PUBLIC EXPENDITURE TRACKING SURVEY IN HEALTH: A CASE STUDY OF KABUL NATIONAL HOSPITALS

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การสำรวจการใช้จ่ายภาครัฐทางด้านสาธารณสุข คือเครื่องมือที่ติดตามงบประมาณรัฐบาลจากจุดเริ่มต้นจนถึงจุดสำคัญที่ถูกใช้ในส่วนเล็กของระดับโรงพยาบาล การศึกษาวิเคราะห์การเชื่อมโยงระหว่างการใช้จ่ายสาธารณะกับการพัฒนาผลลัพธ์ และในที่สุดระบุปัจจัยที่น่าเชื่อถือได้สำหรับการปรากฏของความไร้ประสิทธิผลในระบบงบประมาณของโรงพยาบาลแห่งชาติกาบูลและตัวอย่างของสองโรงพยาบาลใหญ่ที่มีความซับซ้อนและเฉพาะทางในกาบูล (โรงพยาบาลสูตินรีเวชหรือโรงพยาบาลแม่มาลาลัย และโรงพยาบาลเด็กอินทิรา คันที) ถูกพิจารณาสำหรับปีม.ศ. 1390 (มีนาคม 2011- มีนาคม 2012)

การศึกษาประกอบด้วยทั้งสองส่วนของการวิจัยเชิงปริมาณและเชิงคุณภาพ (การสัมภาษณ์เชิงลึก) ในส่วนของเชิงปริมาณประกอบด้วยข้อมูลจากการจัดสรรงบประมาณจากส่วนกลางในปีม.ศ.1930 ข้อมูลในส่วนของอุปกรณ์และเครื่องมือจัดหาและยื่นเสนอแก่โรงพยาบาลจากคลังส่วนกลางและท้ายที่สุดข้อมูลจากโรงพยาบาล ในส่วนของเชิงคุณภาพ ประกอบด้วยการสัมภาษณ์เชิงลึกจากผู้มีส่วนได้ส่วนเสียที่เกี่ยวข้อง ซึ่งประกอบด้วย กระทรวงการคลัง กระทรวงสาธารณสุขและกรมต่างๆ โรงพยาบาลและผู้ที่ได้รับผลประโยชน์ทางสุขภาพ

การศึกษาพบว่าความล่าช้าที่สำคัญในขั้นตอนของการจัดซื้ออุปกรณ์และอุปทานสำหรับโรงพยาบาล ใน ม.ศ.1390 เนื่องจากระบบถูกจัดสรรมาจากส่วนกลางและงบประมาณจึงล่าช้ากว่าหนึ่งปี (378 วัน) โดยเริ่มต้นนับจากขั้นตอนของงบประมาณจนถึงขั้นตอนสุดท้ายการเห็นชอบของงบประมาณโดยคณะรัฐมนตรีและรัฐสภา

ความต้องการเครื่องมือและอุปกรณ์ของทางโรงพยาบาลโดยกลไกการจัดซื้อและการสำรองไว้ในคลังส่วนกลางใช้เวลาเฉลี่ย 145 วันสำหรับการจัดซื้อและสำรอง ดังนั้นรายรับของความต้องการของโรงพยาบาล (เช่น อุปกรณ์/เครื่องมือ) จากคลังส่วนกลางใช้เวลาเฉลี่ย มากกว่า15 – 20วันและบ่อยครั้งที่ความต้องการอุปกรณ์ไม่สามารถหาได้ในคลัง

มูลค่าของผลกระทบทางการเงินโดยความล่าช้าในส่วนที่เกิดขึ้นจริง คือ US$ 30,477 และท้ายที่สุดปัญหาถูกระบุจากระดับส่วนกลางของกระทรวงสาธารณสุข โดยเฉพาะแผนกของการจัดซื้อ เช่นเดียวกับทุกขั้นตอนของกระบวนการและการตัดสินใจซึ่งได้กระทำมาแล้วจากส่วนกลาง ซึ่งแนะนำให้โรงพยาบาลได้รับอำนาจในการบริหารงานเป็นเอกเทศ กับการสร้างความสามารถของการมีส่วนร่วมของเจ้าหน้าที่ในระบบการจัดการทางการเงินของโรงพยาบาล และยังได้แนะนำให้ลดขั้นตอนการปฏิบัติราชการในทุกระดับของการเข้าไปมีส่วนร่วม

สาขาวิชา เศรษฐศาสตร์สาธารณสุขและการจัดการบริการสุขภาพ ลายมือชื่อนิสิต ....

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#5485592029: MAJOR HEALTH ECONOMICS AND HEALTH CARE MANAGEMENT
KEYWORDS: BUDGET ALLOCATION/ACTUAL EXPENDITURE/PUBLIC EXPENDITURE TRACKING/KABUL NATION HOSPITALS/DELAY

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Public Expenditure Tracking Survey is a tool which tracks the government budget from the original to the frontline it is used in small scale of hospital levels. The study analyses the linkage between public spending and development outcomes and finally identifies the factors responsible for the emergence of inefficiencies in the system. The budget of Kabul National Hospitals and a sample of two big complex and specialty hospitals in Kabul (Malalai Maternity hospital and Indira Gandhi Pediatric Hospital) are considered for the Solar year 1390 (March2012-March 2012).

The study consists of both a quantitative and a qualitative (In-Depth interview). The quantitative part include data from the central budget allocation in 1390 year, data on the materials and equipment procured and submitted to the hospitals from Central Stock and finally data from the hospitals. The qualitative part consists of interviews from the relevant stakeholders including the Ministry of Finance, Ministry of Public Health and different directorates, hospitals and finally health beneficiaries.

The study found a substantial delay In process of materials procurement and supply for the hospital, in solar year 1390 the system was centralized and the budget was delayed by more than a year (i.e, 378 days) counting from the start of the budget process until the end of the budget approval by the cabinet and by the parliament. Hospital requirement materials and items in the Central Stock took an average of 145 days to be purchased and reserved. Then the receipt of the hospitals requirements (i.e. items /materials) from the Central Stock took an average of 15-20 more days and often requested materials were not available in the stock. The value of money affected by delay in Real Term is $ 30,477 and finally the problem was identified from the central level of MoPH specifically at the procurement department. As with all the process and decisions were taken centrally, it is recommended that the hospitals has full autonomy with the capacity building of staff involved in financial management system of hospitals and it is recommended that the bureaucratic procedures at all levels of involvement be reduced.

Field of Study: Health Economics and Health Care Management — Student's Signature……………………….
Academic Year: 2012 — Advisor's Signature……………………….

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CONTENTS

Page

ABSTRACT IN THAI....iv

ABSTRACT IN ENGLISH v

ACKNOWLEDGMENT vi

CONTENTS vii

LIST OF TABLES x

LIST OF ABBREVIATIONS xii

CHAPTER I INTRODUCTION 1

1.1 Problems and Significance: 1

1.2. Country profile 3

1.3. Macro - Framework 4

1.4. Structure of the Health Care System 4

1.5 Hospital Efficiency 7

1.6 Research Questions: 8

1.5 Objectives: 8

1.6 Scope: 8

CHAPTER II_BACKGROUND 9

PUBLIC EXPENDITURE MANAGEMENT ARRANGEMENTS IN THE HEALTH SECTOR .. 9

2.1 Definition of Budget 9

2.2 Government Budget Planning Process 9

2.2.1 Current Practice: Traditional Budgeting 9

2.2.2 Development Budget and Donors Contributions to Health: 10

2.2.3 Existing Budget Process of the National Hospitals in Kabul 11

Page

2.2.4 Program budgeting 13
2.2.5 The Budget Cycle 14
2.3 Procurement law of the country 15
2.4 Possible Benefits 16
CHAPTER III_LITERATURE REVIEW 17
3.1 Benefit Incident Analysis 20
CHAPTER IV_RESEARCH METHODOLOGY 24
4.1 Conceptual Framework: 27
4.2 Data collection 29
4.2.1 Quantitative Methodology: 29
4.3 Qualitative Methodology: 30
4.4 Rational for the sample 32
4.5 Data Analysis: 34
CHAPTER V_FINDINGS 38
5.1 Quantitative Analysis findings 38
5.1.1 Malalai Maternity Hospital Actual Expenditure results 38
5.1.2 Indira Gandhi Pediatric Hospital Actual Expenditure results 40
5.2 Budget details 41
5.2.1 Ordinary Budget Approval and Expenditure for year 1390 43
5.2.2 Proposed Budget and expenditure by budget line 44
5.2.3 Delay in procurements and contracts 47
5.3 Qualitative In-Depth interview data analysis 49
5.3.1 Stakeholders analysis reports 49

Page

5.3.2 Health Beneficiaries analysis 59

5.4 Sensitivity Analysis 60

CHAPTER VI_CONCLUSION AND RECOMMENDATIONS 63

REFERENCES 73

APPENDICES 76

Appendix A 77

Appendix B 92

Appendix C 97

Appendix D 101

BIOGRAPHY 104

LIST OF TABLES

Page

Table 1 Literature Review Summary 22

Table 2 Interview Guidelines in each level..31

Table 3 Total number of Hospital and its speciality in Kabul 33

Table 4 Quantifying leakages for each hospital 35

Table 5 Leakage per line item of the budget for each hospital 36

Table 6 Total and average OPD, IPD costs Malalai 38

Table 7 Total expenditure by each cost centers 39

Table 8 Hospital Cost by Major Activity 39

Table 9 Total and average OPD, IPD costs Indira Gandhi 40

Table 10 Total expenditure by each cost centers 40

Table 11 Hospital Cost by Major Activity 41

Table 12 Ordinary Budget approved, expenditure and remaining............................43

Table 13 Proposed and expenditure by codes and sub codes..................................44

Table 14 Delay in procurements and contracts 47

LIST OF FIGURES

Page

Figure 1 Budget Process for National Hospitals 13
Figure 2 Circular flow of the Budget 15
Figure 3 Conceptual Framework 28
Figure 4 Data collection steps 30
Figure 5 Steps for conducting an In-depth interview 37

LIST OF ABBREVIATIONS

ALOS	Average Length of Stay
AMS	Afghan Mortality Survey
ANDS	Afghan National Development Strategy
BHC	Basic Health Center
BOR	Bed Occupancy Rate
BPHS	Basic Package of Health Service
CHC	Comprehensive Health Center
CHWs	Community Health Workers
CSO	Central Statistic Organization
DH	District Hospital
EPHS	Essential Package of Hospital Service
GDoP	General Directorate of Procurement
GDoPh	General Directorate of Pharmacy
GDP	Growth Domestic Production
GIZ	German International Cooperation
HEFD	Health Economics and Health Care Financing Directorate
HP	Health Post
HSC	Health Sub-Centers
IPD	Inpatient Department
ISAF	International Security Force for Afghanistan
JHU	John Hopkins University
MCH	Mother and Child Health
MoF	Ministry of Finance
MoPH	Ministry of Public Health
MSH	Management Science for Health
NHA	National Health Accounts
OPD	Outpatient Department
PETS	Public Expenditure Tracking Survey

PH	Provincial Hospital
USAID	United State Agency for International Development
WHO	World Health Organization

CHAPTER I

INTRODUCTION

1.1 Problems and Significance:

Health system in Afghanistan operates in poor quality especially at the national level. A Hospital Assessment Survey indicates Kabul National hospitals had a poor performance in 2008 (IIHMR, JHU, 2008). To measure performance of the hospitals, the Hospital Assessment study had set different domains to evaluate the hospitals performance as follows; management and administration of the hospital, financial systems, human resources, capacity and infrastructure, quality and safety, functionality index, patients and community, and finally, if the hospitals considered ethical values. National hospitals in Kabul were all assessed as having the result of a poor performance in all domains (IIHMR, JHU, 2008).

Spending on hospitals all over the country made up 29 % of total health expenditure as it was indicated in Afghanistan National Health Accounts (Ministry of Public Health, 2011). Expenditure on health comes mostly from donor's contributions. Contributions from the government are very low, yet all Kabul National Hospitals are financed by the government. Hospitals in Kabul also have the highest percentage of human resource, i.e. 41 per cent of total hospital staff in the country are based on Kabul (MSH, 2004), indicating a further need to understand the flow of funds from the government to these hospitals.

In the 2010 World health report, a number of causes are identified as leading sources of inefficiency in the health system in developing countries. These sources are as follows: Medicine underuse, high prices of generic drugs, use of sub-standard and counterfeit drugs, inappropriate use of drugs, overuse of supply and equipment

and investigation procedures, unmotivated and inappropriate workers, inappropriate hospital size and finally, health system leakages. To address these inefficiencies, the WHO recommends specific ways. In this study, the focus is to identify inefficiency, leakages, and bottlenecks in the system. In other words, health funds, through the use of public spending tracking survey, will be followed to look for rooms for improvement in terms of government regulations and to assess the level of transparency in the system (WHO, 2010).

This study attempts to use a diagnostic tool to investigate the use and misuse of allocated resources. Public Expenditure Tracking Survey, denoted as PETs henceforth, focuses on the flow of funds through different levels of the government in order to identify fund leakages and bureaucratic bottlenecks. PETs have been shown to be an effective tool in identifying delays in financial and in-kind transfers, leakage rate and general inefficiencies in public spending in public services. Recent studies or surveys mostly consider service delivery in public schools, health centers, and hospitals (Reinikka, 2007).

Experiences from various countries that conducted PETs show the strength of this methodology. One of the countries that have conducted PETs is Uganda. It was the first country to implement this tool. PETs revealed that 87 percent of public expenditure in the education sector, excluding wage, did not reach intended beneficiaries. Also, in Ghana, the use of PETs shows that 50 percent on public expenditure in the education sector, excluding wages, and 80 percent of wages as part of health sector expenditure did not reach service providers (Reinikka, 2007).

Public expenditure tracking survey (PETs) is an initiative of the World Bank that countries use as a standard diagnostic tool to track the flow of public and donor funds from the higher level to the lower level, where the lower level could be, for example, providers at hospitals or other public services facilities. Implementing Public Expenditure Tracking survey (PETs) is helpful for the government, donors, Civil

servants and the people to ensure that the allocated funds reach the people. This study will also identify and address problems and weaknesses in the system of public expenditure in Kabul National Hospitals (Malalai Maternity Specialty Hospital and Indira Gandhi Pediatric Hospital) and will reveal use, misuse, bottlenecks of the fund, and its outflow.

Access to expenditure records gives politicians and citizens the ability to engage the government on the issue of effective use of public expenditures on healthcare services. It will also create a motivation for the government to be observant of their financial management practices and contribute to improving the delivery of public health services by identifying and addressing problems of red tape in the bureaucracy (delay), inefficiencies, misuses and leakages (Jan Dehn, Ritva Reinikka, and Jakob Svensson, 2003). Public Expenditure Tracking survey (PETs) is a mixture of both quantitative and qualitative study or exercise that traces the flow of resources from the origin to the destination and determines the location and degree of leakages in service delivery. PETS not only highlight the use and misuse of public money, but also give awareness into how to be cost efficient, consumer perceptions and accountability issues. Utilizing PETs in these two hospitals, Indira Gandhi Pediatric Hospital and Malalai Maternity Hospital, allow for an investigation of whether expenditures at the hospitals are consistent with budgetary allocations, budget execution and whether health services effectively reach the targeted population.

1.2. Country profile

Afghanistan, a mountainous country located in south central Asia with approximately 652,000 square kilometers, shares borders with China, Iran, Pakistan, Tajikistan, Turkmenistan, Uzbekistan and a sector of the doubtful territory of Jammu and Kashmir that is controlled by Pakistan. About half of the territory is more than 2,000 meters above sea level, with the total population of 26.5 million (CSO, 2011-

2012). The major languages are Pashto and Dari/Farsi. The provinces of Afghanistan are the primary administrative division of the country as there are thirty four provinces in the country each province is further divided into districts and the capital city of the country is Kabul.

1.3. Macro - Framework

Since 2002, the economy of Afghanistan has improved significantly. This improvement is also recognized to the growing of agricultural production and other national products Immigrants returning and internationals money infusion. (Ministry of Public Health , 2010). However Afghanistan remains one of the poorest and least developed countries in the world and depends heavily on foreign assistance. As of 2011-2012, the nation's gross domestic product (GDP) at current prices was about US$18.9 billion; the GDP per capita was estimated at US$715 (CSO, 2011-2012) which was a significant improvement in the GDP per capita although when compared it with the past years it was quite low.

About 36 percent of the country's population is unemployed and lives below the poverty line. There are shortages of housing, clean drinking water and electricity (World Bank, 2010).

