of health care services, followed by the health allowances, that these respondents have received from different sources and only 6.2 percent respondents have received financial assistance from government sources, which is the lowest of all in our case.

| Table 10: Financial Assistance | | | |
|---|---|---|---|
| **Source** | **Frequency** | **Valid Percent** | **Cumulative Percent** |
| Government assistance | 6 | 6.2 | 6.2 |
| Health allowance | 34 | 35.1 | 41.2 |
| OoP | 57 | 58.8 | 100.0 |
| Total | 97[14] | 100.0 | |

N 200

### 5.9 Health Facility Used to Diagnose Disease

The results show, that majority of the respondents have availed government facility to diagnose their disease which is 66.0%. This is because government hospital is less expensive and most of the diseases in the list can be cured on minor expenses at a government hospital. Other reasons might be the distance and availability of doctors for specific diseases in government hospitals. Total of 64 respondents argued that government hospitals are preferable over private hospitals because of the high expenses associated with private hospitals.

| Table 11: Type of Health Facility | | | |
|---|---|---|---|
| **Type of facility** | **Frequency** | **Valid Percent** | **Cumulative Percent** |
| Govt Hospital | 64 | 66.0 | 66.0 |
| Private Hospital | 33 | 34.0 | 100.0 |
| Total | 97[15] | 100.0 | |

N200

Only 33 out of 97 respondents used private hospitals for the treatment of diseases. These respondents were comparatively better-off economically and the

[14] Out of 200 respondents 97 have different diseases and these people meet their medical expenses through different sources.

[15] Out of 200 respondents 97 have different diseases and these 97 respondents using different health facilities for their treatment.

reasons behind the use of private hospitals were stated, that distance and quality of treatment are important factors for preferring treatment in private hospitals.

### 5.10 Catastrophic Health care Expenditures and impoverishment due to OoP

OOP health payments are a major source of health financing in many developing countries (O'Donnell et al., 2008a). In this case, the access to health services is related to the income of the household. Seeking health care is difficult if the cost is too high. Households usually borrow money, sell assets, reduce necessary consumption or sometimes even forgo treatment. Thus, it is the most inequitable mode of financing that pushes millions of people into a vicious circle of poverty (WHO, 2010). Pakistan like other developing countries also faces the highest burden of OOP health expenditures. The share of OOP payments of total health expenditure remains above 60 percent for many years (Malik, 2011).

**Table 12: Catastrophe and Impoverishment**

| Catastrophe due to OoP = 1 | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| 0 | 118 | 59.0 | 59.0 |
| 1.00 | 82 | 41.0 | 100.0 |
| Total | 200 | 100 | |
| **With impoverishment after health payments** | | | |
| HH with no impoverishment after health payments | 192 | 95.5 | 95.5 |
| HH With impoverishment after health payments | 9 | 4.5 | 100.0 |
| Total | 200 | 100 | |

N200

As a result, many people will incur catastrophic health expenditures due to these high OoP payments. In this analysis table 12 shows that 59% of the household with no catastrophe due to OoP payments because most of the household financial protected and some other reason is like 66.0% of the household use governments hospital for the treatment and this hospital only have parchee fee another reason is that some of households family members don't have any major disease. 48% of the household have the disease but these diseases are hypertension 30%, Cardio Vascular 12%, Diabetes 23%, and Hepatitis 8%. Out of 48% (having any disease), 62% of the household use governments health facilities where consultation fee, medication are

free and they just pay parchee fee to the hospital and also have a traveling cost for reaching the health facility.

Moreover only 4.5% household become impoverishment due to health payments.

**The major finding of the analysis**

- Monthly income of the household as mean value is Rs28186.50, which is also close to the average household income of Pakistan. HIES 2015-16 shows that average household income is 32578.
- Mean value of monthly food expenditure of household is Rs12113.38.
- Wages have a major part of household income which is twenty-eight percent (28%), this is also justifiable according to the HIES 2015-16 shows that in Pakistan major source of income by occupation is wages and salaries.
- Immunization coverage in this analysis is 54% because according to the data only those children included in immunization who are under 5 year of age. 45% with no immunization shows that children are above 5 years of age and they are in excluded from this question of immunization coverage.
- Pre-natal care during last pregnancy 96%.
- Overall 97% of women had received a tetanus toxoid injection during their last pregnancy.
- 24.4% of the respondents are using a condom as family planning methods and this is the most frequently used birth control method.
- Hypertension is the most frequently found disease in family members of our respondents, which is around 30.9% household members.
- The results show, that OoP is the most utilized source for financial assistance in case of health care services which is 58.8%.
- Majority of the respondents have availed government facility to diagnose their disease which is 66.0%.

# CHAPTER 6

# ANALYSIS

## 6.1 Health System and SHP Overview

Pakistan a lower middle-income country in South Asia has a population of 207.77 million. It's the sixth most populous country in the world, with a population growth rate of 2.40%. The four provinces have a population ranging from 13 to 91 million. 46.87% of the country's population lives in urban areas and 49.08% lives in rural areas (census 2017). According to the size of the labor force, Pakistan is 9th largest county in the world. The unemployment rate is 5.9%. Agriculture sector encompasses 42.27% of the employment share. Among the non-agriculture workers, 57.73% work in the informal sector. The literacy rate of the population (aged 10 years and above) is 54%. In terms of GDP, the country holds 27th position in the world and its economy is growing at the rate of 5.8% real GDP. (Pakistan Economic Survey 2017-18).

Health indicators have improved in the last 70 years but they still lag behind the internationally agreed targets. Maternal mortality ratio 165/100,000 live births in 2017; infant mortality ratio 61.4/1000 live births in 2017 (Pakistan Economic Survey 2017-18) the country did not achieve Millennium Development Goals (MDGs) targets for both of these indicators. Pakistan is among the only three countries in the world with polio endemics. Non-communicable diseases make 73% and communicable disease make 19% of the overall disease burden. Socioeconomic position, gender, and geographical location have been the key determinants of health service coverage and mortality indicators (Nishtar et al 2013).

The country has a three-tiered public infrastructure for healthcare services - comprising of 1096 tertiary and secondary hospitals and 12, 506 first level care facilities. Population to facility ratio is 12, 357:1 and population to bed ratio is 1647:1. According to the last survey done in 2001 to map the private health facilities, there are more than 73, 000 private health facilities, most of which are individually owned clinics. The market system is heterogeneous in terms of the qualification of healthcare personnel, infrastructure, the practice of medicine, and quality of the services. Public employees frequently engage in dual practice and quackery is

common. Informal providers include retail pharmacy owners and operators, non-qualified sellers, and faith-based healers. With the recent mushrooming of the private sector, 80% of care was sought in the private sector and rest 20% in the public sector in the year 2013-14; private doctor clinic was the most commonly accessed type of provider (53%), followed by government hospitals (13.29%), private hospitals (13.06%) and pharmacy/shops (11.36%). Though there have been some quantitative gains in the  the provision of services. And the quality improvement has stayed neglected in the last two decades.

World Health Survey 2003 was the last survey which captured patients' satisfaction at the national level; 60% of the patients who used inpatient care were unsatisfied and 58% of those who had used ambulatory care considered that moderate or bad. With regards to human resources for health, 121,374 doctors are registered, and doctor to population ratio is 1:1127. In contrast to the recommended doctor to nurse ratio of 1:4, the country hasa a 2.7:1 ratio. There are a large-scale shortage of pharmacists, dentists, technologists, midwives, public health experts, and health management professionals. Lack of service structure, poor incentives, and limited opportunities for professional growth are leading to a brain drain of the existing workforce. 1% of physicians emigrate every year. There are no comprehensive human resources for health policy, which can address the current gaps in capacity, training, education, and numerical inadequacy.

Health information system architecture is quite fragmented. 14 separate and incomplete information systems exist for reporting infectious diseases. There is no integrated disease surveillance system in place. Management information system reporting is done at the district level, with limited consolidation and utilization of the data for policy and planning purposes at the provincial and national levels. Three separate agencies with overlapping mandates are responsible for population-based surveys.

On the account of the quality of medicines, the last survey was done by the World Health Organization in 2004; the survey reported that 40-50% of medicines used in the country are either substandard or counterfeit. Medicines are often prescribed by nonqualified practitioners and incentive-intense marketing practices heavily influence the choice of medicines prescribed by qualified providers. The country has an acute shortage of drug inspectors there are 270 inspectors for more

than 62, 000 retail pharmacies. Drug Regulatory Authority has been recently established, but it has a daunting task of establishing a transparent governance and management structure against the odds of powerful interest groups.

Governance of the health system has been abysmal; health is one of the most corrupt services sectors in the country. An 18th constitutional amendment has recently made health a provincial subject; broadly categorizing, preventive and curative services are provincial government's mandates, and health services regulation and coordination are responsibilities of the federal government. Provinces have secured the long-awaited autonomy. Though the spirit of devolution reforms has been cherished in all the circles, but ill-planning of the reform has led to severe constraints related to preparation, capacity, strategy for implementation, and financing for dealing with the complex challenges within provinces. There is duplication in the functions of the secretariat, directorate, and reforms units within provinces. There has been a lack of coordination between federal and provincial ministries of health for the retained and devolved health functions.

From the health financing perspective, general government expenditures make 33%, private expenditures make 66%, and development partners/donors' contributions make 0.8% of the total health expenditures in the country. Households' out of pocket expenditures make 91% of the private expenditures and 60% of total health expenditures. Annual per capita health expenditure is 39.5 US$. Public sector health expenditures are 9.3% of total government expenditures and the ratio of total health expenditures over GDP is 3%. Public health spending in the country is the lowest in South Asia and health financing indicators are poorer than the averages of lower middle-income countries.

Health spending is low but persistently rising. The country is spending 0.5 to 0.8 percent of its GDP on health over the last 10 years. These percentages are less than the WHO benchmark of at least 6 percent of GDP required to provide basic and lifesaving services. During 2015-16, total expenditure increased by 13 percent over 2014-15, and during current fiscal year (July-March) 2016-17, the expenditure remain at 145.97 billion showing an increase of 9 percent over the same period of last year. According to world Bank latest report, currently Pakistan's per capita health spending is US $ 36.2 which is below than the WHO'S low income countries bench mark of US $ 86.