1.4. Structure of the Health Care System

The public health providers in country are primary, secondary and tertiary. These types of services in the country are being provided through different types of health facilities and they are as follows; 10,277 health posts, 468 health sub-centers, 807 basic health centers, 388 comprehensive health centers, 67 district hospitals, 29 provincial hospitals, 5 regional hospitals and 24 national hospitals throughout the country (MoPH, 2011) (Ministry of Public Health , 2010). As mentioned above, health system in country is provided at three different levels of

services which are called Basic Package of Health Service (BPHS), Essential Package of Hospital Service (EPHS) and National Hospitals. In general it can be said that BPHS is providing primary health care as outpatient services and the EPHS is providing secondary health services as both inpatient and outpatient services. The Basic Package of Health Service is offered in four standard types of health facilities (below the level of the provincial, regional, and national hospitals). The four standard types of health facilities under Basic Package of Health Services (BPHS) are health post (HP), basic health center (BHC), comprehensive health center (CHC), and District Hospital (DH). These services include outreach by community health workers (CHWs) at HPs, outpatient care at BHCs, and inpatient services at CHCs and DHs. In addition, services are provided through health sub-centers (HSC) to bridge the gap between HPs and other BPHS levels of service delivery and mobile health teams (MHT).

Health Post (HP): At the community level, basic health care services are delivered by Community Health Workers (CHWs) from their own homes.

Health Sub-Centers (HSC): The Health Sub-Center is an intermediate health delivery facility to bridge the services gap between Health Posts and other BPHS levels of service delivery.

Mobile Health Team (MHT): This team is providing health care services in the remote areas as for the areas which are not under coverage of other health facilities.

Basic Health Center (BHC): The BHC is a small facility that offers the same services as an HP but with more complex outpatient care.

Comprehensive Health Center (CHC): These centers provide the services as Basic Health Centers and in addition the normal deliveries are added in these health facilities. This level of facilities also does not provide inpatient services (MoPH, A Basic Package of Health Services for Afghanistan , 2010).

Hospitals play a critical role in the Afghanistan's health sector. Hospitals are a part of the referral system, which aims to provide sophisticated services that other health facilities are unable to provide. Hospitals are classified into three groups according to size of the referral population, number of beds, workload, and complexity of patient services offered:

- District hospitals (DH)
- Provincial hospitals (PH)
- Regional hospitals (RG)

Another group of hospitals are specialty hospitals which are referral centers for tertiary medical care and are located primarily in Kabul. They provide education and training for health workers and act as referral hospitals for the provincial and regional hospitals. A separate category of specialty hospitals was not created for the EPHS because each of these hospitals is unique, and it would was difficult in the EPHS to have these hospitals part of their group as characterize of national hospitals are unmatchable to become in one group as EPHS and to provide unique services, staffing, equipment, and drugs required at each of these hospitals are quite different than EPHS.

District Hospital (DH): The District Hospital handles all services in the BPHS, including the most complicated cases including other services that are not provided by other facilities.

Provincial Hospital (PH): The PH is the referral hospital for the Provincial Public Health Care System. The PH is counted as the final referral point for patients referred from the districts. In some occasions, the PH can refer patients to higher levels of care in the regional hospital or to a specialty hospital in Kabul.

Regional Hospital (RgH): The Regional Hospital is primarily a referral hospital with a number of specialties for assessing, diagnosing, stabilizing and treating, or referring

back to a lower-level hospital. The regional hospitals (RgH) provide professional inpatient and emergency services at a higher level than is available at DHs and PHs.

National Hospitals (NH): National hospitals are referral centers for tertiary medical care and are located primarily in Kabul. They provide education and training for health care workers and act as referral hospitals for the provincial and regional hospitals. These hospitals are have different specialty for example (Maternity, Pediatric, Ophthalmology, Stomatology, Orthopedics) which will later be explained in table (MoPH, The Essential Package of Hospital Services for Afghanistan, 2005).Totally there are 18 hospitals in Kabul and out of 18 hospitals two of these hospitals are operated under Ministry of Higher Education and these two hospitals are the teaching hospitals. The rest are operated under the MoPH and all these 18 hospitals are received their funds from the government of Afghanistan.

1.5 Hospital Efficiency

In this study Efficiency in Kabul national hospitals is evaluated based on input and output indicators. Average Length of Stay (ALOS), Bed Occupancy Rate (BOR), actual expenditure per OPD visit and per hospitalization day. Typically ALOS greatly differs across different procedures and different wards and according to the WHO BOR is advised not to be more than 85%. If the percentage is more than 85%, it means the hospitals are inefficient and need more beds. For example Indira Gandhi Pediatric Hospitals, BOR was 86% implying that it was not efficient, but, for Malalai Maternity Hospital BOR was 75%. However, if we go in to details and see each ward, BOR for most of the wards in Malalai Maternity hospital are not efficient. Expenditure per OPD visits in Indira Gandhi hospital was $3.73 while in the Malalai Maternity hospital it was $1.82, cost and actual expenditure per day in Inidra Gandhi was $16 and in Malalai hospital was $33.

1.6 Research Questions:

1. Do the allocated resources from the government reach intended beneficiaries?
2. What are the bottlenecks and weaknesses of the public health expenditure system and inefficiencies of the current financial resource management?
3. What mechanism can guard the system against inefficiency and work towards ensuring transparent, accountable and effective resource management?

1.5. Objectives:

1. To trace the flow of the health budget for the provision of health services from the origin to the final destination.
2. To detect bottlenecks and delay of the health expenditure system and financial resource management.

1.6. Scope:

This study is an analysis of the use of public expenditure at Indira Gandhi Pediatric and Malalai Maternity hospitals. The study is descriptive and in-depth interviews are conducted. Questionnaires are developed and data were collected in February 2013.

CHAPTER II

BACKGROUND

PUBLIC EXPENDITURE MANAGEMENT ARRANGEMENTS IN THE HEALTH SECTOR

2.1 Definition of Budget

Every organization and entity no matter how small or how big is needs to have a budget in order to operate. Within the structure of the organization money may be derived in the case of voluntary organization from the member's contributions, in a commercial or manufacturing firm from the sale of products or services, and from raising taxes and charging for services in government.

Every organization has its own characteristics and its own scope and objectives. In order to achieve its objectives, each organization must have resources of fund or money to run the organization and achieve extra objectives. (MoPH, 2011) Therefore every organization needs to use the available money in an efficient manner and not misuse it.

2.2 Government Budget Planning Process

2.2.1 Current Practice: Traditional Budgeting

Currently the government of Afghanistan practices a dual budget process. 1) Operating budget is obtained from the Government of Afghanistan's revenues, and 2) external budget (development budget) is primarily funded by donors with inputs from the government. The core budget consists of central government funding through the government's Treasury covering current expenditure. The Cabinet and the Parliament must approve core budget as well, subject to the public financial management mechanism. The Government of Afghanistan has traditionally

required ministries and budgetary units to use line-item budgeting. Line items in the budget typically consist of 1) wages 2) commodity and 3) services, where each of these items is allocated with some details. Wages include salaries of permanent employees and professional allowances. Commodities consist of stationaries, vehicle fuel and office equipment and finally services refer to the cost of using telephones and the cost of maintaining buildings and machineries (Budget Statement, 2011).

Now the Ministry of Public Health's and other ministries' budgets are classified according to the government's classification codes for each line item. These codes are as follows; code 21 stands for salaries and wages, code 22 stands for goods and services and code 25 stands for procurement of capital. Each of these codes is further classified to sub-codes (Appendix B) which provide details of other types of expenditure that may occur. According to these codes and sub codes every ministry has to submit an estimate of the total needed budget for the coming year. This budget approach (traditional budget approach) is a simple way of preparing the national budget, and provides a suitable basis for controlling the expenditure during the period of policy execution. One notable feature of the budgeting process in Afghanistan is that ministries are not permitted to transfer budget allocated to a line tem to another. For example, it is not possible to use code 21 salary to buy commodity which is code 22 (Budget Statement, 2011).

2.2.2 Development Budget and Donors Contributions to Health:

In Afghanistan's health system donors play a dominant role which their contributions represent 75 percent of total public expenditures on health, suggesting that health care priorities are largely donor driven in contributing funds for providing of health services in the country through government development budget as most donors funds are being spent outside the government's core budget although donors assistance in providing the core budget is increase.

The major player are USAID, World Bank for supporting the BPHS and EPHS through the development budget, While other assistance are being spend outside governments budget. European Union is funded externally without channeling through government core budget. World Health Organization, UNECIF, ISAF (International Security force for Afghanistan) and many other small and medium donors operating in the country like CIDA Canadian International Development Agency, GIZ, UNFPA, JICA, ICRC, MSI which their assistance are being spent out of government budget but the biggest portion of health funds are derive from three donors USAID, World Bank and European Union.

Mostly development budget and donors contribution cover the following areas of health programs; Health systems support, Maternal and Child Health, Mental Health/ Drug Demand Reduction/ Pharmaceutical, Communicable disease and disability (Health Care Financing Strategy 2008)

2.2.3 Existing Budget Process of the National Hospitals in Kabul

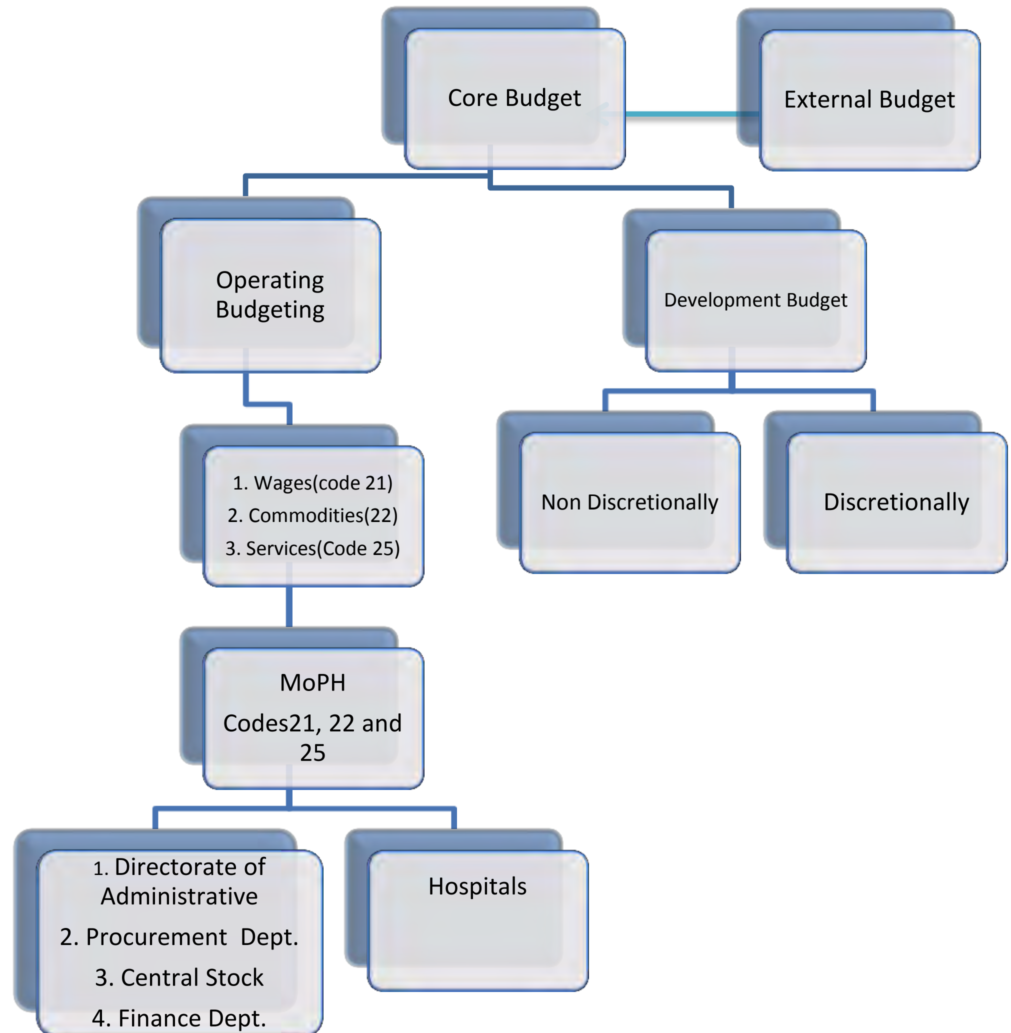
National hospitals in Kabul are funded through government operating budget. And special programs like Vaccination, Tuberculosis program and HIV combat are being supported by different donors. But unfortunately the hospitals funding is derive without any linkage of previous hospital utilization and expenditure data and not well defined.

Currently each national hospital administrative are preparing their budget plan and submitted to MoPH for a one financial year, the budget is prepared without any previous expenditure information and hospital patients utilization history finally MoPH Finance Department submits as a consolidation budget for the whole health system to the Ministry of Finance, and this whole budget does not have any breakdown of each hospital budget.

Every hospital in Kabul has to make procurement and expenditure requests to the MoPH without any information about their specific total hospital budget. Requesting of goods from MoPH directorates are as estimation and not follow any standard formats. These departments that are involved are Finance directorate under General directorate of Administration, Procurement Department and Central Stock.

Hospitals have to wait for the period of known time for the requested items without getting any response from the Central Administration Department, except the food, fuel and salaries that are provided on schedule. The hospital will receives an allowance of drugs, supplies of services based on centralized procurement decisions without considering hospitals requested needs. (MoPH, 2010)

Figure 1 Budget Process for National Hospitals



2.2.4 Program budgeting

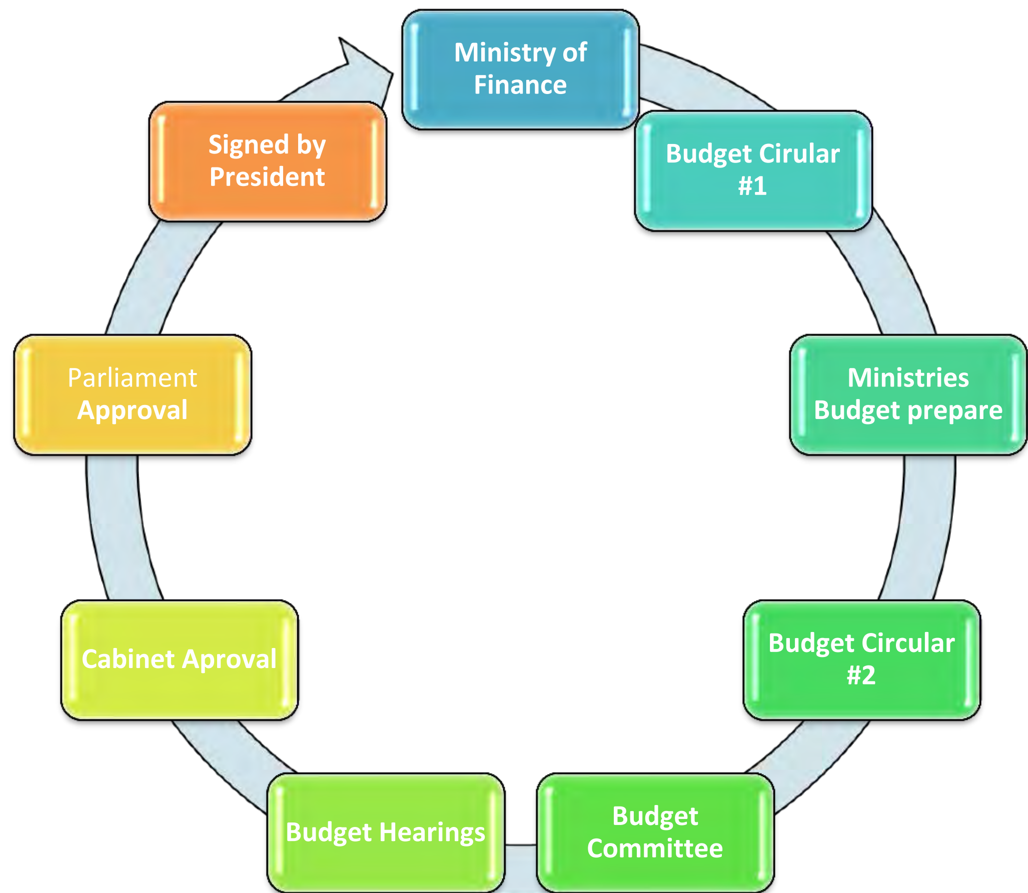
Currently the Ministry of Public Health and other ministries are using this budget process which is called traditional budgeting process (that use classification of codes and sub codes) although the government of Afghanistan is working on a program to integrate and use a modern method that that is consist of the old budget process(traditional budgeting) and program budgeting or in other word to integrate

operating and development budgets and avoiding duplication in both operating and development budgets.

2.2.5 The Budget Cycle

Ministries and budgetary units are expected to present and manage their budgets in a way that is consistent with the Afghanistan National Development Strategy results framework. The budget follows the cycle shown in Figure#1 the process starts from the budget preparation by ministries and it is followed by budget circulation, budget committee, budget hearing, cabinet approval, parliament approval and finally the budget will be signed by the president of country. This process followed by budget calendar which starts from 15 April and has to end in February of each year i.e the duration of 10 months.

Figure 2 Circular flow of the Budget



Sources: Ministry of Finance, budget formulation process 2010

2.3 Procurement law of the country

Afghanistan has a procurement law and it is necessary to know this process, while after the budget process is finished every ministry need to follow that procedure for procuring goods and services. They should follow this law to be consistent with the government law. This process is also very important to follow if not followed ministries cannot do any procurement. The objective of the procurement law of Afghanistan is to guarantee transparency of the procurement procedures, active control of financial activities and public expenditure to provide opportunities for the participation of qualified bidders. All government entities ministries, municipalities

and other units using funds from the government budget required to procure goods and services in accordance with the procedures included in the law. The procurement should follow the following procedures starting the prequalification documents, bidding documents, contracts, agreements and contract conditions. Every entity has to follow these procedures strictly in order to obtain the budget for operating to public services (Government of Afghanistan, 2009).