| Table: 13 Total Health Expenditure 2001 to 2017 | | | | | |
|---|---|---|---|---|---|
| Health and nutrition expenditures (2000-01 to 2016-17) | | | | | (Rs billion) |
| Fiscal year | Total health expenditure | Development expenditure | Current expenditure | Percentage change | Health expenditure as % of GDP |
| 2000-01 | 24.28 | 5.94 | 18.34 | 9.98 | 0.58 |
| 2001-02 | 25.41 | 6.69 | 18.72 | 4.63 | 0.57 |
| 2002-03 | 28.81 | 6.61 | 22.21 | 13.42 | 0.59 |
| 2003-04 | 32.81 | 8.50 | 24.31 | 13.85 | 0.58 |
| 2004-05 | 38.00 | 11.00 | 27.00 | 15.84 | 0.58 |
| 2005-06 | 40.00 | 16.00 | 24.00 | 5.26 | 0.49 |
| 2006-07 | 50.00 | 20.00 | 30.00 | 25.00 | 0.54 |
| 2007-08 | 59.90 | 27.23 | 32.67 | 19.80 | 0.56 |
| 2008-09 | 73.80 | 32.70 | 41.10 | 23.21 | 0.56 |
| 2009-10 | 78.86 | 37.86 | 41.00 | 6.86 | 0.53 |
| 2010-11 | 42.09 | 18.71 | 23.38 | -46.63 | 0.23 |
| 2011-12 | 55.12 | 26.25 | 28.87 | 30.96 | 0.27 |
| 2012-13 | 125.96 | 33.47 | 92.49 | 128.51 | 0.56 |
| 2013-14 | 173.42 | 58.74 | 114.68 | 37.68 | 0.69 |
| 2014-15 | 199.32 | 69.13 | 130.19 | 14.94 | 0.73 |
| 2015-16 | 225.33 | 78.07 | 147.26 | 13.05 | 0.77 |
| 2016-17 | 291.90 | 101.73 | 190.17 | 29.54 | 0.91 |
| 2017-18B.F | 384.57 | 130.19 | 254.38 | 31.75 | 1.12 |
| **July-feb** | | | | | |
| 2016-17* | 121.57 | 30.40 | 91.17 | - | 0.38 |
| | 167.16 | 40.66 | 126.50 | 37.51 | .49 |

Source Finance Division (PF wing)

Table 13 shows that the current fiscal year has witnessed a considerable increase in budget allocation for health expenditures showing 40.7 percent growth by allocating Rs 384.57 billion during fiscal year 2017compared with Rs 273.34 billion during fiscal year 2016-17

There is very limited private pooling of finances for health; private health insurance makes 0.59% of total health expenditures. Public pooling of finances, encompassing tax funded allocations, social security contributions, and profits earmarked for social protection benefits of the employees, provide some level of health coverage to 21.92 % of the population; they are mainly employees of federal and provincial governments, armed forces, autonomous organizations, and a few public mandated private sector organizations and foundations. Rest, 68% of the population has to make out of pocket expenditures at the time of seeking care. Even at

the government facilities, patients are required to cover costs and to pay the user fee. Doctors' fee, admission fee make 1.15% and 0.39%, while payments for medicines, diagnostic tests, and medical supplies constitute 67%, 10%, and 7% of out of pocket expenditures made in public health facilities respectively. Catastrophic health expenditures make 70% of the economic shocks faced by poorer households.

### 6.2 Out of Pocket Health Care Spending

OoP is defined by WHO define as, these are the direct payments which is made by the household for receiving health care facilities to the health care provider from individual own pocket. OoP payments exclude any insurance premium, and prepayments made for the health care services, also excluded reimbursements to the individual who made the payment at the time of seeking health care. Alma-Ata declaration of 1978 supported "health for all", means that all individuals around the global should have equitable access to health care services regardless of their social economic, religious and geographical conditions (Dror, Panda, May, Majumdar, & 5.3Koren, 2014). WHO report 2005 indicate that 44 million household around worldwide are in

Catastrophic level due to health care expenditures. These payments push household in to impoverishment resulted push people toward poverty and these are estimated around 25 million.

The World Health Report 2012 indicate more than 1 billion people cannot use health services at the time when these services are needed. More than one million people push toward poverty because of catastrophic health care expenditures and 150 million people entitle financial hardship at the time of health care payments because they have to pay these healthcare cost directly from their own pocket for health services at the time of health care service delivery. (Xu et al., 2012).

Pakistan a lower middle income country in the world situated in South Asia region, has a total population of approximately more than 207.77 million (census 2017). General government expenditures make up 33% and households' out of pocket expenditures make up 60% of the total health expenditures in the country. On a per capita basis, as compared to other south Asian countries Pakistan public healthcare spending is lower and health financing indicators are poorer than the averages of lower middle income countries (Pakistan Economic Survey 2015-16). Public pooling

of finances provides some level of health coverage to 21.92 % of the population. The rest, 68% of the population, has to pay fee at the time of seeking healthcare and this fee pay by the individual in the form of out of pocket expenditure. Even at government facilities, patients are required to cover costs and to pay user fees (Nishtar et.al, 2013).

Payments for medicines, diagnostic tests, and medical supplies constitute 67%, 10%, and 7% of out of pocket expenditures made in public health facilities respectively (Pakistan Bureau of Statistics 2013-14). There is very limited private pooling of finances for health; private health insurance makes 0.59% of total health expenditures (Pakistan Bureau of Statistics 2013-14).

Analysis of the OOP health expenditure 2015-16 data reveals that in Pakistan, around 24% of the total OOP expenditure are incurred on in-patient services while OOP spending as outpatient care for their illness is 29%. About 47% are spent on Medical Products, equipment & appliances. Some indicators or questions pertaining to the category "Medical Products, equipment & appliances" indicates that this category also covering the expenditure mostly incurred on self-medication. Self-medication means those who are taking medicines from pharmacies without consultation/prescription, or all those people who are taking medicines for long lasting diseases like diabetes and high blood pressure that was al-ready prescribed by doctors.