2.4 Possible Benefits

- Increase government funds for delivering of quality health care.
- Make a significant improvement in the allocation of existing resources to improve outcomes.
- Determine the bottlenecks that currently obstruct the efficient use of resources.
- Determine if the allocated amount of money for the hospital is sufficient.
- Improve accountability of the government to the people and the parliament.
- Determine the processes and procedures involved in budget planning, allocation, disbursement, execution and evaluation.
- Explore if budget process is efficient and effective.
- Identify if there is any delay, leakage or diversion inflow of funds.
- Define whether the funds reach the intended services.

CHAPTER III

LITERATURE REVIEW

Uganda was the first country to implement Public Expenditure Tracking survey (PETs) in both education and health sectors in 1996, due to lack of suitable and sufficient public accounts and to reflect actual spending and increase accountability. This study was implemented to track the flow of funds from the original (high level), which they allocated budget for the providers, to the lower level. To find what exactly happened to the allocated fund. The result was that on average in school just 13% of provided funds excluding salary reached the school and 87% were misused. After continues implementation of public expenditure tracking survey in Uganda in year 1999 and 2000, a significant improvement was indicated in public expenditure management. The funds reached to the providers of public service by overall 80 and 90 percent in 1999 and 2000 respectively (World Bank, 1999).

Kenya was suffering from a number of problems: bottlenecks, wastage and leakages of public resources because of the weak procurement procedures and weak monitoring system of public expenditure at different levels. In 2004 the government of Kenya started to run a survey for having more useful information and improving the effectiveness of public expenditure on service delivery. Thus conduct Public Expenditure Tracking survey (PETs) and collected data from different levels of related organizations (Multistage sampling procedures), and interviewed key relevant actors. And the analysis of this study was based on descriptive statistics. First they ran a quantitative study to support the qualitative findings to reflect enough information for policy implications. The final result indicated and identified constraints in public service delivery and leakages of public resources at different levels. Poor record keeping was one of their findings in most of the institutions and

overall the study showed that about 85 percent of the health facilities did not have enough medical supplies while 83 percent of health facilities purchased their medical requirement. PETs indicated that during the financial year of 2001 and 2002 only 70 per cent of drugs were issued at the district level and only 59 per cent of supplies drugs reached and were distributed in health facilities. Facilities with annual audit have a leakage of 25 per cent in the drugs while in non-audit facilities it was 34 percent. And, for user charges, PETs indicated that about 22 per cent and 28 per cent for the audited and non-audited health facilities respectively (KIPPRA, 2004).

The government of Tajikistan wanted to adopt an intervention to help improving the effectiveness of the health system to the beneficiaries and improve the financing system of the country, especially one of health. The government decided to conduct a study of Public Expenditure Tracking survey (PETs), to track the flow of fund from the original to the destination in 2006 with the support of the World Bank. Their survey questions were designed and covered all institutions covered information about the budget process from the origin to end users. They used a mixed method of quantitative and qualitative survey. Their qualitative part included interviews with key relevant staffs. The result from study of public expenditure tracking survey obtains much information about public resources before reaching facilities that provide public services. And also this study enabled them to build a budget management reform. And Identify deficiencies in their budget management system and practices, especially at the local level which included budget preparation execution and reporting, delay in the payment of salaries and deduction in the amount of allocated salaries was dominant. The other important result is that the allocated budget was not sufficient; it was under allocated for health. (World Bank, 2008)

With the same objectives as other countries in Tanzania two studies were implemented first in 1999 and the second one in 2001 to find out the serious problems in the flow of funds from the central governments through the local

authorities to beneficiaries. In the first Public expenditure tracking survey the sample was 45 primary schools and 36 health facilities. The survey indicated a diversion of a large portion of funds disbursed in the central level for expenditure excluding salary in education sector and health expenditure. They used the allocated funds for their personal advantage while paying of salaries was delayed at public facilities. The second study was also implemented on health and education sectors and indicated that there were significant delays in disbursement of funds at all levels of the government. Delay was more dominant expenditure excluding salary in the rural areas. Rural districts also suffered from fewer amounts of intended resources than their urban counterparts (USAID, 2004).

In Rwanda PETs started to track the flow of resources and grants provided for public services in health and education for the years 1998 to 1999 to practice accountability at various levels, areas of improvement of public services, efficiency of the administrator's system. Assessing whether the amount of funds appropriated actually reached beneficiaries was the important objective. The analysis of Public Expenditure Tracking survey (PETs) was done in 2003 with regard to health and education and traced the flow of budget from the Ministry of Finance to primary health centers and beneficiaries as well as schools by a period of one year from 1998-1999. PETs showed a significant delay in the process of public funds transfer from the central government to final beneficiaries and some leakage of funds at the regional and lower level of health and education offices. The lack of accountability at regional levels created a way for leakage. The study also found that the budget allocation from the government for health and education paid for the salaries of health workers and teachers only, while the facilities relied on the contribution of household fees, and a large contribution of donors and NGOs. The cost of services was also very high. 95 % of those who needed to go to a health facility didn’t do so because of the high cost and 80 % of those who used health facilities were unsatisfied with the cost of services (Fofack, Ngong, & Obidegwu, 2003).

Cambodia is another country that implemented Public Expenditure Tracking survey (PETs) after their first PETs in educations sector in 2004. The aim of this study was to help the government of Cambodia diagnose issues and recommend directions for improving effectiveness and efficiency of public financing in the health sector. This study was bigger practice of the Cambodian government's public reforms in health systems. Experience from the first PETs on education contributed to the design of a mixed method approach for the public expenditure in health. PETs in health combined both quantitative and qualitative survey techniques tailored to the specificities of the country's budget management practices. The quantitative survey assessed the scale of funds reaching frontline facilities while qualitative approaches investigated the processes related to resource management. Quantitative survey used structured interviews with key informants and data from accounting records. The qualitative approach comprised review of secondary data and in-depth interviews with key informants at all levels of health systems. The results indicated that only a small share of government budget expenditures was spent on direct delivery of health service. Only 36% in 2003 and 32% in 2004 of the government health budget was spent on providing health services and importantly disbursement delay was significantly long about 4.3 months in 2003 and 3.8 months in 2004 from provincial treasury to provincial health departments' level. (World Bank, 2008)

3.1 Benefit Incident Analysis

It is generally accepted for the government for providing health services without considering equality or disproportionally to be benefits the poor. Benefit Incident Analysis is a study for understanding how much of public spending distribute by individual categorizes or live standards, poor received most of the health care services or rich received. To find out are the government expenditure on health are more pro rich or pro poor. In the simplest form it is as an accounting procedures to see and find out how much of public spending received by whom. In this study

recipients are usually separate based on their economic situation, ages and ethnicity to see the equity of using public providing services for the population.

Chosen living standards are needed to be measures by the income of the families or other measures to find out household micro data and will be used to find out the rank of the individuals who are receiving health services from public health facilities to know the equity of health distribution (Wagstaff, 2010).

In general it can be said that BIA is most focus on the household status whether poor received or rich received the services at public facilities, and do not consider about the allocated amount of money, use and misused of the resource. While PETs is looking at the institutions levels and will find out the use, misuse and delay of fund and are looking for inefficiencies of current resources used for providing health services at all level of involvements.

Table 1 Literature Review Summary

Country	Year	Sectors	Objective	Sample size	Conclusion
Uganda	1996 - 2000	Education, Health	Its effort to compare budget allocation to actual spending through the different levels of government, including frontline service delivery units in both primary schools and clinics	250 primary schools and 100 facilities in total of 19 districts out of 39	It indicates 87% of misused just 13% reaches to the beneficiaries in 5 years of time this percentages reaches to 80% and 90% reaches to the public service providers
Tanzania	1999 & 2000	Health and Education	To evaluate actual spending & appraise leakage of funds transfer from government to health facilities at sector level	36 health facilities & 45 primary schools	Delay in salary. Receiving smaller shares of the intended resources substantial delays in the disbursement of funds at all levels of the government
Rwanda	1998-1999	Health and Education	To evaluate actual spending & appraise leakage of funds transfer from government to health facilities at sector level	400 primary, secondary schools & 351 health facilities	Very limited funding of the central government for primary education and primary health care, incoordination of donors, NGOs and government. The actual release of the funds is irregular and always with delayed

Cambodia	2003-2004	Health & Education	To diagnose issues and propose directions for improving effectiveness and efficiency financing in the health sector	20 health facilities	In 2003 and 2004 only 6% and 32% respectively government health budget was spent providing services in government health centers and referral
Kenya	2004	Education, Health and Agricultur e	Provide useful information for improving the effectiveness of public expenditure and service delivery	279 schools (primary & Secondary) and 54 health facilities	Identify constrains in service delivery and leakages of public resources at various levels, poor record keeping in most institutions
Tajikistan	2008	Health sector	In order to support future reform efforts	326 health facilities	Health sector continues to be severely underfunded, few resources reach front line, degree of discretion allocation of scarce resources is too large

CHAPTER IV

RESEARCH METHODOLOGY

The methodology here is derived from international experiences of PETs, with in the establishment of countries (Afghanistan) context and study's objectives (Reinikka, 2007). This study will be Macro- level information of service delivery systems and service provider performance.

For implementing Public Expenditure Tracking survey in health system the following three steps should be considered.

1. Step one: Mapping the flow of resources. A list of sources from which to gather all data needed to conduct PETs needs to be provided. The resource map may be simple or complex with multiple sources of funding. In this study the flow of funds makes from the higher level of government (Ministry of Finance) to the lower level (Ministry of Public Health and its directorates in side MoPH) and finally hospitals. All of the funding goes through this channel and data need to be collected from these levels of involvement. Amount of materials and equipment received by Malalai and Indira Gandhi hospitals from different sources are available in Appendix C.

After completing the mapping of the resources flow and the completion of the secondary data from relevant government offices, gathering budget data itself can reveal and give good information about the trend of public expenditure. The ample needs to be selected and questionnaires designed.

2. Step two: data should be collected carefully. Cleaning of the data should be done during the collecting time of the data, and during the data entering it could uncover trends that needed to be added in the survey later.

Data analyzing is the most important phase of the study. It takes less time than the actual data collection and preparation. Data analysis includes the identification of the leakages of the funds, delay (where the money gets stuck). Leakage could be identified at each stage of the expenditure chain by comparing the amount of allocated from the higher level and the amount received by the lower level.

3. Step three. Identifying answers and further problems. The result of quantitative findings and result of in-depth interviews will be finalized in this step. At the same time the delay and leakage will be reveal and the study objectives and study questions will be answered.

Example of PETs: The goal of PETS is to gather information beyond official data and administrative records, to understand what actually happens to money and whether the amount is appropriate for service delivery. **PETs is not a software. This is a method for finding out the flow of money, tracking the government budget for service delivery for the public and to locate where these funds are spent and how much are received for delivering services by the facilities.** PETS identifies the problems that occur in the institutions involved in the management and supply of the hospital requirements and which organization causes most of the problem.

Mainly this methodology is a mixed method of quantitative and qualitative surveys. The quantitative survey calculates the scale of funds reaching frontline facilities and end users. The qualitative analysis investigates the procedures and issues related to budget resource management in order to find out where the problem lies.

Particularly in small scale PETs quantitative methods can be used to identify the leakage, delay, and the amount of leakage but it may fail to explain causal issues. Qualitative methods alone cannot provide the statistical evidence that decision makers seek before they are going forward to seek the solutions (World Bank, 2010).It is therefore necessary to conduct both quantitative and qualitative surveys to exactly find the cause. And this study contains both studies quantitative and qualitative.

To overcome some of the information problem in the principal agent relationship (i.e. the relationships of all levels of involvement) in the process of budget execution, budget process and finally the process of service providing for the public, the main focus is on organizational and institutional characteristics. Particularly, attention is paid on the way in which Indira Gandhi Pediatric Hospital, Malalai Maternity Hospital, MoPH and MoF manage the budget and monetary issues. This study examines flows of funds and supplies from the central government to local service providers in order to identify and determine the use and misuse of resources.

Questionnaires are developed addressing all levels of organization (MoF, MoPH, Hospitals and People). The questionnaires attempt to acquire general information, financial and accounting information including budget and expenditure of the hospitals for the duration of financial year 1390 Solar Year[1] (March2011-March2012).

For the health care utilization and actual expenditure information of Indira Gandhi and Malalai Hospitals I use data from “Costing of Kabul National Hospitals” that available for the same period of time 1390(March 2011- March 2012). The report of actual expenditure of Kabul National Hospitals gives complete information of health

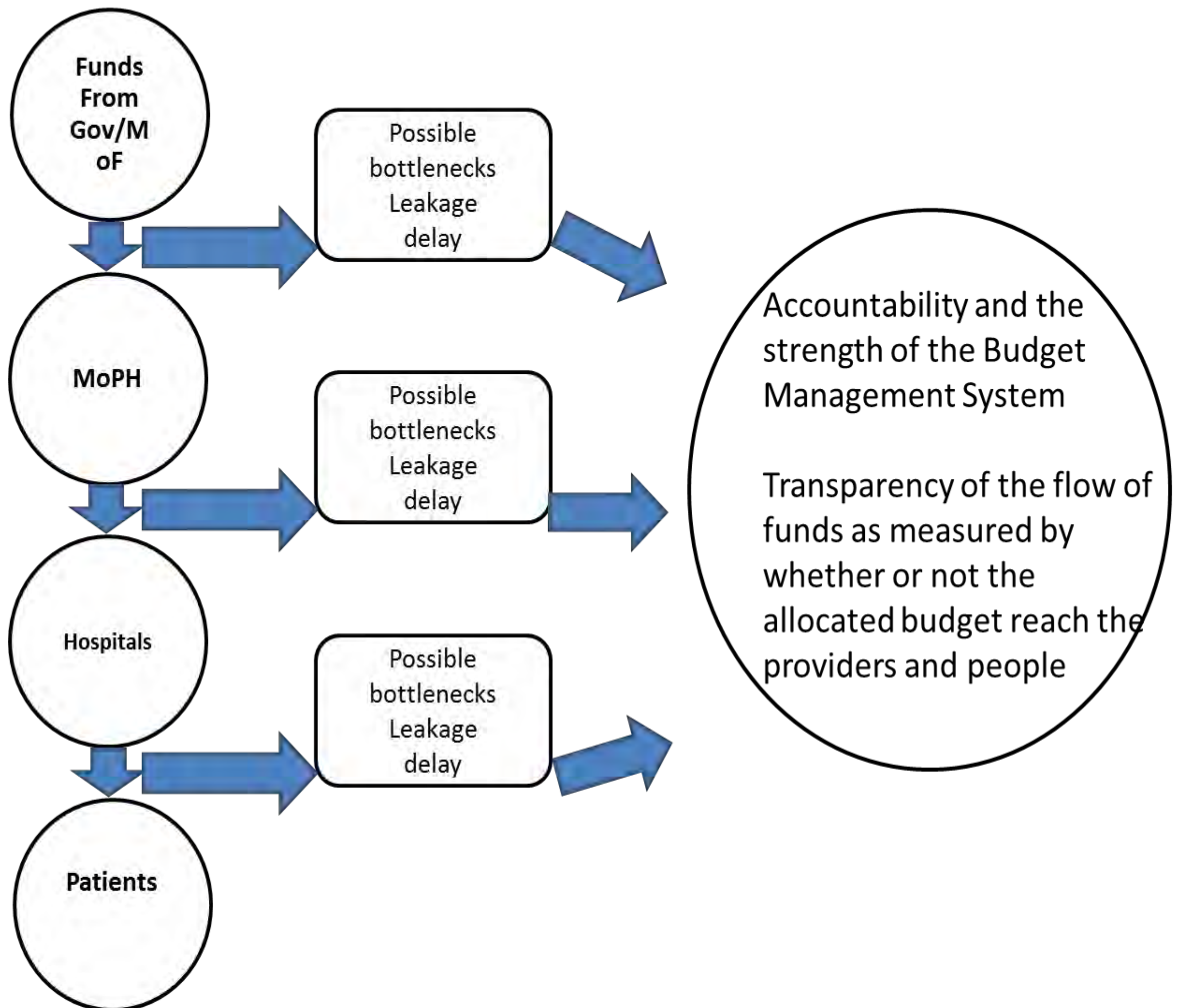
[1] Afghanistan calendar year (financial year) is calculated based on solar year and has a difference of 621 years from Gregorian calendar year.

services provided in these two hospitals for the duration of one year including total and unit cost of all services, number of OPD and IPD visits, Average Length of Stay (ALOS) and Bed Occupancy Rate (BOR).

4.1 Conceptual Framework:

The Government of Afghanistan allocates funds which come from government revenues (taxes). After a long budget process the allocated budget will be accepted by the government and the parliamentarians. The entities must follow a long procurement procedure according to the procurement law. The process takes a long time and may cause delay or leakages.

Figure 3 Conceptual Framework



It shows the flow of funds from the higher government level to the lower level hospitals. The budget allocated from the MoF to the MoPH possible that bottlenecks, leakages and delay would happen at this level of involvement. Than in the MoPH as a centralized system all the procurement and distribution are happening , possible that all the problems, leakage and delays would be in purchasing and distributing process from the central level to the hospitals levels. This study will increase government

accountability, strength budget management system of the country, and will enable lower level to prepare their hospitals budget.

4.2 Data collection

4.2.1 Quantitative Methodology:

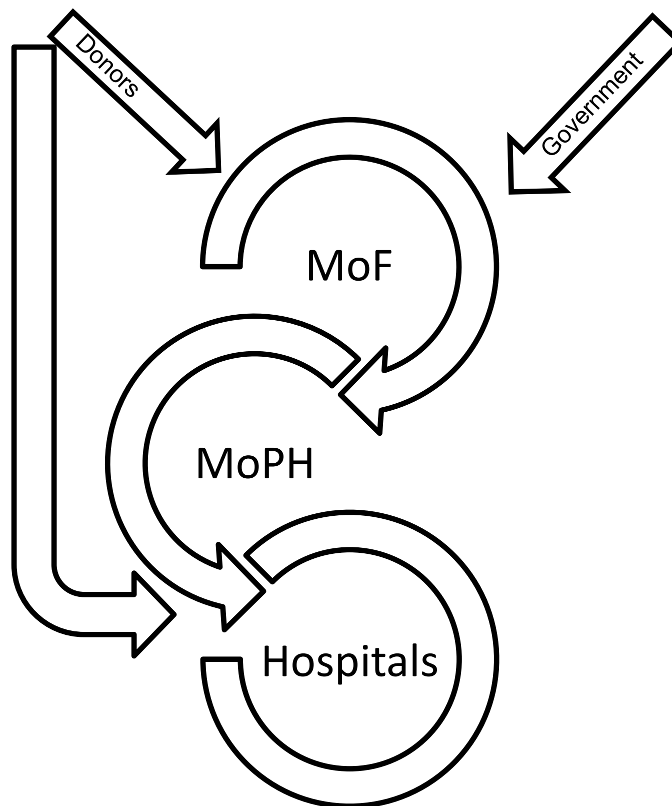
Questionnaires includes in “Appendix A” were designed to address stockholders. It asks questions including the amount of allocated budget from the Ministry of Finance budget department, actual expenditure data from different departments in the Ministry of Public Health (Procurement Directorate, Central Stock, General Directorate of Hospitals and two Hospitals). These departments are responsible for preparing drugs, foods and other hospital recurrent costs. Finally actual expenditure data were collected from Indira Gandhi Pediatric Hospital and Malalai Maternity Hospital. And the data were later analyzed on a spreadsheet.

The nature of this study requires information from the Ministry of Finance, Ministry of Public Health (especially General Directorate of Procurement which is responsible for the procuring foods, drugs and other recurring expenses). Central Stock which stores all the goods redistributes all these goods for hospitals and finally data from two hospitals (i.e. Indira Gandhi Pediatric Hospital and Malalai Maternity Hospital). After developing structured questionnaires for the quantitative data collection and interview guide for adopting interviews with relevant organizations key staff, the data collection process began from the higher level to the lower level. The sample was selected based on Nonprobability **purposive (judgmental) sampling** method. (NHS R&D HTA Programme, 1998)

Purposive or Judgmental Sampling: purposed sampling method is a sampling method used whenever an objective is available and a targeted group is

considerable. And specific relationship is available within the related targeted groups.

Figure 4 Data collection steps



Above figure give an idea at a glance that from where start collecting data as it can be seen that all level of involvements are indicated here therefore it would be necessary to collect data from all levels: MoF, MoPH and from Hospitals.

4.3 Qualitative Methodology:

For the qualitative part of the study, primary data were collected from the stream of budget allocation from the higher level of government to the lower level of service providers. In-depth interviews were under taken with related staff from Ministry of

Finance budget department, Ministry of Public Health, Indira Gandhi pediatric hospital and Malalai maternity hospital personnel. Some interviews were also conducted on beneficiaries (patients) of services at these hospitals.

Table 2 Interview Guidelines in each level

Organizations	Number of Interview	Remarks
Ministry of Finance/ Budget Directorate	1 Interview	Health Sector Budget Manager
MoPH/HEFD/Health Financing unit	1 Interview	Health Financing Head Unit
MoPH/GDoP	1 Interview	Procurement officer for hospitals
MoPH/GDoCentral Hospitals	1 Interview	Financial and budget consultant for the hospitals
MoPH/GDoA/Finance Directorate	1 Interview	General Manager of Ordinary Budget
MoPH/Central Stocks	1 Interview	Responsible of central stock
Hospitals	4 Interviews	Director of Hospitals and Financial head unit
Health beneficiaries (Patients)	12 interviews	One interviews from each wards of hospitals

Mainly I interviewed with following people in each organization: In Ministry of Finance I interviewed the health sector manager, the Ministry of Public Health I interviewed Health Economic and Health Care Financing Directorate head of Health Financing Unit which mostly managing all budget related activities for the program budget of development budget, Ordinary budget manager . General Directorate of Central Hospitals, General Directorate of procurement and Supply, Central Stock that

is responsible for storage and redistribution to the hospitals and finally from the I interviewed director of each hospitals and financing managers of two hospitals. And lastly I interviewed people (Patients) who received treatment in the mentioned hospitals.

4.4 Rational for the sample

Reasons for the selection of two hospitals are (I) Indira Gandhi hospital is the only specialty and complex hospital for pediatrics in the country (ii) the recent November, 2012 study of Cost Analysis of Kabul's National Hospitals indicates that between all Kabul national hospitals this hospital has the highest expenditure. Malalai maternity hospital is the other biggest and only maternity hospital in the country with the highest number of visits between other maternity hospitals; also this is the biggest referral hospitals in the country for maternity problems.

Total available hospitals in Kabul are 18. I divide them in two categories: Complex and Specialty. Eleven of these Kabul hospitals are complex hospitals which provide variety of services for public. Seven other remaining hospitals are specialty hospitals which provide specific services for the population. Based on this classification, I select one from complex hospital and one from specialty hospitals as a sample. The actual expenditure of the below 18 hospitals is available which indicates the total actual expenditure, department cost, actual expenditure per outpatient visit, cost per hospitalization day and other actual expenditure details. Below this table lists all 18 Kabul National Hospitals with their specialty number of beds and the services are provided in these hospitals.

Table 3 Total number of Hospital and its speciality in Kabul

Specialty	# of Beds	Year Establish	Type of hospital	Location	Hospital Name
Chest Surgery (cardiology), Internal Med	60	1962	Complex	Pul-e Artal, District 2, Kabul	Ibne Sina Sadri
General Surgery, Internal Medicine, Neurology, Neurosurgery, Urology	221	1932	Complex	Karte Sakhi, District 3, Kabul	Ali Abad
Pediatrics, Internal Medicine, OBGYN	25	2006	Complex	Dasht Barchi, District 13 , Kabul	Dasht-e Barchi
Burn Center, OBGYN, General Surgery, Internal Medicine	310	1982	Complex	Darulaman Road, District 6 ,Kabul	Esteqlal
ENT, General Surgery, Internal Medicine	136	1975	Complex	Walayat Kabul Road, District 4 ,Kabul	Jamhoriat
Dermatology, ENT, General Surgery, Internal Medicine, Malnutrition, Plastic Surgery	226	1939	Complex	Maiwand Road, District 2, Kabul	Maiwand
Emergency, General Surgery, Internal Medicine, Neonatology, OBGYN	174	1991	Complex	Froshgah, District 2, Kabul	Rabia Balkhi
General Surgery, Internal Medicine, Orthopedics, Ortho Recovery	210	1965	Complex	Wazir Akbar Khan, District 10, Kabul	Wazir Akbar Khan
Dermatology, Ear, Nose and Throat (ENT), General Surgery, Neurosurgery, Internal Medicine, Vascular Surgery	200	1961	Complex	Pul-e Artal, District 2, Kabul	Ibne Sina Emergency
Pediatrics (Dermatology, Emergency	350	1976	Complex of Pediatric	Wazir Akbar Khan, District 10, Kabul	Indira Gandhi

Malnutrition, ENT, General Surgery, Internal Medicine, Orthopedics,					
OBGYN, Fistula, Neonatology, Emergency	200	1946	Maternity	Shahr-e-ara, District 4,Kabul	Malalai
Physical Therapy	30	1981	Specialty Orthopedics	Pul-e Artal, District 2, Kabul	Ehyay-e Mojadad
Pediatrics (Internal Medicine, Malnutrition, Surgery)	187	1983	Pediatric	Karte Sakhi, District, Kabul	Ataturk
Infectious Diseases	100	1979	Specialty	Walayat Kabul Road,District 4, Kabul	Antani (Infectious Disease)
Addiction Therapy, Mental Health	100	1989	Addictive Specialty	Karte Seh, District 3, Kabul	Mental Health
Ophthalmology	75	1947	Specialty	Cinama-e Pamir, District 2, Kabul	Noor Eye
Tuberculosis treatment	35	1931	Specialty TB	Darulaman Road, District 6, Kabul	Tuberculosis
Dental/oral surgery	30	1978	Specialty Stomatology	Froshgah, District 2, Kabul	Stomatology

4.5 Data Analysis:

The analysis includes the identification of bottlenecks leakages of funds, delay (where the money gets slowed) and where the problems may exist in the expenditure chain (KIPPRA, 2004).

Leakage can be identified at each stage of the expenditure process from the higher level to the lower level, by comparing the amount paid by the higher relationship in the chain and the amount received by the lower relation in the process. The exact

amount of leakage may not be found but it would be possible to at least find evidence of leakage.

Table 4 Quantifying leakages for each hospital

Hospitals	**Allocated amount**	**Date**	**Received amount**	**Received Date**	**Leakages how much?**	**Time of Delay**
Indira Gandhi	A	A1	R	R1	A-R= leakage amount	A1-R1=Delay
Malalai Maternity						

In addition to calculating allocated funds and the expenditure amount I also calculate the incidence of inefficiencies, such as delays in the arrival of funds by using the bellow simple calculation formula.

$$Leakages\ by\ percentage = \frac{\text{Resrouce received by facility}}{\text{Resource allocated by higher level for the facility}}$$

The table below indicates the calculation of the leakages and delay of funds for each specifics budget line items:

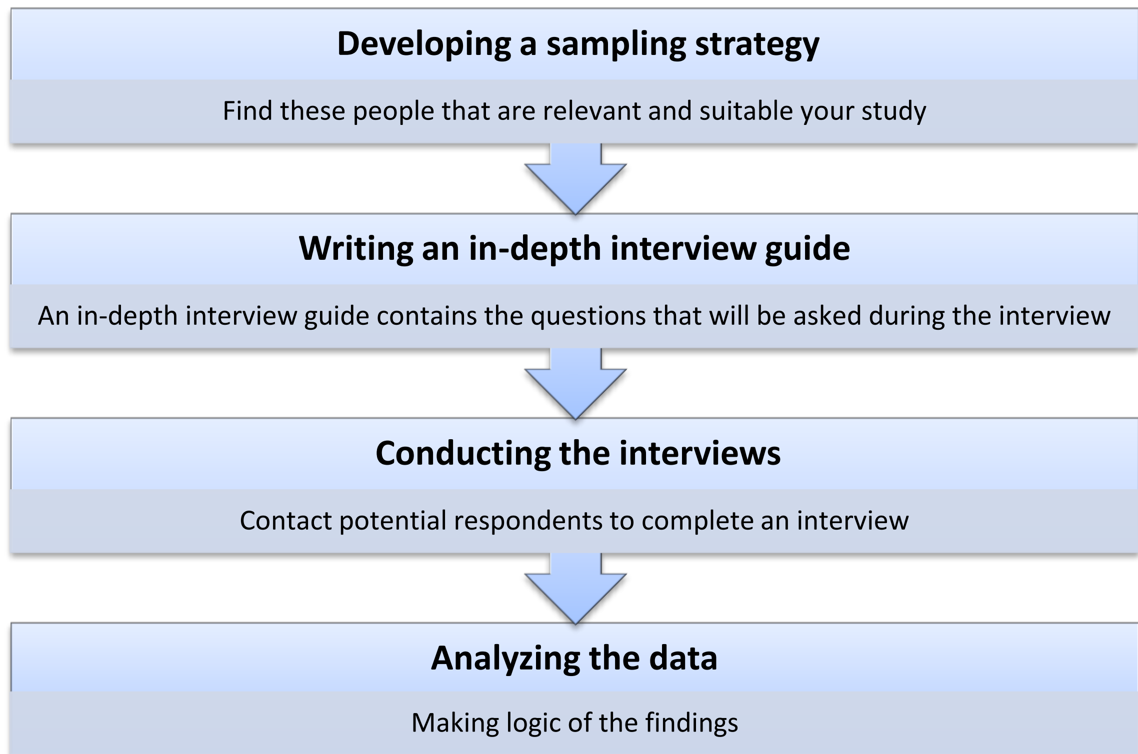
Table 5 Leakage per line item of the budget for each hospital

Source	**Allocated amount**	**Date**	**Received amount**	**Date**	**Leakage how much**	**Time of delay**
Salaries & Wages (Code 21)	A	A1	R	R1	A-R= leakage amount	A1-R1=Delay
Goods and services (code 22)	A	A1	R	R1	A-R= leakage amount	A1-R1=Delay
Commodities or capital procurement (code 25)	A	A1	R	R1	A-R= leakage amount	A1-R1=Delay

The qualitative part consists of interviews. First the interviews were. I transcribed all the interviews in to the needed format manually using Qualitative Data Analysis Spreadsheet. The following steps were considered while undertaking an in-depth interview; #6. The interview questions guide are included in the Appendix A.

Steps Involved in Conducting In-depth Interviews

Figure 5 Steps for conducting an In-depth interview



Source: (WORKBOOK E: CONDUCTING IN-DEPTH INTERVIEWS)

CHAPTER V

FINDINGS

5.1 Quantitative Analysis findings

Two hospitals were selected: Malalai Maternity Hospital and Indira Gandhi Pediatric Hospital. The actual expenditure results of the two Kabul National hospitals are as follows, and the following results were part of the Kabul National Hospitals Costing report 2012 conducted by the Ministry of Public Health. These costs provide an approximation of actual expenditure and they will be compared with the budget (planned expenditure) at a later stage.

5.1.1 Malalai Maternity Hospital Actual Expenditure results

Malalai Maternity hospital was established in 1946. It is located in Kabul and this is the first national hospital established for obstetrics and gynecology services (Primary, Secondary and Tertiary). This hospital has five wards: Emergency, Obstetrics, gynecology, fistula and neonatology. In the year 1390 (i.e. 2011-2012) the following statistics for Malalai hospital were documented:-

Table 6 Total and average OPD, IPD costs Malalai

Care	Costs	Percentage of Expenses	Average cost
Inpatient Cost	$1,845,411	93%	$33/bed day
Outpatient Cost	$143,865	7%	$1.82/visit

Total IPD cost is $1,845,411 which consist 93% of total expenditure and total of OPD cost is $143,865 that consist 7% of total cost. Also cost per bed per day is $33 and cost per OPD visit is $1.82.

Hospital Costs by Cost Center

Table 7 Total expenditure by each cost centers

Cost Centers	**Cost in $**	**Percentage of Expenditure**
General	$895,174	45%
Clinical	$716,139	36%
Ancillary	$377,962	19%

About 45% of total expenditure goes to general cost center, 36% of it goes to Clinical center and finally 19% are expended in Ancillary center.

Table 8. Hospital Cost by Major Activity

Cost Centers	**Cost in $**	**Percentage of Expenditure**
Salaries	$1,074,209	54%
Other	$537,105	27%
Kitchen	$139,249	7%
Pharmacy	$238,713	12%

Hospital costs are being distributed by major activity which are salary, kitchen pharmacy and other which 54% of total hospital expenditure goes to salaries 7% which is the lowest cost goes to kitchen.

5.1.2 Indira Gandhi Pediatric Hospital Actual Expenditure results

Indira Gandhi Pediatrics Hospital was established in 1976 in Kabul as a large pediatric hospital in the country which is provide services for the population from seven wards: Internal medicine, orthopedic, dermatology, surgery, ENT, emergency and malnutrition wards. And overall hospital statistics are as follows:

Table 9 Total and average OPD, IPD costs Indira Gandhi

Care	Cost	Percentage of Expenditure	Average Cost
Inpatient Cost	$1,753,975	76%	$16/day
Outpatient Cost	$557,627	24%	$3.73/visit

Total Inpatient and outpatient cost are $1,753,975 and $557,627 respectively which this money consists of all government ordinary budget and other donation made to hospital. Cost per bed day are 16 $ and on average cost per each OPD visit is 3.732$.