**Table: 14 Out of Pocket health expenditure by type of health care 2015-16 in %**

| Province | Inpatient | Outpatient | Medical, Products, equipment's & appliances | Total |
|---|---|---|---|---|
| **Pakistan** | 24.10 | 28.58 | 47.32 | 100 |
| **Punjab** | 22.86 | 30.67 | 46.47 | 100 |
| **Sindh** | 30.58 | 24.30 | 45.12 | 100 |
| **KP** | 14.02 | 36.21 | 49.77 | 100 |
| **Baluchistan** | 14.42 | 29.74 | 55.84 | 100 |

*Source: NHA Report 2013-14*

Further analysis of data on the type of health care accessed by provinces reflects that share of Medical Products, equipment & appliances is highest in Baluchistan (55.84%) followed by KP (49.77%), Punjab (30.67%) and Sindh (29.74%). The percentage share of outpatient is highest in KP (36.21%) followed by Punjab (30.67%), Baluchistan (29.74%) and the lowest share is of Sindh (24.30%). For the Inpatient services, the highest share is of Sindh (30.58%) and the lowest share is of KP (14.02%)

### 6.3 SHP Program Overview in the Country

The government of Pakistan's health insurance program has started to cater a significant portion of the poor population. Still in the total expenditure, 68% is the share out of pocket. It is important to note that in Pakistan, the catastrophic health expenditure [spending 40% of the non-food expense] are responsible for a major proportion of the economic shocks faced by poorer households.

a) The prime minister national health program with an aim to prevent 100 million individuals from catastrophic health expenditure across the country in a phase wise manner. This program is a milestone towards social welfare reforms; ensuring that the identified under-privileged citizens across the country get access to their entitled medical health care in a swift and dignified manner without any financial obligations. The premium of PKR 1300 is paid by the government to the selected insurance company which cover expenses up to 600,000 for indoor treatment. In the current phase, people who are living in 60 priority districts and earn less than US$2 a day (according to BISP survey), are the beneficiaries of PM National Health Program. This program is to be scaled up to all the districts in coming years.
b) For the province of Punjab, the Punjab health initiative Management Company has been mandated the execution/ implementation of PMNHP. The program objective is to improve access of the poor populations to good quality medical services, through a health insurance scheme.
c) Khyber Pakhtunkhwa's (Sehat-Sahoolat) program was launched in 4 designated districts, with the financial assistance of German bank KFW. However, it is included in the provincial annual development program and

has been extended to the entire province (25 districts). Program will be run as regular scheme through legislation. Under it, health insurance cards will be issued to 1.8 million households through which eight individuals will stand entitled to free medical treatment from designated private and public-sector hospitals for inpatient facilities. The program besides ensuring free medical treatment to the deserving population will also help reduce poverty rate in the province. Premium for health insurance card is around Rs 1700 for household, which will be paid by the provincial government.

d) Gilgit Baltistan has also launched its own social protection (Behar-Hifazat) program the financial assistance of German bank, KFW. Focus of this program so far has been to provide below poverty households (21%) in Gilgit district for a coverage for the illnesses requiring hospitalization. In the first phase of the program 5, 000 families in Gilgit city would benefit from the scheme under the provincial government would provide the premium of 1700 for each family. The benefits will be up to a maximum of Rs 25, 00 per person per annum. This scheme will provide cashless facilities at empaneled hospitals. Scheme will be extended to 4 other districts of Gilgit Baltistan in the next phase, which will include Hunza, Nagar, Astore and Ganche.

Several other revenue pooling mechanism have been in place for the last two decades,

i) Zakat and Bait-ul-maal are the two mainstream publicly mandated health financing agents; many charitable organizations hospitals and health equity funds models are extending Social Health Protection

ii) Another initiative is the National Ruler Support program (NSRP) is in more than half of the district of Pakistan working for ruler development and poverty reduction through offering micro Health Insurance schemes. NSRP microfinance poverty program has enabled the ruler men and women with knowledge and skill to seek timely and appropriate Healthcare.

iii) Benazir income support program is another safety net arrangement by the Federal government which uses targeting process to identify poor for offering microcredit options exclusively for the rural women in

Pakistan. BISP in the recent years has been providing Health Insurance program for the beneficiaries with the name of the Waseela-e-Sahat).

iv) Few NGOs offer safety nets for health in the form of vouchers for certain reproductive health services and transport fare partially cover the peri-urban and rural areas where the majority of the vulnerable population lives; but they need to expand and scale up their scope of work.

### 6.4 Regional Perspective

A study conducted in South East Asia Lao where just 38 percent of births take place in a health. Antenatal (ANC) and postnatal care (PNC) care is low, with just 56% and 39% of pregnant ladies having ANC and PNC. Financial limitations are a critical, but not the only obstacle towards the health care utilization as government spending also very limited in this regard, representing just 49% of total health expenditures (THE) or 1.0% of GDP. OoP payments are subsequently higher up to 40% of THE. In this manner limited equitable access to health care services increase the impoverishment risk of the household.

#### 6.4.1 Highest OoP Payments by Countries

Following is a bird view of the OoP in the different countries to make proper assessment to SHP requirements in the needy countries

**Table: 15 OoP payment by countries**

| S.No | Highest OoP | Country |
|---|---|---|
| 1 | 82% | Myanmar |
| 2 | 65% | Bangladesh |
| 3 | 60% | India |
| 4 | 49% | Nepal |
| 5 | 45% | Pakistan |
| 6 | 41% | Indonesia |
| 7 | 38% | China |
| 8 | 28% | Maldives |
| 9 | 15% | Thailand |
| 10 | 13% | Bhutan |

*WHO statistics Report 2012*

Pakistan health care as per GDP is low as compared to other sectors. Due to scare resources public health sector facing many difficulties to provide affordable quality of care to its population. In Pakistan, private health care providers deliver good quality of health care services but its involve direct payments, these payments made health care unaffordable for the people and for obtaining facilities people even sell their own assets or borrow money. This may cause to reduce the substance expenditure and push people toward vicious cycle of poverty. Direct payments are the main hurdle for seeking healthcare facilities (Falkingham, 2004).

### 6.5 Global Perspective

A number of determinants influence household out-of-pocket healthcare expenditure. These vary substantially according to the developed or developing status of a country. Growth of public sector health spending is relatively higher in developed than in developing countries due to higher levels of government quality, stability and efficiency, and therefore the household burden of out-of-pocket expenditure does not vary considerably because of supply-side factors (Organisation for Economic Co-operation and Development., 2010).

The literature on determinants of spending on healthcare services in OECD countries is not entirely applicable in developing countries (Seth & Mohanty, 2017). US studies show that determinants include household size, composition, financial constraints and the level of health insurance (Kumara & Samaratunge, 2016).

Using a US consumer survey, found that out-of-pocket expenditure is notably associated with household size, composition and financial constraints. They considered a variety of variables to control demand-side and supply-side factors that impact this expenditure (Hwang, Weller, Ireys, & Anderson, 2001). using the US 1996 medical expenditure panel survey, concluded that out-of-pocket expenses increase as the number of chronic conditions for elderly and non-elderly increases, the highest out-of-pocket expenses are observed among uninsured individuals and they vary by age.

Some studies concluded that out-of-pocket expenses and income are negatively related: according to Sanmartin et al. (2014), though expenditure increased for households in all income quintiles in Canada, households in lower-income

quintiles tended to spend more than those in richer-income quintiles (Longo, Fitch, Grignon, & McAndrew, 2016).

A number of studies have estimated the relationship between household income and size of out-of-pocket expenditure for healthcare. However, there is no clear-cut relationship between these, because the relationship varies from country to country found a positive relationship in Germany (Bock et al., 2014)

Atanasova et al. (2012) found no significant association between household income and out-of-pocket expenditure in Bulgaria. They argued that the burden of such expenditure is approximately the same across poor and rich households. Some studies concluded that out-of-pocket expenses and income are negatively related.

### 6.6 SDGs and Universal Health Coverage

The 17 Sustainable Development Goals (SDGs), with their 169 targets, form the core of the 2030 Agenda. They balance the economic, social and ecological dimensions of sustainable development, and place the fight against poverty and sustainable development on the same agenda for the first time.

**Goal 1.** End poverty in all its forms everywhere

**Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**Goal 3.** Ensure healthy lives and promote well-being for all at all ages

**Goal 4**.Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

**Goal 5.** Achieve gender equality and empower all women and girls

**Goal 6.** Ensure availability and sustainable management of water and sanitation for all

**Goal 7**. Ensure access to affordable, reliable, sustainable and modern energy for all

**Goal 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**Goal 9.** Build a resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

**Goal 10**. Reduce inequality within and among countries

**Goal 11.** Make cities and human settlements inclusive, safe, resilient and sustainable

**Goal 12**. Ensure sustainable consumption and production patterns

**Goal 13.** Take urgent action to combat climate change and its impacts

**Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development

**Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

**Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

**Goal 17.** Strengthen the means of implementation and revitalize the global partnership for sustainable development.

**Table 16: Goal 3 targets and indicators**

| **Goals and targets** | **Indicators** |
|---|---|
| **Goal 3. Ensure healthy lives and promote well-being for all at all ages** | |
| 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all | 3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, and newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population). |
| | 3.8.2 Number of people covered by health insurance or a public health system per 1,000 population. |

Source: WHO

# CHAPTER 7

# CONCLUSION AND POLICY RECOMMENDATIONS

## 7.1 Conclusion

Health enhances the natural capability and capacity of human beings to deal with the vicissitudes of life efficiently, to take pleasure in routine activities. A psychologically healthy person is less prone to depression and anxiety, he enjoys good relations with fellow human beings and can rise to the expectations and challenges life throws at him. Good health has deep impact on overall psychological apparatus and hence it improves memory and sleep cycle and helps one become a responsible citizen to play one`s role in nation building. It is worthy to mention here that SHP must recognize and address mental health as an integral part of the definition of health.

Globally, it is hard to find countries providing medical coverage to more than 95% of its population and some African and Asian countries are said to cover even less than 10 percent of their population.

Countries desiring to provide universal health coverage to its masses must develop strategies of access to health services delivery and for achieving this they need to take into account legislation, affordability, financial protection and availability of quality services. Country comparisons in terms of poverty and labor markets situation would greatly help in this regard.

Quality is the most important aspect of healthcare service delivery as quality has been shown by various studies to be directly proportional to access and per capita income. Low-quality health services were found in countries with least public funds per capita. One of the dangerous outcomes of diverting funds from the health sector is that the quality of health services provided will be compromised greatly putting the health of the population at risk. Therefore, during critical financial times, it would not be wise to displace funds away from the health sector.

Public funds allocated for health services are lowest in countries which are vulnerable in terms of health. This means that patients are supposed to pay for their bills from out of their pockets which expose the patients to the risk of catastrophic health expenditures which is a vicious cycle and leaves one bankrupt and indebted. In

order to counter this, prepayment methods and pooling of funds are established financial state strategies to be employed by the policymakers in order to protect the individual and families from suffering a financial crisis. Furthermore, equity which means fairness or distribution according to one`s financial status be ensured while formulating and implementing such policies.