Hospital Costs by Cost Center

Table 10 Total expenditure by each cost centers

Cost Centers	**Cost in $**	**Percentage of Expenditure**
General	$1,132,685	49%
Clinical	$1,017,105	44%
Ancillary	$161,812	7%

Expenditure in General cost center is 49% which is $1,132,685 and about 44% of total expenditures goes to Clinical centers and 7% of it goes to Ancillary centers.

Table 11 Hospital Cost by Major Activity

Cost Centers	Cost in $	Percentage of Expenditure
Salaries	$1,502,541	64.8%
Other	$508,552	22%
Kitchen	$295,885	13%
Pharmacy	$4,623	0.2%

Hospital expenditures are being distributed by major activity which are salary, kitchen pharmacy and other which out of all hospital expenditure 64% of it goes to salaries, 22% of it goes to other expenditure, 13% goes to kitchen and finally 0.2% of it goes to pharmaceutical.

5.2 Budget details

The budget for the year 1390 (2011-2-12) was proposed in the 1389/2/3 and the budget was approved for the MoPH both development and operating budget in 1390/2/21, It means that the budget process for the year 1390 (2011-2012) took about 378 days. This was more than a year. Another important thing is that the total proposed budget was approved by the MoF and parliamentarians the amount of 34,327,808 US Dollars was proposed and the same amount was approved. The budget would be includes all 16 Kabul National Hospitals and central MoPH and out of this allocated money the MoPH and central Hospitals were able to spend about 29,239,518 US Dollar this means is that about 5,088,290 US Dollars remained. The MoPH and Hospitals in 1390 were able to expend about 85% of their total allocated operating or ordinary budget.

In 1390 the budget was approved centrally for the MoPH and then the MoPH decided how much to allocated to the national hospitals. Hospitals did not have any

authority of procuring of hospitals recurrent expenses (i.e. medicine, food, fuel…) any materials for the hospitals requirements. The procuring, supplying and contracts of hospitals requirement such as (cleaning material, medicine, food, medical equipment...) for all 16 Kabul hospitals was done centrally by General Directorate of Procurement. The hospitals did not know how much budget they would receive and could not plan their operation in advance.

There are three main codes which then it divided to sub codes and based on these codes the budget are being approved these codes are code 21 which consist of staff salaries and wages, code 22 which is goods and services and this one also divided to sub codes and codes 25 which capital and assets are involved in this code for more details please see Appendix C. The proposed and allocated budget for wages and salaries was 24,233,020 US Dollars and the amount 23,314,437 US Dollar was expended and 918,584 US Dollars was remained which they could expend about 96% of their approved budget for the salaries and wages.

For code 22 which are goods and services they MoPH proposed and allocated budget was 9,758,617 US Dollars and the amount 5,841,512 US Dollars was expended which the remaining amount was 3,917,105 US Dollars and about 60% was expended out of total approved budget.

And finally for the assets and capital (code 25) the proposed and approved budget was 336,170 US Dollars and MoPH and hospitals were able to expend 83,569 US Dollars which it makes 25% of total expenditure in this code.

5.2.1 Ordinary Budget Approval and Expenditure for year 1390

Table 12 Ordinary Budget approved, expenditure and remaining

Description	Approved budget	Expenditure	Remaining	percentage of expenditure
Salary & Wages (Code 21)	$24,233,020	$23,314,437	$918,584	96%
Goods and Services (Code 22)	$9,758,617	$5,841,512	$3,917,105	60%
Asset (Code 25)	$ 336,170	83,569	252,601	25%
Total central operate	$34,327,808	$29,239,518	$5,088,290	85%

As the hospitals did not had the authority of procuring their required equipment the procurement of all goods were done by General Directorate of Procurement and Supply. Then all the materials and equipment were reserved in the Central Stock of the MoPH. Then all the hospitals could receive their required materials from the central stock after submitting the request to upon the approval from the MoPH, the procurement directorate will order the central stock to approve of the requested goods for the hospitals. In the Central Stock, if the goods are available, they will provide them but if the goods and requested materials are not available, they would excuse and the hospitals will received if any items of the requested materials were available.

5.2.2 Proposed Budget and expenditure by budget line

In 1390 all proposed budget by codes and sub codes are listed in the table below for the operation by central MoPH and 16 hospitals the last two columns represent the actual expenditure by codes and sub codes and remaining money. In the financial year 1390 all the hospitals procurement and supplies were done centrally by the MoPH which later on the year 1391 a semi autonomy was given for the hospitals that the hospitals were able to purchase an urgent and necessary materials from the money that has been given for the hospitals that was about 500000 Afghani ($10,000) and in the year 1392 (2013) hospitals received a full autonomy.

Table 13 Proposed and expenditure by codes and sub codes

	Brief of proposed and approved Budget 1390		**Brief Actual expenditure 1390**	
Budget Code	**Description of Code**	**US Dollar**	**US Dollar**	**Remaining US Dollar**
21	**Salary and allowance**			
21100	permanent staff	6,726,149	3,352,140	3,374,009
21101	supporting staff	2,036,915	3,290,726	(1,253,811)
21106	Overtimes	3,808,723	5,436,794	(1,628,071)
21107	Risk allowance hard work	132,702	245,232	(112,530)
21109	Food Allowance	687,277	700,000	(12,723)
21110	professional Allowance	24,277	161,527	(137,251)
Total Code 21		13,416,043	13,186,420	229,622
22	Goods and Services			
221	Per diem			
22102	local per diem	148,936	80,369	68,567

22103	foreign per dime	74,468	58,239	16,229
222	Communication			
22200	Communication	163,830	111,335	52,495
22201	Post	14,894	11,397	3,496
223	Contracts Services			
22300	communication and publication	22,340	8,378	13,962
22301	Printing	14,894	4,295	10,598
22306	Seminar and trainings	7,447		7,447
224	Reconstruction			
22400	Transportation	308,511	122,990	185,521
22403	Communication equipment	14,894	707	14,187
22404	information equipment	14,894	117	14,777
22405	Energy control Equipment	44,681	37,430	7,250
22408	computer equipment for office	44,681	2,466	42,215
22409	Water distribution equipment	106,383	7,128	99,255
22411	Laboratory equipment	74,468		74,468
22412	Entertainment and sport equipment	7,447		7,447
22416	Constructions	425,532		425,532
225	Public Facilities			
22500	Electricity	776,596	1,304,841	(528,245)
22501	Water	127,660	18,569	109,091
22502	Gas	87,234	77,842	9,392
22503	Municipality charges	191,489	67,310	124,180
226	Vehicle Oil			

22600	oils local	178,723		
22601	Vehicle Oil	957,447	996,637	(39,190)
227	tools and equipment			
22700	Medical & Laboratory	3,106,383	1,285,276	1,821,107
22701	office equipment	244,681	21,145	223,536
22702	home and kitchen equipment	276,596	108,044	168,552
22704	food without salary	3,148,255	999,231	2,149,024
22705	cloths	382,979	63,387	319,592
22706	Furniture	116,766	28,344	88,422
22708	Agricultural equipment	7,447	87	7,360
228	other expenses			
22800	Rent	193,617	108,113	85,504
22801	Fee license	8,511	3,509	5,001
Total of code 22		11,292,681	5,527,185	5,586,773
25	**Asset**			
252	Machinery and equipment over 50000			
25200	Vehicle	170,213	272	169,940
25205	electric Stabilizer	42,553	14,816	27,738
Total of code 25		**212,766**	**15,088**	**197,678**

This table # 18 gives a detail oversight of what the allocated budget was expend on, by each budget line and by each expenditure items which give an idea how to track each of these items.

5.2.3 Delay in procurements and contracts

The following table indicates the requests for goods which had been purchased centrally for 18 Kabul national hospitals and facilities. It could be seem that all the hospitals received their requirements from Central Stocks after a long bureaucratic procedure. The maximum amount of time that a goods and materials need to be contracted for the hospitals took 294 days and the minimum amount was 18 days. So on average the procurement and supply of goods for the hospitals took 145 days for goods to reach the Central stock and then it would take few more days for the hospitals to receive it from Central stocks.

Table 14 Delay in procurements and contracts

No	Items	Value of money if spent upon budget approval	Delay (days)	Value of money affected by delay (in Real Term)	Difference
1	Stationary (paper, pen, files…)	$70,426	187	$69,715	$711
2	Stationary (cartridge, equipment..)	$63,152	203	$62,460	$692
4	cleaning contracts 28 items	$104,334	202	$103,197	$1,137
5	Oxygen Gas Patients	$88,660	152	$7,931	$728
6	Wood for stove	$75,394	122	$74,896	$497
7	10 items vegetable	$218,940	122	$217,496	$1,444
8	Fruit contracts 3 items and eggs	$522,902	167	$518,185	$4,716
9	Contracts of 10 items grains	$821,797	113	$816,774	$5,023
10	Bread contracts	$304,007	113	$302,149	$1,858
11	Cooking Gas	$32,108	113	$31,912	$196
12	Wood pieces for winter	$80,200	80	$79,852	$347
13	Renting of minibus	$335,174	121	$332,981	$2,193
14	Renting of 52 Bus	$612,770	121	$608,761	$4,009

15	Contracting of transportation Minibus	$209,889	121	$208,516	$1,373
16	Cloths 13 pieces	$239,201	294	$235,416	$3,785
17	Vehicle oil	$63,497	214	$62,764	$733
18	Cream, Jam and cookies	$30,087	145	$29,851	$236
19	Beef meatball	$16,851	18	$16,835	$16

Rate of return calculation for delay of materials and items for the financial year 1390, delay for each specific materials listed in the table #20 that differ from the maximum of 294 to the minimum of 18 days which the average delay are 145 days.

Above table indicates value of money for periods of time that the money is delayed and the difference available if the money were spend at that period of time.

$$RR = \frac{C}{(1+r)^n}$$

RR = Rate of Return

C = Current Value = $ 3,889,389

r = rate of return 0.02 ((World Bank website, 2013)

n = number of period = 145 days which is equal to 0.4 years

$$RR = \frac{3{,}889{,}389}{(1+0.02)^{0.4}}$$

$$RR = 3{,}858{,}703$$

The amount of the money that was pending due to contracts delay for hospitals materials and goods indicates if the contracts were signed at that period of time the value of the money would not reduce as now real term total amount that has been reduce to **$30,477** for the duration of the time that the money was not used.

5.3 Qualitative In-Depth interview data analysis

5.3.1 Stakeholders analysis reports

The stakeholders' analysis report consists of interviews from the Ministry of Finance, Ministry of Public Health, General Directorate of procurement, Finance Directorate of the MoPH, Central Hospitals Directorate, Program Budgeting and finally Indira Gandhi and Malalai hospitals responses.

For better understanding, the responses are categorized in to two parts. The first part contains the responses from the Ministry of Finance, the General Directorate of Finance/MoPH, the Program budgeting unit of MoPH and the Central Hospital Directorate (as indicated in the response for each question as **STK1**). And the second part is consists of responses from Malalai Maternity Hospital, Indira Gandhi Pediatric Hospital, Central Stock of MoPH and finally from the Procurement Department of the MoPH (indicated as **STK2**).

1.0. Current budget process and procurement process for the hospitals

STK1: stakeholders in the MoPH and MoF explained that in the year 1390 hospitals were not autonomous and not aware of their budget, and did not know the hospital budget ceiling nor were they allowed to participate in the budget process. The budget was prepared, proposed and then approved without considering hospitals requirements and needs. The budget was prepared by the MoPH finance directorate as estimation then it was proposed and submitted to the MoF to set budget ceiling. In the process of revising the budget would be corrected and after a long process by the MoF, the Ministry of Economy and the parliament the budget would be finally approved and finalized. Then the Procurement Department of MoPH has the authority of supplying, procuring and contracting for equipment taking in to account hospital requirements, centrally and finally distributed to the hospitals from Central

Stock Directorate of MoPH. However in the year 1391 some autonomy was given to the hospitals such that the hospitals could procure and supply their needed primary expenditure from the amount of 500000 Afghani for a year. This autonomy took place in 14 Kabul hospitals as a trial but one year later in the year 1392 full autonomy was given and now separate codes are defined for hospitals so that hospitals could prepare and propose their own budget and based on that proposed budget they could procure and purchase what they require.

STK2: In the year 1390, the two hospitals (Malalai and Indira Gandhi) made their budget plans and submitted them to Finance Department of MoPH. However the hospitals did not know how much would have been allocated for them and how much was secured from the annual MoPH budget or the annual budget for each hospital. To identify their own requirements the hospitals have to prepare and classify their requirements from different units such food, medicine, cleaning materials and other needed goods, and after preparing of these requirements the MoPH leadership need to approve the requirement list, and send their approvals to the Procurement Directorate. This directorate submits the request to the Central Stock which provide equipment and materials if they available in the Central Stock.

1.1. Whether Previous process or practice is good or not

SKT1: Previously the budget process was centralized, without any coordination between financial management, budgetary, procurement and services. Low capacity of staff to manage budget issues, made this complex system of management and the administration could not fulfill the people's need. Overall the ministries argued that the old system was not an easy or a good system.

SKT2: To some extent the lower level found the old process to be a good process as it was an aggregate procedure. It had many problems, however the hospitals did not know what was available in the central when they required different items. Whenever a hospital had an urgent need for some materials they had to go through a long bureaucratic procedure to obtain the materials which would take approximately about 15 to 20 days at the earliest over all it was not a positive and good practice.

1.2. Problem in the budget process in MoF, MoPH or in Hospitals

SKT1: Mostly the problems were in the area where decisions were made. As in most MoPH related organizations, the problem was in the estimation of budget, the fact that staff unprofessionally fills some forms, low capacity of financial managers in financial planning such that the plan was not submitted on time and on schedule that was set by the MoF.

SKT2: The problem was mostly in the process for purchasing goods and equipment for the hospitals there was delay too much and the signing of the contracts took a long time. This was the problem of the MoPH as mostly all the operation and supply for the hospitals were decided by them. The hospitals claimed that if they did not have money in their hands the problems could be from everywhere.

1.3. Problems during financial year 1390

SKT1: Problems which available in all Afghanistan organizations are unprofessionally filling of some forms and low capacity of staff in providing consultations and incorrect budget planning. The other problem is security which causes delays; as the budget is available but due to security issue the project work not started then it

could not be processed and this budget would be transferred to the next year budget. And for the next year the project officers incorrectly fill the estimated budget forms, therefore it rejected due to available budget for that specific project which did not started due to security and they have to fill forms again and again which casus delay.

SKT2: The main problems in the financial year 1390 were 1) the allocated budget for the procurement department was not sufficient and 2) it was completely underestimated and the distribution of the materials was not on time therefore the supply for the hospitals was delayed and nothing was reserved in the central Stock. For example in order to request dozen of pens hospitals have to fill forms on a bundle of paper to obtain it. It is not possible to obtain the pens on time at all because of too much bureaucracy procedures.

1.4. Problem of people or system?

SKT1, SKT2: Most of the respondents mentioned that it is the problem of both the system and the people. If the system is too complicated then it needs a strong staff to operate and run it, such a complex system. However, people could change or overcome the system. One of the responses emphasized the problem regarding inefficiencies of the managers of the projects.

2.0. Process from MoF to MoPH and to the Hospitals also duration of delay

SKT1: The stakeholders at the central level said that budgeting takes time. From the start of finish, the budget approval takes about 9 to 10 months.

SKT2: The process started form the preparation of the requirement list. Then it was sent to MoPH leaderships for approval and after the approval it goes to the

Administrative directorate and after that it goes to the procurement directorate and finally the procurement directorate refers it to the Central Stock without considering about the availability of the requested list. For example the hospitals would request for 200 items but by the time the request reaches the Central Stocks, they could obtain 20 items out 200 requested items. The reason is that all the requested items would have been depleted in the central stock or not all items purchased. The requested submission procedure from the central stock mostly took about 15-20 days. If the items were not available in the Stock the request would be delayed for months. As an example from the hospitals, “if we request a fan in spring they would submit it to us in winter and if we request a heater in the winter it will be submitted to the hospitals in the springs.”

2.1. Cause of delay

SKT1: From the perspectives of MoF’s and program budgeting units of MoPH, the delay was necessary so that the MoF could be very accurate in prioritizing the budget. Another reason would be bureaucratic procedures which would take much more time and increase delay.

SKT2: From the hospital’s perspective, the reasons for the delay would be the unavailability of coordination between the hospitals and MoPH for the provision of needed equipment by the hospitals, or the unavailability of goods in the central stocks and also the recruitment of staff that did not have good qualifications.

2.2. Where the delay occurs

SKT1: In the development of the budget the Ministry of Public Health which has a lot of projects has to prepare an estimated budget for each of their projects. Therefore it takes much time for the MoPH as they have to discuss about each project and

make sure most of their projects will be approved by the MoF. To same extent the delay in the budget happens at the MoF too and takes time in the parliament as well.

SKT2: Mostly all the delay occurs in the central ministry at the procurement level of the MoPH specifically at the procurement department with regard to requests made by the hospitals.