Out of pocket expenditure carry the risk of exposing the poor and the vulnerable to catastrophic health expenditures which may also result from transportation costs, reduced productivity and loss of income due to illness. Financial protection mechanisms are the only means of restraining the financial impacts of seeking quality healthcare. SHP may address the gap of public sector finding and health needs.

In many countries around the globe poverty trap, which forces the poor to remain poor, shifts from rural to urban areas creating problems in the latter like overcrowding, urban slums, suboptimal living conditions, lack of healthcare facilities, unclean drinking water and drainage system thereby leading the dwellers to be more frequently ill and die from preventable diseases. The main culprits acting as barriers in the path of better health indicators are lack of resources, insufficient human resource, and subsidies resulting in people going to the private health sector for medical attention.

Pakistan, while devising policies for the health sector, need to prioritize extending healthcare services to the vulnerable population, especially those living in rural and suburban areas by implementing SHP across the country.

Social health insurance schemes are appropriate for the workers` needs for myriad reasons such as they provide swift and speedy access to medical services, the scope for natural contribution systems linked to payrolls, workers participation in dialogue with policy makers and governance mechanisms through trade unions open the door for sense of ownership and long term sustainability.

Once Social Protection in Health is in place, the reform will raze economic barriers to timely care and it will prevent the individuals and families from catastrophic health expenditures by promoting efficiency, equity, equality, adequacy and easy access to health and that way SHP will help reduce poverty due to illness. This research is about setting priorities and providing an ethical basis to the reform,

taking into account financial features, expected benefits and outcomes and future challenges in health. Finally, it will act as a trailblazer for other countries to follow by addressing the issues of fairness, equity, and quality for poverty alleviation and better living.

Health has an intrinsic value as it produces a sense of well-being and an instrumental value as it is the most important determinant of economic development. Instrumental value is a direct consequence of improved health in relation to labor productivity and financial crisis resulting from illnesses. The indirect impact is economic growth through education.

Individuals can utilize health insurance in protecting themselves from any possible health hazards and events that affect health negatively. For doing so they can get either private medical insurance or state-sponsored insurance. It is pertinent to mention here that limited access to private insurance is the result of limited information and that private insurance carries huge financial costs on part of the individuals thereby driving the private providers to derive a lion`s share from the deal.

Therefore, to act in accordance with the goals of equity and efficiency at the same time the most suitable option to protect the population is by providing them SHP. With the help of health insurance, health care financing would be subsidized between income groups or health risks. In short, social health protection can contribute in alleviation of poverty in two ways: first by reducing out of pocket costs and thus the poverty ratio resulting from bearing excessive health costs; second by lowering financial barriers to health access and increasing utilization of health services by the masses that will lead to their overall better health.

It has been observed that universal health coverage directly affects the health of the population by increasing their productivity and active contribution to their family and society as healthy individuals will build a healthy society and a strong nation. By reducing health expenditures families will be less prone to fall into the poverty trap and that way it will help reduce social inequity and injustice. It will be a giant leap forward for the stakeholders to ensure sustainable development and reduce poverty in the middle and low-income countries.

Having said that, it must be understood that UHC is not merely about the range of services provided but it is also about the manner in which they are covered

that is whether the services are people-centric or integrated health services are delivered to the people. In fact, a string of myths has been surrounding UHC for a long time such as it is another form of health financing or just a package of health services or that it covers all possible health interventions) thereby preventing the growth and evolution of the services that may pave the way for the realization of UHC.

## 7.2 Policy Recommendations

### 7.2.1 Extending Social Health Insurance Coverage to the Poor and Vulnerable

There are various means and methods of how to make effective social health protection in bringing a positive change to the social and economic environments. Although state regulated social health protection schemes appear elementary and uncomplicated to the formal sector workers in the presence of good governance, sufficient financing and administration yet it is quite hard to reach the poor living and working in the hard to reach areas and tough terrains.

The Social Protection strategies need to include custom-tailored approaches for the identification of persons, their needs and health risks. Despite these modifications, there will be a risk that protection schemes will not ensure that regulations can be implemented in true letter and spirit.

To access the informal sector thoroughly the country will have to improve government-owned health sector as well as come up with better-integrated schemes based on collective risk sharing at the community level. The rising trend of mutual health organizations and micro-insurance schemes in the country is fascinating in this regard. Health programs have been initiated by hospitals, NGOs or local associations. Schemes are usually restricted to a specific region or community covering a limited number of people.

Furthermore, health insurance packages do not cover all aspects. In spite of limitations micro health insurance holds signs of future success by extending healthcare coverage to conventionally excluded and marginalized individuals since it carries the potential to integrate a big chunk of the rural population in Pakistan that has been without health facilities.

While the scope of each individual scheme is very limited there are other ways to expand and maximize the coverage such as building federations between schemes and using community institutions such as co-operatives, widely spread the insurance product and find synchronicity between the community and public efforts e.g through subsidies. Attractive schemes having low transaction costs are the way forward. The challenge to be faced by policymakers lies in the need to promote expansion and scaling up of schemes and linking them with public policies. This will need deliberation so let insurance schemes to flourish.

### 7.2.2 Providing Adequate Benefit Packages and Adjusting Cost Sharing

Health services which are covered by social protection programs are important for preventing people from severe financial loss. Individuals and families may still fall into the vicious cycle of poverty trap despite being covered by insurance if the benefits package offered do not cover all aspects of health. There is no gold standard regarding benefit package but its highest objective should be protecting the vulnerable and the poor against excessive costs incurred. Sufficient data is available showing that benefit packages which are restrictive and not comprehensive would not be successful in protecting the vulnerable against catastrophic health expenditures.

In Kenya, there is enough evidence of catastrophic health expenditure where the NHIF covers only the inpatient services and not the outpatient services. The size of the benefits package got nothing to do with its success but if it is comprehensive that is if it strikes a balance between cost and risk protection then it will work for most of the households. Resources are limited so it is very essential to prioritize while devising benefit packages to cater to the needs of the poor and the vulnerable. Medical guidelines, evidence-based medicine, epidemiological needs, certifications, and quality assurance should guide priority settings.

### 7.2.3 Policy Considerations and Research Needs beyond the Health Sector

People who have fallen in the trap of catastrophic health expenditures due to out of pocket payments or those who are unable to access health services due to financial constraints are abounded. For the present sincere efforts are underway to scale up social protection programs so to allow easy and all-inclusive access to needed services, minimize the costs borne by the poor households and let the poor

escape from the trap of poverty and illness. By now it is obvious from the aforementioned discussion that there is no one solution for all the maladies.

Policy interventions regarding social protection focused on the supply side in the past, for example, providing subsidies for the healthcare facilities, providers and the ministry of health but lately the focus is shifting to the demand side in the eyes of the policymakers as they are considering patients as economic agents and not just beneficiaries or target groups but actors interacting with other stakeholders such healthcare providers, government authorities etc. This is a breakthrough but still, more is needed to be done in this field as the individuals and families face others risk as well.

### 7.2.4 Sustainable Cooperation

High level of coordination will be needed to achieve such an ambitious agenda. The way Cambodia established Technical Working Group (TWG) to formulate an extensive and all-inclusive Social Health Protection policy framework including social assistance and insurance both. After enacting SHP schemes the foremost responsibility will be to make sure the external funding is properly channelized to aid the government in achieving its objectives as stated in the new policy framework. As Pakistan is gradually inching towards UHC, the government will be required to increase the aggregate level of public expenditure in SHP. To achieve this government will have to consider reallocation of public expenditures, raising tax revenues or maximizing contributory revenues.

### 7.2.5 Strategic Expansion

Many development partners who are willing to support the National Social Security Funds (NSSF) to enhance coverage of the new health insurance branch. The best way to achieve this goal in the near future will be to support the NSSF to (i) include dependents into existing schemes for both private and public sectors and (ii) extend legal access to persons not covered by the Labour Law, especially those workers in companies with less than 8 workers. In the context of social assistance the needs are considerable and therefore the government will have to set clear priorities and commitments for financing.

### 7.2.6 Innovation for the Informal Sector

The contributory schemes will need to be catered to the characteristics of the labor market, to specifically accommodate a countless number of workers in non-standard forms of work and informal employment by introducing innovative policies and comprehensive solutions for law and compliance.

Employment injury insurance has been the step of the ladder of protection and it must be expanded across the country by more investment and by the inclusion of other groups of the informal sector so to let them access other branches of NSSF in the future. for example, health insurance and pensions. It is worthy to mention that many will lack the capacity to contribute and that is the reason the social assistance must reach a wider portion of the economically challenged population. This may need wide reforms, legislation and the highest level of political will and commitment.

## 7.3 Way Forward

The current health reforms represent a major window of opportunity to expand Pakistan's social protection. The enhancement of synergies between contributory and non-contributory schemes will be essential to establish a coherent system this will play an important role in the innovative through development policy.

# ANNEX 1

## Annex 1: Ethical Approval

## Ethical Approval

Respected Respondent,

Scholarly research is undertaken to observe the **Universal Health Coverage**. This is often accomplished through the use of a questionnaire. This questionnaire is designed to investigate "**Role of Social Health Protection in Universal Health Coverage**."

In this regard, your cooperation in term 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 purpose only.

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

Hira Siddiqui

Mphil Health Economics

PIDE, Islamabad

# Annex 2: Questionnaire

| Individual ID: |
|---|

**Questionnaire**

**"Role of Social Health Protection in Universal Health Coverage"**

**A case study of Pakistan**

I am from Pakistan Institute of Development Economics Islamabad undertaking the above M.Phil. Research Project. The research investigation is related to Social Health Protection as a significant tool for achieving Universal Health Coverage. 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 1

| **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. | Milk men | vi. | Armed forces | vii. | Driver | viii. | Shop keeper |
| ix. | Self employed | x. | Government employ | xi. | Gardener | xii. | other |
| **8) 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) 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 | | | |

**11) What was the total expenditure on food, shelter and clothing in the last month?**

| |
|---|
| |

**12) What was the total expenditure on non-food items in the last month?(rent, electricity, water, gas, telephone bills )**

| |
|---|
| |

**13) What was the total expenditure on health care in the last month?**

| |
|---|
| |

## Section: 2

**14) Are you beneficiary of any health programme?**

| | | | |
|---|---|---|---|
| i. | Zakat Fund | ii. | Sahat e Sahulat |
| iii. | BIPS (Waseela Sahat Card) | iv. | Prime Minister National Health Program |
| v. | Bait ul mal | vi. | Non |

**15) Are you receiving any type of financial assistance from?**

| | |
|---|---|
| i. Government | ii. NGOs |
| iii. Programme/ Project | iv. Health allowances |