2.3. Reaction and behavior of the hospital and staff

Usually delays in the salaries rarely occur. Most delay and problems happen generally in the recurrent costs of the hospitals. And overall it does not cause the hospitals any trouble but it affects patients and beneficiaries when no thing is available in the hospital. Patients and their beneficiaries often had to purchase prescription drugs from outside and pay out of pocket. Also if the hospitals requested items from the MoPH and items were not available in the central stock the hospitals would accept the available items as they did not have any other solutions.

2.4. Effect of delay on the quality of the services

Delay has a very worse effect in the quality of the provided services. For instance whenever a hospital want to standardize the infections prevention within the hospital, and if the cleaning materials and tools are not available the hospital could not achieve their goal to be standardize which it has effect in the quality of the services as well. If medicine not available in the hospitals and the delivery of the medicine delay it would has a negative effect in the quality of provided services may be the patient state get worse or the patient expire.

2.5. Discrepancies between the proposed budget and approved budget

Mostly discrepancies between the proposed and the approved budget happen in the development budget and there is quite a large difference between the proposed and approved budget. For instance if 200 million was proposed the approved budget would be about 90 million or about 50 % difference between proposed and approved budget. In the ordinary budget the discrepancy happens in the different budget codes for example in salaries and wages (codes 21) and assets (codes 25).

2.6. Reason of discrepancies

The MoF has some criteria for each ministry and based on those criteria they set a budget ceiling. Also the government has small revenues and the expectations and expenditures are too much.

3.0. Enough budget, equipment and budget for the hospitals

SKT1: The budget process and budget allocation were decided by the MoPH which keeping hospitals out of this decisions. The hospitals did not know about their budgets, they received everything from MoPH centrally while it was not sufficient for the hospitals to provide services for the people.

SKT2: If the supplies for the hospitals were based on the hospitals requirements it would be enough but as in these past years it was not based on hospital's needs. Over all the supplied materials were not enough for the hospitals.

3.1. Allocated budget used for different purpose and not reaching hospitals

SKT1: One of the stakeholders mentioned that a package of gloves which cost 30 Afghani stored and estimated in the Central Stock as 500 Afghani with a huge different between the market price and the estimated and registered price.

SKT2: The allocated items for the hospitals were not misused during the transportation to the hospitals and entirely reach the hospitals. But it happens sometimes whenever materials reach the Central Stock hospitals that come first take all their required materials and hospitals that come later realize that nothing remains. For instance once cloths for the hospitals arrived at the central stock, some hospitals came first and took their needed cloths and hospitals that come to Central stock later received nothing. It was not a standard system, as it contained no guidelines how much each hospital should obtain from the procured and reserved goods from the central stock.

3.2. Capability of spending entire allocated budget or supplied materials

SKT1: Most of the time the salaries are entirely expended but in the other parts like procurements and supply which are needed contracts they are unable to expend entire budget and always it remains and they were unable to expend it all. First the capacity of the staff should be build that they should be able to prepare their required budget and based on their proposed prepare budget they could spend it all.

SKT2: At the hospitals level no one know about the allocated budget, the approved budget and remaining budget of their hospitals. And at the hospitals level they are able to spend entire allocated provided materials and mostly of the times it is not sufficient for the hospitals to provide services which many times the hospitals face

problem and shortage of materials but rarely it happens that a specific items could not be spend and would be expire.

4.0. Funds from other sources and its continues support

The government national budget for the health is very low and becoming less. The hospitals could not provide all services based on the allocated budget by the government. With the innovation of the hospitals leadership and other staff relations or with the donors or organizations interest, the hospitals could receive donations from private enterprise and NGOs al be it not a continuous basis. For obtaining donors support not any specific condition were required, For instance if a donor wanted to support a specific materials or equipment first contact the hospitals leadership if the hospitals needs those items then would accept it. Malalai and Indira Gandhi hospitals do not have specific donors support.

4.1. Goods and equipment for the hospitals are the same as they requested

It happened that the funding sources support an item for the hospitals that the hospitals do not really need it and the hospitals could not use it, after long time of keeping it in the hospitals than it wasted. Also it happened that the hospitals received a list of supporting items which hospitals just need few items of that list, but for obtaining that specific items hospitals accept all items as well and then they redistribute it to other hospitals.

5.0. Hospital Authority

The hospitals do not have money authority. Salaries are being processed from the MoPH and the hospitals just had an authority over 10000 Afghani in the year 1390. But in the year 1391 the hospitals received some authority for spending or

purchasing necessary items, the amount of the 500000 Afghani were given to the hospitals.

6.0. Bottlenecks and problems in transferring of fund.

SKT1: In transferring of the funds, the big problem is the unavailability of money and unavailability of good financial plan. Another problem would be delay which mostly happened in the procurement department at the contracts of the hospitals requirements

SKT2: From the provider's perspective bottlenecks and problems were mostly in the procurement directorate of the MoPH specifically in the requirements list processing gets delay.

7.0. Recommendations for improvement of budget management system

SKT1: Coordination between financial, supply and service provision should be established. It would be better to give the complete autonomy for the hospitals and make the system decentralized at least at the central level. An efficient and regular budgetary and financial planning should be done for these complete autonomy hospitals. Staff should be trained so they could manage the budget managements for the hospitals.

SKT2: As Afghanistan is a developing country and mostly depending on the international donors support, it would be better that health budget have a specific place in national budget plan of the country. The health budget percentage should be increased and should be based on the hospitals utilizations. For instance previously there was no difference in the budget of the 100 beds and 350 beds hospitals; all hospitals were receiving the same amount of money for the medicine

which was about 60000 Afghani for a quarter. Budget authority should be given for the hospitals so that they could prepare and plane their own budgets based on their requirements. Lastly, strengthening of hospitals in the management system of the hospitals especially in the financial unit, the capacity of the staff should be built and they should be trained to be able to implement and prepare their own budget.

5.3.2 Health Beneficiaries analysis

1. Services provided by the hospitals

Patients received good treatment from doctors. Hospital personnel were on time and they provide services for the patients at any time if needed.

2. Duration of stay and amount of money spend

These patients in the hospitals were admitted for 1 to 10 days and each of them spend about 1000 - 35000 Afghani for the medicine, diagnostics and transportation for the duration of their stays in the hospital. Some medicine and services they were receiving from hospitals were free and rest they have to purchase from outside private pharmacies.

3.0 Behavior of hospital staff

Most of the patients were very happy and said that the behavior of the personnel was good. Some patient complained of staffs’ punctuality of works and not the fact that they did not support patient sufficiently.

4.0 Food and medicine by hospital

Most of the patients answered that they received some medicine which were available in the hospitals but mostly they purchased the required medicine from private pharmacies outside. Every patient that was interviewed said that the food was available and distributed to every patient on time. But the food was not good some patients with high blood pressure could not eat that food and had to order from outside.

5.0 Expectation of the patients from the hospital

Patients claimed that the bathrooms were not clean enough and requested for better cleaning and hygiene of the hospitals specially bathrooms. Most of the patients requested that the medicine should be available for the patients as most of the people cannot afford to purchase it from outside. Also in Malalai Maternity hospitals, the beds were not sufficient and patients requested that the hospital consider this issue. Patients in Indira Gandhi Pediatric hospital mentioned that the number of doctors was not sufficient to take care of patients.

5.4 Sensitivity Analysis

Based on the findings earlier, the duration of the delay for the contracts and supply of hospitals requirement at the central level was about 145 days, and the cost of delay in Real Term was $30,477. It is clear that the cost of delay could be avoided given a more efficient budget allocation and having of trained staff in budgeting and financial management. Three scenarios are experimented with in order to see the impact of delay.

Scenario one: Assume there is no delay in the contracts and supply of the hospitals. This means the MoPH could use that amount of money (i.e.$30,477) for a different purpose e.g to increase the allocation of pharmaceuticals for the hospitals as it seems the budget set aside for pharmaceutical is quite low (i.e in Indira Gandhi Hospital it was 0.2% of total hospital expenditure). Given no delays, the government would be able to purchase the most used drugs and distributed them for the hospitals. Table 15 lists the most used drugs and shows the amount of drugs that could have been bought in the absence of delay.

Table 15 List of Drugs Most used drugs

No	Description	Unit	Unit price $	Total price $	Total amount of drugs that could be purchase
1	3rd generation antibiotic (Ceftriaxone)	500mg(injection)	0.75	6,095	8,153
2	Amoxicillin	10 tablet	0.65	6,095	9,317
3	Acetaminophen (Paracetamol)	10 tablet	0.19	6,095	32,610
4	Ampicillin	500mg(injection)	0.56	6,095	10,870
5	Metronidazole	10 tablet	0.28	6,095	21,740

Sources: interview with the private pharmaceutical shops in Kabul

Scenario two: Assume the delay decrease from 145 days to 30 days (which may be the result of bureaucratic procedures having been improved or procurement management staff of the MoPH having had more training. The value of money that would be lost because of 30 day delay becomes $6,325. The MoPH would have saved $24,152 in real terms if the delay shortened. The calculation available in the Appendix C

Scenario three: As full autonomy is being given for the hospitals in the solar year 1392 hospitals financial staff will need to be trained and the cost of training should be part of budget planning, budget estimation. Assume money is not delayed and it is used to train financial staff. Based on an interview with the MoPH, the cost of training outside the country for financial staff is about $3000, while it should be around $500 for in-country training. Therefore, the delay cost could have been used to train one staff from each hospital (16 Kabul National hospitals in the country) domestically and 10 staff members internationally.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

First I described the Kabul National Hospitals actual expenditure that indicates total, unit and costs per each ward and per each department, IPD, IPD, per day for each of the two hospitals. Secondly I explained data for the quantitative part for PETs to find out where the delay occurs in the budget and the provision of hospitals supply. I collected data from MoF, Central MoPH, Central Stock and hospitals. To support this quantitative part I conducted in-depth interviews with stakeholders and health beneficiaries. I had the total of 22 interviews, ten interviews with stakeholders and 12 interviews with health beneficiaries in two hospitals, one from each ward.

The total cost of Malalai Maternity Hospital was $1,989,276 and the total cost in Indira Gandhi pediatric Hospital was $2,311,602. Total OPD visits in Malalai hospital for the duration of one year were 78,929 visits and total IPD visits were 32,616. The Bed Occupancy Rate (BOR) within the hospital was 75% WHO recommends that BOR should not exceed 85%, or otherwise hospitals would be inefficient and may acquired infection (R, 2011). Average Length of Stay (ALOS) in Malalai hospital the year 1390 was 1.7 days. Services were provided by 437 staff including doctors, nurses, technicians, midwives and supporting staffs.

The cost per OPD visit in this hospital was $1.82 for anyone who visited the hospital seeking consultation the hospital would bear the burden of that much. Cost per IPD per night was $33 for one patients staying in the hospital for one night the hospital would bear this much expenses. Services are free for patients would not pay anything. Patients have to pay only for medicine that is not available in the hospital.

The important thing is that the total OPD cost made up 7% of the total cost and 93% of the total cost were expended in the IPD wards. Dividing cost centers in to General cost centers, Ancillary and Clinical centers, 45% of total cost was expended in general cost center, 36% was in the Clinical units and finally 19% in the Ancillary (diagnostic centers). About 54% of total expenditure went to salaries, 27% went to others (transportation, oil, electric bills …) 7% went to kitchen and finally 12% to pharmaceuticals. It is safe to say that medicines are mostly being supported by donors, and the other costs like salary kitchen and recurrent expenditur are supported from the government ordinary budget through Procurement Directorate /Central Stock MoPH. If the hospitals did not have support from other sources for the medicine, the allocation for the medicine would be much less.

The total expenditure of Indira Gandhi Hospital as mentioned above was $2,311,602. Total OPD visits in Indira Gandhi hospital is 149,639 visits and total IPD visits were 26,331 for the duration of that year. The Bed Occupancy Rate (BOR) was 86% WHO recommends that BOR should be less than 85% otherwise chance of acquiring infection in this hospital is much high. Average Length of Stay (ALOS) in Indira Gandhi hospitals for the year 1390 was 4.2. Services were provided by 529 staff including doctors, nurse, technicians and supporting staffs.

The cost per OPD visit in this hospital was $3.73 for anyone who visited the hospital seeking consultation the hospital would bear the burden of that much. Cost per IPD per night was $16 for the one patients staying in the hospital for one night the hospital would bear this much. Services are free and patients would not pay anything. Patients have to pay only for medicine that is not available in the hospital.

The important thing is that the total OPD expenses made up 24% of the total expenses and 76% of the total expenditure were expended in the IPD wards. Dividing cost centers in to General cost centers, Ancillary and Clinical centers, 49% of total

expenses was expended in general, 44% was expended in the clinical parts and finally 7% in the ancillary parts which is consist of diagnostic centers. About 65% of total expenses went to salaries, 22% went to others (transportation, oil, electric bills …) 12.8% went to kitchen and finally 0.2% to pharmaceuticals.

In conclusion most of the cost was expended in the salary of the staff and less money was spent on medicine. As hospitals need medicine rather than foods it can be said that food expenditure was quite high, (Although the hospitals received some medicine as a donation from different sources).

Cost and utilization comparison between Malalai and Indira Gandhi Hospitals

Total expenditure in Malalai Maternity Hospital was $1,989,276 while total expenditure in Indira Gandhi Pediatric Hospital was $2,311,602, expenditure in Indira Gandhi hospital is more than the expenditure in Malalai hospital. OPD visits were higher in Indira Gandhi hospitals while total IPD visits were higher in Malalai hospital if we compare the costs in each center it seems most of the money were expended in the IPD visits of both hospitals; In Malalai hospital 93% of total costs are in IPD and 7% in OPD but in the Indira Gandhi 76% in IPD and 24% in OPD visits, the hospital with higher IPD visit spend more money.

To compare it by the cost centers of each hospitals in Malalai hospital 45% of total expenditure spent in General cost center, 36% in Clinical and 19% in ancillary (diagnostic centers), while in Indira Gandhi about 49% went to general cost center,44% and 7% respectively in Clinical and Ancillary centers.

Lastly in other cost centers like salaries, kitchen, pharmacy it seems that big proportion of expenditures went to salaries of the staff. As in Malalai hospital 54% went to salaries, 27% went to other recurrent expenses (Stationary, fuel, cleaning

materials…), 7% and 12% are respectively went to kitchen and pharmacy the reason the pharmacy is higher than the kitchen expenses is this hospitals; most of drugs are donated for this hospital while kitchen expenditure are all from government ordinary budget if the donation for the medicine are ended the kitchen expenditure will entirely be higher than pharmacy it should be considered for future budget plan and estimation. But in Indira Gandhi hospitals 64.8% of the total expenditures went to salaries, 22% went to other recurrent costs (Stationary, fuel, cleaning materials…), 13% and 0.2% respectively expended in kitchen and pharmacy, in this hospital the donation for the drug is very less than we can see the expenditure of kitchen is higher than the pharmacy and the expenditure on pharmacy is very less comparing with the expediture of pharmacy in Malalai. The reason the cost of salaries in Indira Gandhi is higher is because of higher number of staff compare to other hospitals.

Budget process:

In the year 1390 the hospitals did not had a separate and specific budge, and did not had the authority to purchase or make any decision about the hospitals supply chain management. They had to make a request from the central level and received their requested materials from Central Stock. If process took a long time, they could not do anything, and if the goods were not available they could not do anything too because they do not had the physical money in hand and do not had the authority to purchase their requirements.

The budget for the year 1390 was proposed in the solar year 1389/2/3 and both development and operating budget were approved for the MoPH in the 1390/2/21. It means that the budget process for the year 1390 or (2011-2012) took about 378 days, which is more than a year.

The PETs findings indicates that 79.7% of total ordinary budget was expended on the salaries, 20% of total ordinary budget was expended on goods and services and about 0.3% of it went to capital formation and assets.

The budget was approved for the ministry as an aggregated portion and none of Kabul National Hospitals had any specific budget. The hospitals did not know about their budget even in the MoPH none knows how much the budget for each hospital was. Hospitals supplies were done centrally by the procurement directorate of MoPH. There were contracts held for all hospitals without any input from the hospitals, goods and materials were purchased for them. The hospitals would receive their requirements from Central Stock after following long administrative or bureaucratic procedures, first having to request materials from the MoPH leadership then to the General directorate of procurement and lastly submitting this request to Central Stock to obtain the requested goods.

Besides budgetary resources, the hospitals in Kabul received in kind contribution directly from the donors including business enterprises and individuals. Most of the donations were medicine and some equipment.

The procurement department had to sign request contracts for the hospitals supply requirement and these contracts for the year 1390 took average of 145 days to be finalized. After the contracts were finalized the hospitals needed 15-20 days more to obtain materials from the Central Stock. The total amount for the materials for year 1390 was $3,889,389.