**16) What type of assistance do you get?**

| | |
|---|---|
| i. Food | ii. Cash |
| iii. Health allowances | iv. Non |

**17) Immunization & Diarrhea**

| | | | |
|---|---|---|---|
| **A: Immunization(under 5 year of age)** | | | |
| **1)** | **Age of child and mother** | | |
| **2)** | **Do you have immunization card for the child? (under 5 years of age)** | | |
| | i. Yes | ii. | No |
| **3)** | **Did the child receive all vaccination ? (under 5 years of age)** | | |
| | i. Yes | ii. | No |
| **4)** | **Where were you got immunized** | | |
| i. | Government | ii. | NGOS |
| iii. | Paid | | |
| **B: Diarrhea** | | | |
| **5)** | **Did the child (under 5 years of age) face diarrhea during the last 30 days?** | | |
| | i. Yes | ii. | No |
| **6)** | **Did you consult anyone for the treatment of diarrhea?** | | |
| | i. Yes | ii. | No |
| **7)** | **Whom did you consult first?** | | |
| i. | Private Dispensary/Hospital | ii. | Chemist/Pharmacy |
| iii. | Government Hospital | iv. | Hakeem, Homoeopath, Waid |
| v. | RHC/BHU | vi. | Nurse/LHV/MCHC |
| vii. | LHW | viii. | Others |
| **8)** | **Did you give Nimkol (ORS) to him/her?** | | |
| i. | yes Purchased, | ii. | yes Prepared at home |
| iii. | yes Provided | iv. | No |

## 18) Married Women (Aged 15-49)

| | | | |
|---|---|---|---|
| **1)** | **Have you given birth to a child during the last 3 years?** | | |
| | i. Yes | ii. | No |
| **2)** | **Did receive any pre-natal care during this pregnancy?** | | |
| | i. Yes | ii. | No |
| **3)** | **Where you did normally receive Pre-natal care?** | | |
| i. | Home TBA | ii. | Govt. Hospital / RHC/BHU |
| iii. | Home LHW | iv. | Private Hospital/Clinic |
| v. | Home LHV | vi. | Other |
| vii. | Home doctor | viii. | |
| **4)** | **During the pregnancy, were you given tetanus toxoid(TT 5 dose)** | | |
| i. | Yes | ii. | No |
| **5)** | **Where did she give birth (Last Pregnancy)?** | | |
| i. | Home | ii. | Private hospital/ Clinic |
| iii. | RHC/BHU/Govt. hospital | iv. | Other |

| | | | |
|---|---|---|---|
| **6)** | **Who assisted you during this delivery?** | | |
| i. | Family member/Neighbour, Friend | ii. | Doctor |
| iii. | Midwife | iv. | LHV/LHW |
| v. | TBA | vi. | Nurse |
| vii. | Trained Dai | viii. | Others |
| **7)** | **Did receive post-natal care within 6 weeks after this delivery** | | |
| i. | Yes | ii. | No |
| **8)** | **From where did receive post-natal care** | | |
| i. | BA-home | ii. | RHC/BHU/ Govt. hospital |
| iii. | LHW-home/LHV-home | iv. | Private hospital/ Clinic |
| v. | Doctor-home | vi. | Other |
| **9)** | **Did received any in kind( food, multivitamins) or in cash assistance during the pregnancy** | | |
| i. | Yes | ii. | No |
| **10)** | **Where did you get in kind( food, multivitamins) or in cash from** | | |
| i. | Government | ii. | NGOs |
| iii. | Purchased | iv. | |

## 19) Family planning coverage with modern methods (aged 15-49)

| | | | |
|---|---|---|---|
| **1)** | **Do u adopt any family planning methods?** | | |
| i. | Yes | ii. | No |
| **2)** | **Which method currently using?** | | |
| i. | Pills | ii. | Implant |
| iii. | IUD | iv. | Condom |
| v. | Injectable | vi. | Female sterilization |
| **3)** | **Where did you get from** | | |
| i. | RHC/BHU/ Govt. hospital | ii. | Private hospital/ Clinic/ |
| iii. | NGOs | | |

## 20) Communicable and Non-Communicable diseases

| | | | |
|---|---|---|---|
| **1)** | **Any family member with chronic diseases** | | |
| i. | Hypertension | ii. | Cardio Vascular |
| iii. | Diabetes | iv. | Hepatitis |
| v. | Tuberculosis | vi. | Non |
| vii. | Other | viii. | |
| **2)** | **Which health facility you used to diagnose your disease?** | | |
| i. | Govt. hospital | ii. | Private hospital/ Clinic |
| **3)** | **Where did you get the treatment?** | | |
| i. | Govt. hospital | ii. | Private hospital/ Clinic |
| **4)** | **From where did you get financial assistance for the treatment?** | | |
| i. | Government | ii. | Health allowances |
| iii. | Out of pocket expenditure | | |

**Thank you for your Cooperation**

## Annex 3: Timeline

| **3 MONTHS PLAN** | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Duration** | | | | | | | | | | | | |
| Tasks | 1st week | 2nd week | 3rd Week | 4th week | 5th week | 6th week | 7th week | 8th week | 9th week | 10th week | 11th week | 12th week |
| Identification Of problems | | | | | | | | | | | | |
| Formulating research question/title | | | | | | | | | | | | |
| Proposal writing | | | | | | | | | | | | |
| Pilot testing | | | | | | | | | | | | |
| Data collection | | | | | | | | | | | | |
| Data analysis | | | | | | | | | | | | |
| Final report writing & Submission | | | | | | | | | | | | |

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