Qualitative parts conclusion

Stakeholders

Currently the budget process was top down where all decisions were taken centrally. The budget process for the year 1390 was such that the MoPH and its related organizations prepared and estimated a budget for each specific project for the development budget and for the ordinary budget. It was said that hospitals also prepared and estimated their own budgets for that year and then after receiving of the estimated budget from every specific hospital and projects the MoPH compiled it and changed it in to a specific format to be submitted for the MoF. Then the MoF reviewed the proposed budget and the Mof mostly cut proposed budget because they felt the hospitals and projects required too much. Then the MoF requested that MoPH prioritize their projects and the budget was finalized by the MoF. This prioritization mostly took place in the development budget. Operating budget mostly does not have these problems because the government would have to pay for the operating budget. The operating budget proposal is mostly estimated based on the previous year with a small increase due to inflation or any specific items to be purchased. The approved budgets go to the Parliament. The delay occurs in the parliament because the parliament represents a big community. They often do not agree with the allocated budget for their province and it takes time to adjust the budget according to their preference and negotiations. Delays also occur in the MoPH as well. MoPH staffs unprofessionally and incorrectly fill the budget forms and it has to be rejected by MoF many times

In obtaining requirements from the Central Stocks hospitals needed about 20 days until the goods reached the hospitals and it was all because of the bureaucratic procedure hospitals had to request materials from the MoPH then the MoPH referred the request to procurement directorate at the MoPH and to the Central

Stock. Over all that process was not a positive and good process for the hospitals as the delivery requested items which were needed was delayed. Problems were at different levels of involvement specifically the procurement department of the MoPH. These problems are not just the problem of the systems but also of the people.

Resource allocation in the hospitals was inequitable the allocation was not based upon the hospitals requirement and no correlation between the resources and hospitals size it was in favor of the decision makers at central level. The main problem was not just the delay of the items. There was problem in the unavailability of many requested items as well. For instance if a hospital requested 200 items after following long process finally the request reach to Central Stock and in the Central Stock there were just 20 items left. This was a big problem for the hospitals and the hospitals did not have any other solutions except to accept 20 items.

Usually the salaries were not delayed. But the equipment and materials were delayed and were not available in the central stock. This would have effect on the quality of the services. The burden would mostly be on the patients; if medicine and other necessities are not available in the hospitals patients have to purchase it from the private market.

Health beneficiaries' conclusion

The patients receiving services from the hospitals staff and they seem agree from them as their services were provided on time, patients were receiving foods on time and three times while the medicine were not provided enough for them and the patients had to purchase the medicine that is not available in the hospitals for their disease. Although all the services are provided for free for the people but the patients who are admitted to the hospitals have purchase and procure and expend

big amount of money for the duration of their stay in the hospitals as the patients were expending amount from 1000-35000 Afghani.

The cleanness and they hygiene were not considered in the Malalai Maternity hospitals. Number of beds for the patients was not sufficient patient was complaining from unavailability of beds as this is the only and the biggest maternity hospital.

Effect of Delay on quality of healthcare

The delay could have an indirect effect on the quality of healthcare. For example, if the salary of the staff were delayed staff would be demotivated and could not concentrate on their work. Also if medicine and equipment were delayed, it could affect the quality of service provided for the people.

Sensitivity Analysis conclusion

In the sensitivity analysis three scenarios were considered. First, if there was no delay, the money could be used to purchase a portion of essential medicines, e.g. 32,610 units (10 tablets) of Paracetamol. Secondly if the duration of the delay decreased to 30 days which would be possible given an improvement in bureaucratic procedures, the cost of delay would be reduce to $6,325. And finally if the delays not occur the money could be used for the training of the financial staff of the hospitals, and based on the cost of training domestically, each Kabul National hospital in the country (and there are 16) could have sent their staff to be trained, and it would hopefully reduce the bottleneck in the system.

Recommendations and Discussion:

6.1 The process which was top bottom approaches in the year 1390 changes gradually to bottom up which in the year 1391 semi autonomy was given for the Kabul National Hospitals and in the year 1392 the hospitals received a full autonomy, as the decision is now taken inside hospitals. Therefore it would be better to increase hospitals knowledge in the financial planning, estimation and budget process. Otherwise if their capacity not build in the financial management system, the system would get worse the delay would be the same and the quality of the provided materials would get worse than the previous system. That it has a negative effect on the quality of the services as well.

6.2 It should be considered that hospitals received donation (medicine and materials) from different sources beside government budgetary, while these donations are terminated hospitals should have another complement for these source of donations start implementing user fee.

6.3 Given the budget constraint in the country, reprioritization of the hospitals supply is needed. Instead of spending too much on food with no good quality, money should be spent on medicine. As the health care services are provided for free for the people, medicine and food are provided for free as well. people's economics situation is worst and people cannot afford to purchase medicine which is expensive but they would be able to provide food therefore supplying food should be shifted to supplying of the medicine for the beneficiaries.

6.4 Hospital staffs who are involved in the procurement, financial management and administrative side should be trained well to better understand how to make a budget plan and how to estimate hospitals requirements based on previous year utilizations.

6.5 Equity funds should be demonstrated for each hospitals linking financing directly with the services provided by each hospitals considering hospitals utilizations. Coordination between budget process and hospitals requirement should be established.

6.6 Other source of revenue should be added to integrate with the government ordinary budget fund to increase hospitals revenue (user fee) that the hospitals become further autonomous.

6.7 Make the procurement and supply procedures shorter and establishe a procurement management system to prevent duration of delay occurred for the procurement and supply of hospitals' requirements.

6.8 As all Kabul National hospitals follow the same administrative and budget procedures and obtain their requirements from the central ministry (and sometimes from donations as well), the sample of two hospitals Indira Gandhi Pediatric Hospital and Malalai Maternity Hospital, which are the biggest hospitals in Kabul city, has covered all aspects of the budgeting and the hospitals financial procedures. The results here are therefore quite generalizable

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APPENDICES

Appendix A

These questionnaires are for both quantitative data collection and also for In-Depth interview including Informed consent Form;
Qualitative In-Depth interview guide and Quantitative Data collection tools

ORAL AGREEMENT TO PARTICIPATION

I want to thank you for taking the time to meet with me today.
My name is ________________________ and I would like to talk to you about your experience participating in the budget process and procedures in MoF as a key staff in budget management of health sector.

PURPOSE

The purpose of this study is to increase accountability and transparency and to increase quality of health services for the population especially in Kabul National Hospitals. This study is mostly looks at the perspective of budget from the higher levels of government to lower levels of hospitals. You are invited to take part in a study to help the Ministry of Public Health and Ministry of Finance to improve the quality of health service delivery in public hospitals of Kabul.

PROCEDURES

The interview will take about 45 to 60 minutes of your time. During the interview, you will be asked questions about your views on a range of budget procedures, budget delay and current budget process from MoF to Ministries specially MoPH and hospitals. And I will ask about your idea for better improvement of process and to find out where the problem happen in MoF MoPH or Hospitals and where mostly misuse and bottlenecks are?

RISKS/DISCOMFORTS

Being a part of this study will pose minimal risk for you. Your anonymity will be maintained in this interview. We will only ask you for your first name and will not record it in the transcript. The digital recording and transcript of the interview will be stored on a password-protected computer, and only the members of the project team will have access to this information.

Whenever you feel uncomfortable at any time during the interview, do not want to answer a specific question, and/or decide you no longer want to participate, just let us know and we will skip the question or end the interview.

BENEFITS

With your help, we hope that the study will help us to have a better understanding of the budget process and problems in budget disbursement and will give the ability for government to be more observant in the budget management system for providing quality health care for the people or patients.

The reason for selecting you to be part of this interview

Because you are one that manage the all budget process in health sector for the MoPH and specially for the hospitals

PERMISSION TO PROCEED

Is it okay to proceed with the interview?

Interview guide for In-Depth interview with the Ministry of Finance

1. Could you please tell me what your current position is?
    a. How long you have work in this position?
    b. What are your main responsibilities?

2. What is the current budget process from the MoF to Ministry of Public Health and especially to hospitals?

    a. What do you think of the current budget procedures from MoF to MoPh especially to the Kabul National Hospitals is it a good practice?
    b. What procedure did the hospital go through to get these kinds of funds?
    c. What are the problems of budget allocation from MoF to MoPH/ Hospitals and where the problem mostly happens?
    d. What major problems and challenges did you face during the financial year 1390?
    e. What do you think is it the problem of the system or it is the problem of the people who are involved in the process?
    f. Were there discrepancies between the approved budget and actual expenditures?
    g. What was the reason of the variation between approval and actual budget?

3. How long it will take that MoPH and hospitals have access to the allocated money?

    a. And do you think it is too long if so long why it is so long and where it mostly delays? And what is the cause of delay?

b. Why delay occurred mostly and mostly in which entities it occurs?
c. Where the MoPH spend the money on?
d. What do you think about the central procurement system do you think it will be the cause of the delay?

4. What do you think about the allocated money is it enough for the MoPH to provide health services especially in Kabul hospitals?

a. And does the allocated budget completely reach to the hospitals? It means any misuse or expenses of that money in other program for example the money is allocated for the hospitals and the MoPH spend it for other purpose?
b. Are hospitals spending the entire allocated budget? If no why they are unable to spend all the allocated public funds?
c. What is the behavior of hospital if the commodities, salary and services are delayed?
d. What would be the reaction of the staff if the salary delayed?
e. In your opinion do the hospitals need more money to operate?
f. What do you suggest from MoPH and hospital for improvement of the process and have access to allocate budget at the best possible time?

5. What do you think where the bottlenecks are happening mostly in transferring of funds to hospitals?
6. What mechanism do you suggest for the improvement or reduction of bottleneck, misused, delay or inefficiency of resource?

7. What do you recommend for improvement of budget Management system?

Interview guide for In-Depth interview with the Ministry of Public Health

1. Could you please tell me what your current position is?
    a. How long you have work in this position?
    b. What are your main responsibilities?

2. What is the current budget process from the MoF to Ministry of Public health especially to hospitals?

    a. What do you think of the current budget procedures from MoF to MoPh especially to the Kabul National Hospitals is it a good practice?
    c. What procedure did the MoPH and hospitals go through to get these kinds of funds?
    d. What is the problem of this budget allocation from government to MoPH/ Hospitals and where these problems mostly happened?
    e. What major problems and challenges did you face during the financial year 1390?
    f. What do you think is it the problem of the system or it is the problem of the people who are involved in the process?
    g. Were there discrepancies between the approved budget and actual expenditures?
    h. What was the reason of the variation between approval and actual budget?

3. How long it will take that MoPH and hospitals have access to the allocated money?

    a. And do you think it is too long if so long why it is so long and where it mostly delays? And what is the cause of delay?
    b. What do you think about the delay of the allocated budget?

c. Why delay occurred mostly and mostly in which entities it occurs?
d. What do you think about the central procurement system do you think it will be the cause of the delay?

4. What do you think about the allocated money is that enough for the MoPH to provide health services especially in Kabul hospitals for the public?

    a. Where the MoPH spend the money on?
    b. And does the allocated budget completely reach to the hospitals? It means any misuse or expenses of that money in other program for example the money is allocated for the hospitals and the MoPH spend it for other purpose?
    c. Are hospitals spending the entire allocated budget? If no why they are unable to spend all the allocated public funds?
    d. What is the behavior of hospital if the commodities, salary and services are delayed?
    e. What would be the reaction of the staff if the salary delayed?
    f. How the hospital receives drugs, food and other goods from MoPH procurement department?
    g. How is the process of the distributing these items to hospitals and how long it will takes?
    h. In your opinion do the hospitals need more money to operate?
5. What do you think where the bottlenecks are happening mostly in transferring of funds to hospitals?
6. What mechanism do you suggest for the improvement or reduction of bottleneck, misused, delay or inefficiency of resource?

7. What do you recommend for improvement of budget Management system?

Interview guide for In-Depth interview for Hospitals

1. Could you please tell me what your current position is?

a. How long you have been working in this position?
b. What are your main responsibilities?

2. Do you have information about the budget process from government to Ministry of Public Health specifically to Kabul Hospitals? What is the current budget process from the MoF to Ministry of Public health especially to Kabul Hospitals?

a. How and from where the hospital received it is needed money and goods?
b. What do you think of the current budget procedures from MoF to MoPH especially to the Kabul National Hospitals is it a good practice?
c. What major problems and challenges did you face during the financial year 1390?

3. What was the problem of this budget allocation from government to MoPH/ Hospitals?

a. Where these problems are mostly happened at which level of involvements (MoF, MoPH or hospitals)?
b. What do you think is it the problem of the system or it is the problem of the people who are involved in the process?

4. How long it will take that MoPH and hospitals have access to the allocated money or have access to their needed goods and equipment.

a. And do you think it is too long if so long why it is so long and where it mostly delays? And what is the cause of delay?
b. Why delay occurred mostly and mostly in which entities it occurs?
c. What is the behavior of hospital if the commodities and services are delayed?
d. What would be the reaction of the staff if the salary delayed?
e. Do the allocated equipment drugs are enough for the hospital to operate?
f. In your opinion do the hospitals need more money to operate

5. What do you think about the allocated money is that enough for the MoPH to provide health services especially in Kabul hospitals for the public?

a. Does the allocated budget completely reach to the hospitals? (Probe) It means any misuse or expenses of that money in other program for example the money is allocated for the hospitals and the MoPH spend it for other purpose?
b. Are hospitals spending the entire allocated budget? (Probe) If no why they are unable to spend all the allocated public funds?
c. Did the hospital receive any equipment and drugs from any other organization apart from the MoPH in 1390 (probe) are these fund are in regular based funding source?
d. What are the conditions for receiving fund from external source?
e. What do you think about the external source is it what the hospital is needed for the hospital or the hospital is need different items?

   And what the hospital had done if not received fund form the external source?

6. What do you think where the bottlenecks are happening mostly in transferring of funds, equipment and goods to the hospitals?

7. To what extend hospital has to authority to expend their allocated budget? What do you think how should be the system of budget for the hospitals?

8. What do you recommend for improvement of budget Management system to increase service provision for the population?

Interview guide for In-Depth interview with the Ministry of Public Health/Finance Directorate

1. Could you please tell me what your current position is?
    a. How long you have work in this position?
    b. What are your main responsibilities?

2. What is the current budget process from the MoF to Ministry of Public health especially to hospitals?
    a. What do you think of the current budget procedures from MoF to MoPh especially to the Kabul National Hospitals is it a good practice?
    b. What procedure did the MoPH and hospitals go through to get these kinds of funds?
    c. What is the problem of this budget allocation from government to MoPH/ Hospitals and where these problems mostly happened?
    d. What major problems and challenges did you face during the financial year 1390?
    e. What do you think is it the problem of the system or it is the problem of the people who are involved in the process?
    f. Were there discrepancies between the approved budget and actual expenditures?
    g. What was the reason of the variation between approval and actual budget?
3. How long it will take that MoPH and hospitals have access to the allocated money?

    a. And do you think it is too long if so long why it is so long and where it mostly delays? And what is the cause of delay?
    b. What do you think about the delay of the allocated budget?

c. Why delay occurred mostly and mostly in which entities it occurs?
d. What do you think about the central procurement system do you think it will be the cause of the delay?

4. What do you think about the allocated money is that enough for the MoPH to provide health services especially in Kabul hospitals for the public?

   a. Where the MoPH spend the money on?
   b. And does the allocated budget completely reach to the hospitals? It means any misuse or expenses of that money in other program for example the
   c. Is the behavior of hospital if the money is allocated for the hospitals and the MoPH spend it for other purpose?
   d. Are hospitals spending the entire allocated budget? If no why they are unable to spend all the allocated public funds?
   e. What commodities, salary and services are delayed?
   f. What would be the reaction of the staff if the salary delayed?
   g. How the hospital receives drugs, food and other goods from MoPH procurement department?
   h. How is the process of the distributing these items to hospitals and how long it will takes?
   i. In your opinion do the hospitals need more money to operate?

5. What do you think where the bottlenecks are happening mostly in transferring of funds to hospitals?
6. What mechanism do you suggest for the improvement or reduction of bottleneck, misused, delay or inefficiency of resource?

7 What do you recommend for improvement of budget Management system?

Interview guide for In-Depth interview for the beneficiaries from the hospitals (Indira Gandhi and Malalai hospitals)

1. Could you please tell me what is your name?
2. What was your problem and where did you received services?
3. What services do they provide you?
4. How long you stay in hospital?
5. How was the attitude of the doctors and hospital staff? Do they provide you all necessary things (Medicines, food and others) do the food and drug are enough and good?
6. How much you or your husband spend out of pocket for these dieses?
7. In your opinion how hospitals provide services for the people to be quite enough and people are happier?
8. What is your expectation from the hospitals? How to provide services?

Name of Organization: Name of Person who provide information:
Date:

Source for year 1390	1. Total government budget allocated for health		2.Total government budget received by MoPH		3. How much was the hospital entitled from this source		4. How much did the Hospital actually receive from this source	
	Amount	Date	Amount	Date	Amount	Date	Amount	Date
Operating budget (National government)								
b. Donor (development/external budget)								
c. NGOs								
d. Private donations								

Source for year 1390					5. How much did the hospital actually spend from the allocated amount		6. What procedure did the hospital go through to get these kinds of funds	
	Amount	Date	Year 1390	Date	Yes	No	Yes	No
Operating budget (National government)								
b. Donor (development/external budget)								
c. NGOs								
d. Private donations								

Source for year 1390	9. What percentage of the allocated budget was actually spent by the hospitals	
	Yes	No
Operating budget (National government)		
b. Donor (development/external budget)		
c. NGOs		
d. Private donations		

Expense of year 1390		10. How much was spent from the hospital budget	11. How much was allocated for these items	12.How much did hospital received for each items	13. Did the hospital receive any of this item(money) in kind from other sources
Budget line items		Amount	Amount	Amount	Amount
Salary (Code21)	Security staff				
	Maintenance of hospital building				
	Personnel salaries and bonuses				
	Supporting staff				
Commodity (code22)	Office Equipment				
	Food				
	Utilities				
	Administrative costs				
	Transport				
	Personnel training				
	Medicines				
Services (code25)	Maintaining Building				
	Vehicle				

Appendix B

1.Malalai Maternity hospitals Actual Expenditure Results

Medical Utilization and number of beds: Malalai Hospital

Beds by each ward	Beds	ALOS/ Day	BOR	Hospitalization Days	Admissions	Discharges	OPD Visits
Obstetrics	88	1.3	102%	32,770	25,490	25,038	39,538
Gynecology	64	5.0	44%	10,321	2,055	2,055	26,876
Fistula	22	17.3	21%	1,681	97	97	4,379
Family Planning							8,135
Neonatology	20	2.8	113%	8,281	2,913	2,781	
Emergency	6	1.0	94%	2,060	2,060	2,047	
Total	**200**	**1.7**	**75%**	**55,113**	**32,615**	**32,031**	**78,929**

The highest numbers of beds are in the Obstetrics ward which is about 88 beds and the lowest numbers of beds are in Emergency ward which is 6 beds. The maximum BOR is documented in Neonatology and Obstetrics which are 113% 102% respectively which the average BOR is 75%. The Higher ALOS is 17 days in the Fistula ward and the lowest is in the Emergency ward 1 day. Also the table indicates total admission, discharge and OPD visits per ward.

Human Resources in Malalai Hospital

Professions	Number of Staff
Total Doctors	145
Total Nurses	36
Total Midwifes	105
Total Technicians	11
Admin	27
Total supporting staff (Cleaner, Guard.)	113

The above table show numbers of different specialty staff that the total number of staff in the hospital is 437 including doctor, nurse, midwifes, technicians, admin and others.

Cost per day by ward

Wards	Cost/day/ward	Cost/OPD visit/ward
Obstetrics	$29	$1.4
Gynecology	$68	$2.5
Fistula	$61	$1.0
Neonatology	$5	
Emergency	$16	
Family planning		$2.0

This table indicates expenses per day by each ward which the highest expenditure is in Gynecology ward $68 and the lowest expense is in the Neonatology ward which is $5 per day. The highest expenditure per OPD visit is in Gynecology ward $2.5 and the lowest cost is in Fistula Ward which is $1.

2. Indira Gandhi Pediatric Hospital Actual Expenditure Results

Medical Utilization and number of beds: Indira Gandhi Hospital

Beds by each ward	Beds	ALOS/ Day	BOR %	Hospitalization Days	Admissions	Discharges	OPD Visits
Internal Medicine	134	3.3	113%	55446	16,734	15,704	25914
Orthopedic	48	5.2	72%	12692	2,430	2,445	3093
Dermatology	3	4.4	8%	84	21	19	7628
Surgery	90	6.4	86%	28130	4,546	4,192	2,531
ENT	40	4.0	58%	8511.	2,136	2,134	12,202

Emergency	10	7.1	4%	150	75	21	
Malnutrition	25	13.7	55%	5000	389	325	
Stomatology							3979
Total	**350**	**4.2**	**86%**	**110,012**	**26,331**	**24,840**	**149,639**

The highest numbers of beds are in the Internal medicine ward which is about 134 beds and the lowest numbers of beds are in Dermatology ward which is 3 beds. Hospital utilization indicates total hospitalization days, total admission and discharge by each ward and finally total number of OPD visits by each ward for the duration of one year. Bed Occupancy Rate for the whole hospitals was 86 % and Average length of stay was 4.2 days.

Human Resources in Indira Gandhi Hospital

Human resources	**# of staff**
Total Doctors	187
Total Nurses	122
Anesthesiology	9
Radiologists	11
Pharmacist	10
Physiotherapist	1
Total Technicians	16
Admin	26
Total supporting staff (Cleaner, Guard...)	147

Total numbers of staff in the hospital are 529 including doctor, nurse, and, technicians, admin and others.

Cost per day by ward

Wards	Cost/day/ward	Cost/OPD visit
Internal Medicine	$15	$5.17
Orthopedic	$18	$12.42
Dermatology	$443	$0.95
Surgery	$11	$17.47
ENT	$16	$0.84
Emergency	$573	
Malnutrition	$18	
Ophthalmology		$1.18
Out Patient Clinic(Polyclinic)		$3.12
Stomatology		$4.78

This table is indicated cost per day by each ward which the highest cost is in Emergency ward $573 and the lowest cost in the Surgery ward $11 per day. Cost per OPD visit by is indicated that the highest cost is in Surgery ward $17.47 and the lowest cost is in ENT Ward which is $0.84.

Budgets details by Economics Codes and Sub Codes

Budget Code	**Description of Codes**
21	**Salary and allowance**
21100	Civilian employees (permanent)
21101	Civilian employees (worker)
21106	Overtimes
21107	Risk allowance hard work
21109	Food Allowance
21110	Professional Allowance
22	**Goods and Services**
221	**Per dime**
22102	Local per dime
22103	Foreign per dime

222	**Communication**
22200	Communication
22201	Post
223	**Contracts Services**
22300	Communication and publication
22301	Printing
22306	Seminar and trainings
224	**Reconstruction**
22400	Transportation
22403	Communication equipment
22404	Information equipment
22405	Energy control Equipment
22408	Computer equipment for office
22409	Water distribution equipment
22411	Laboratory equipment
22412	Entertainment and sport equipment
22416	Constructions
225	**Public Facilities**
22500	Electricity
22501	Water
22502	Gas
22503	Municipality charges
226	**Vehicle Oil**
22600	Oils local
22601	Vehicle Oil
227	**Tools and equipment**
22700	Medical & Laboratory
22701	Office equipment
22702	Home and kitchen equipment
22704	Food without salary
22705	Cloths
22706	Furniture
22708	Agricultural equipment
228	**other expenses**
22800	Rent
22801	Fee, License
25	**Asset**
252	**Machinery and equipment over 50000 Afghani**
25200	Vehicle
25205	Electric Stabilizer

Appendix C

Malalai and Indira Gandhi hospitals requested purchased items by Procurement Directorate under small purchasing (less than 500000 Afghani) which not goes under contracts but procured after three quotation from different three suppliers.

Malali Maternity hospital

No	Description	Date of Delivery	Price
1	hospital requirements ten items	25/4/90	$ 3,072
2	Water Pump 10 Hps, 2 inch Italian		$ 1,553
3	Electric Switch Relay ABB	3/7/1990	$ 64
4	Sewing material (needle, Chord)	4/7/1990	$ 45
5	Lab Gatt 8 items	14/9/90	$ 1,853
6	Gel for Ultrasound	19/10/90	$ 40
7	Wooden Stove 50 seat	26/10/90	$ 1,766
8	Gloves 42000 pieces	26/10/90	$ 3,399
9	electric switch and line	26/10/90	$ 170
10	electric meter 5 amp	26/10/90	$ 1,383
11	hydraulic 30 liters	26/10/90	$ 83
12	stabilizer 35 KVA	26/10/90	$ 702
13	water heater 3 pcs	28/12/90	$ 326
14	delivery table	28/12/90	$ 2,489
Total			**$ 16,945**

Indira Gandhi Pediatric Hospital

No	Description	Date of Delivery	Price
1	Renovation material 20 items	5/2/1990	$ 1,782
2	Bulb complete seat 1000 pcs	30/6/90	$ 1,702
3	Patients record files 12000 pcs	18/7/90	$ 1,277
4	Lab Gatt 8 items	14/9/90	$ 1,853
5	Patients record files 12000 pcs	4/10/1990	$ 1,277
6	Exhausted fan 15 pcs	19/11/90	$ 383
Total		**$ 8,274**	

Delay in procurements and contracts

No	Items	Date of Request	Date of Contract	Amount US Dollar	Delay in Days
1	Stationary	1390/5/23	1390/11/30	70,426	187
2	Stationary	1390/1/7	1391/7/30	63,152	203
4	cleaning contracts 28 items	1390/5/3	1390/10/25	104,334	202
5	Oxygen Gas Patients	1389/8/13	1389/12/15	88,660	152
6	Wood for stove	1390/01/04	1390/04/06	75,394	122
7	10 items vegetable	1390/01/04	1390/04/06	218,940	122
8	Fruit contracts 3 items and eggs	1389/09/14	1390/04/01	522,902	167
9	contracts of 10 items grains	1390/01/13	1390/04/06	821,797	113
10	Bread contracts	1390/01/13	1390/04/06	304,007	113
11	cooking Gas	1390/01/13	1390/04/06	32,108	113
12	Wood pieces for winter	1390/03/08	1390/05/08	80,200	80
13	Renting of minibus	1390/8/29	1390/12	335,174	121
14	renting of 52 Bus	1390/8/29	1390/12	612,770	121
15	Contracting of transportation Minibus	1390/8/29	1390/12	209,889	121
16	cloths 13 pieces	1390/01/16	1390/10/10	239,201	294
17	Vehicle oil	1390/10/27	1391//3/1	63,497	214
18	Cream, Jam and cookies	1390/01/13	1390/05/08	30,087	145
19	Beef meatball	1390/4/13	1390/04/01	16,851	18
Total				**$ 3,889,389**	

Sensitivity analysis scenario two calculations

No	Items	Amount $	Delay (Day)	Number of period year	RoR $	Difference $
1	Stationary	70,425.53	30	0.08	70,311	65
2	Stationary	63,152	30	0.08	63,049	53
4	cleaning contracts 28 items	104,334	30	0.08	104,165	120
5	Oxygen Gas Patients	88,660	30	0.08	88,515	94
6	Wood for stove	75,394	30	0.08	75,271	73
7	10 items vegetable	218,940	30	0.08	218,584	307
8	Fruit contracts 3 items and eggs	522,902	30	0.08	522,051	802
9	contracts of 10 items grains	821,797	30	0.08	820,460	1,289
10	Bread contracts	304,007	30	0.08	303,513	445
11	cooking Gas	32,108	30	0.08	32,056	2
12	Wood pieces for winter	80,200	30	0.08	80,069	81
13	Renting of minibus	335,174	30	0.08	334,629	496
14	renting of 52 Bus	612,770	30	0.08	611,774	948
15	Contracting of transportation Minibus	209,889	30	0.08	209,548	292
16	cloths 13 pieces	239,201	30	0.08	238,812	340
17	Vehicle oil	63,497	30	0.08	63,394	53
18	Cream, Jam and cookies	30,087	30	0.08	30,038	(1)
19	Beef meatball	16,851	30	0.08	16,824	(23)

Scenario two calculation formula

$$RR = \frac{C}{(1+r)^n}$$

RR = Rate of Return

C = Current Value = $ 3,889,389

r = rate of return 0.02 ((World Bank website, 2013)

n = number of period = 30 days which is equal to 0.08 years

$$RR = \frac{3,889,389}{(1+0.02)^{0.4}}$$

$$RR = 3{,}883{,}064$$

If the period of delay reduced to almost 30 days the value of the money would reduce to almost $6,325 and above table shown the calculation of delay for each contracted items.

Appendix D

Materials distributed by Central Stock to the hospitals in different dates for the year 1390

Malalai Hospital Equipment distributed by Central Stock

No	Description	Date of Distribution	Price US Dollar
1	Serum solution	1391/2/5	$ 340
2	Medical Equipment Special	1391/2/24	$ 1,154
3	Anesthesia Machine	1390/1/28	$ 52,128
4	Medicine	1390/2/5	$ 22,979
5	Medical Equipment Special	1390/2/24	$ 187
6	Disposables gloves	1390/2/24	$ 160
7	Medicine &Medical Equipment	1390/5/9	$ 1,270
8	Medicine special	1390/6/21	$ 2,117
9	Medicine	1390/8/7	$ 1,193
10	Medicine	1390/8/24	$ 1,277
11	Medicine &Medical Equipment	1390/10/5	$ 553
12	Medicine special	1390/10/5	$ 4,087
13	Gas Metric	1390/12/5	$ 383
14	Cleaning material 1st quarter	1390/1/14	$ 1,636
15	Food 1st quarter	1390/1/16	$ 836
16	Cleaning material	1390/2/6	$ 15,168
17	food 1st quarter remaining	1390/2/10	$ 5,221
18	Electric equipment	1390/3/3	$ 1,389
19	Food Month of (Jawza)	1390/3/8	$ 4,340
20	Food remaining (Jawza)	1390/3/21	$ 65
21	Food for (Saratan)	1390/4/7	$ 4,671
22	Cloths	1390/5/4	$ 7,872
23	Cleaning material	1390/5/4	$ 1,556
24	Food for (Sonbola)	1390/5/11	$ 1,605
25	Medical Equipment	1390/6/23	$ 440
26	Tent	1390/6/23	$ 1,532
27	Electric equipment	1390/7/6	$ 456
28	cleaning equipment 3rd quarter	13907/6	$ 1,323
29	Food	1390/7/10	$ 306
30	Blanket	1390/730	$ 4,043
31	Food 4th quarter remain	1390/9/16	$ 173

32	cleaning equipment	1390/10/6	$ 2,317
33	Transformer	1390/10/6	$ 1,600
34	Tea	1390/10/13	$ 252
35	Electric and Gas Stove	1390/11/4	$ 6,915
36	Cloths and electric equip	1390/11/29	$ 5,283
37	Electric equipment	1390/1129	$ 316
38	Office Equipment	1390/2/6	$ 4,702
39	Food	1390/5/11	$ 5,580
40	Food	1390/7/10	$ 2,672
41	Food	1390/7/10	$ 3,422
42	Food	1390/9/6	$ 337
43	Food	1390/9/16	$ 2,183
44	Curtain separator		$ 309
45	Chair	1390/10/13	$ 209
46	Food	1390/10/13	$ 1,125
47	Food	1390/11/9	$ 3,157
48	Kitchen Equipment	1390/11/29	$ 1,374
49	Sofa Seat	1390/12/28	$ 487
50	Camod	1390/1/14	$ 36
51	Toilet Equipment	1390/7/6	$ 17
52	Toilet Equipment	1390/7/29	$ 879
53	Stationary	1390/1/13	$ 151
54	Stationary	1390/12/6	$ 531
55	Stationary	1390/4/4	$ 1,638
56	Stationary	1390/5/4	$ 99
57	Electric equipment	1390/7/6	$ 17
58	Stationary	1390/7/6	$ 249
59	Stationary	1390/10/6	$ 234
60	Electric stove	1390/11/4	$ 172
61	Electric stove	1390/11/29	$ 172

Indira Gandhi Hospital Equipment distributed by Central Stock

No	Description	Date of Distribution	Price US Dollar
1	Medicine	1390/2/5	$ 301
2	Serum	1390/4/27	$ 394
3	Medicine	1390/2/5	$ 20,532
4	Teeth powder	1390/3/8	$ 17
5	Medicine 1st quarter	1390/4/27	$ 883
6	Medicine 3rd quarter	1390/8/7	$ 1,276
7	Medicine 4th quarter	1390/11/24	$ 1,277
8	Food 1st quarter	1390/1/3	$ 6,681
9	Cleaning equipment 1st quarter	1390/1/13	$ 788
10	cleaning equipment	1390/2/5	$ 24,631
11	Food Remaining 1st quarter	1390/2/13	$ 6,266
12	Food (Jawza)	1390/3/9	$ 3,923
13	Food (Saratan)	1390/4/4	$ 7,186
14	Cleaning equipment	1390/4/19	$ 603
15	Food	1390/5/2	$ 3,773
16	food 3rd quarter	1390/5/2	$ 859
17	Mosquito spray	1390/8/9	$ 14
18	Cleaning Equipment	1390/7/9	$ 1,024
19	Cleaning equipment 4th quarter	1390/10/13	$ 1,828
20	Dry Tea	1390/10/24	$ 680
21	Cleaning equipment	1390/11/17	$ 295
22	Cleaning equipment	1390/12/13	$ 1,118
23	Food	1390/5/2	$ 10,353
24	Food	1390/5/2	$ 7,797
25	Food	1390/8/3	$ 8,428
26	Food		$ 856
27	Food	1390/10/24	$ 13,721
28	Food	1390/11/3	$ 3,866
29	Stationary 1st quarter	1390/11/13	$ 1,031
30	Stationary	1390/2/5	$ 2,028
31	Stationary	1390/5/8	$ 1,031
32	Stationary	1390/7/9	$ 36
33	Stationary	1390/10/13	$ 82
34	Stationary patient file	1390/11/17	$ 2,660
35	Stationary	1390/12/13	$ 2,654

BIOGRAPHY

PERSONAL DATA

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2010-2011	Medical Officer at Maiwand Teaching Hospital Kabul, Afghanistan