Partners for Health Reform*plus*

Jordan National Health Accounts Reproductive Health Subanalysis, 2001

July 2006

Prepared by:

Partners for Health Reform*plus*

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Abstract

This National Health Accounts study estimates current national reproductive health (RH) spending in Jordan in order to accurately predict what additional funding will be needed to meet Millennium Development Goals and the national priorities set in the Reproductive Health Action Plan (RHAP). The RH subanalysis was conducted using solely secondary data from the public and private sectors. Overall RH expenditures total 91.6 million JD (or US$129.4 million), which represents 15 percent of total health expenditures (THE) and 1.5 percent of the gross domestic product. RH expenditures per woman of reproductive age are 70 JD (or US$99.53) and out-of-pocket spending by women of reproductive age equals 28.08 JD (or US$39.10). Fifty-seven percent of RH financing comes from the private sector, 38 percent from the government, and 5 percent from donors. Donor spending on RH accounts for 16 percent of all donor health spending and household spending for RH is approximately 15 percent of all household health spending. Providers of RH services are mainly the public sector (45 percent of RH THE), followed by the private sector (37 percent of RH THE). Medical (curative) care accounts for 83 percent of RH resources, pharmaceuticals for 15 percent. Maternal health spending consumes 48 percent of all RH expenditures, with deliveries and antenatal and postnatal expenditures contributing 24 percent each. Family planning expenditures are on pharmaceuticals (4 percent) and outpatient care (8 percent). Other RH expenditures are on inpatient care (23 percent), pharmaceuticals (11 percent), and outpatient care (5 percent). A very small amount goes to RH-related programs for prevention and public health (0.5 percent of RH total health expenditure). Subanalysis results have three key policy implications: the share of public financing in the total resource envelope for RH services is low, expenditure on family planning is low, and the quality of care administered in the public sector facilities is perceived to be lower than quality in private facilities.

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Acronyms

ANC	Antenatal Care
CPP	Comprehensive Post-partum
DHS	Demographic and Health Survey
GDP	Gross Domestic Product
IUD	Intra-uterine Device
JAFPP	Jordan Association of Family Planning and Protection
JD	Jordanian Dinar
JUH	Jordan University Hospital
MCH	Maternal and Child health
MDG	Millennium Development Goals
MOH	Ministry of Health
NGO	Nongovernmental Organization
NHA	National Health Accounts
NPS	National Population Strategy
OOP	Out-of-pocket
PHC	Primary Health Care
PHR*plus*	Partners for Health Reform*plus*
PNC	Postnatal Care
PPP	Purchasing Power Parity
RH	Reproductive Health
RHAP	Reproductive Health Action Plan
RMS	Royal Medical Services
SIDA	Swedish International Development Cooperation Agency
THE	Total Health Expenditure
UNRWA	United Nations Relief and Works Agency
USAID	United States Agency for International Development
WHO	World Health Organization

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Executive Summary

Background

One of the key development challenges identified in Jordan is the poor quality of primary health care services. Key constraints to Jordan's future development include large family sizes, lack of sufficient high quality maternal and child health care services, a significant unmet demand for high quality maternal and child health services, and a significant increase in the prevalence of chronic diseases such as diabetes, hypertension, and obesity.

With considerable pressure to lower its population growth rate, the National Population Strategy (NPS) 2000-2020 was passed in March 1996, followed by the drafting of the Reproductive Health Action Plan (RHAP), a sub-strategy of the NPS, in April 2004 that operationalizes the goals of the NPS. In parallel, Jordan has been working towards meeting the targets set in the Millennium Development Goals (MDG).

Given this policy environment, having accurate information on current national reproductive health (RH) spending is critical in order to accurately predict what additional funding needs are required to meet the MDG and the national priorities set in the RHAP. Estimating RH care expenditures, using the National Health Accounts (NHA) framework, can address the following questions that are of particular policy interest to Jordan:

- How much does Jordan spend on RH in a fiscal year? What is the percentage of RH out of total health expenditure (THE)?
- Who are the main financiers of RH services in Jordan?
- Who are the main providers of RH services in Jordan?
- How much is spent on different RH functions, or programs (maternal health services, family planning services, and personal reproductive health services)?
- What are the policy implications of linking these expenditure figures with RH indicators such as infant mortality, maternal mortality, and contraceptive prevalence rates?

Methodology

The RH subanalysis was conducted using solely secondary data sources from the public and private sectors. The allocation principles used for estimating and distributing most expenditures are based on the same allocation rules used in the general NHA as these are non-targeted expenditures, except for USAID funds, which are targeted specifically for contraceptives. The main sources for estimating public expenditures were the Ministry of Health (MOH), Royal Medical Services (RMS), and Jordan University Hospital (JUH). Private sector data were estimated from Demographic and Health Survey and IMS. It was determined that there was sufficient secondary data and indirect

sources that primary data collection was not necessary. The subanalysis bases its scope on the WHO definition of RH.

Findings

Total spending on RH services in Jordan in 2001 was approximately 91.6 million JD (or US$129.4 million.

Financing sources

The largest financiers of RH are the private sector, contributing 57 percent, of which households contribute 46 percent of funds, followed by the public sector (38 percent) and donors (5 percent). Households finance 45.6 percent of RH, mostly through out-of-pocket spending (87 percent of their contribution). Although donors finance only 5.3 percent of RH spending, they transfer 60 percent of their funds through the government, with the remainder (40 percent) through NGOs/implementing agencies. The central government directs a majority of its funds through the MOH (75 percent) with the remainder going to the RMS (23 percent) and other public financing agents such as the JUH and public universities.

Financing agents

The MOH is the financing agent for 46 percent of public RH funds while households, through out-of-pocket spending, account for 40 percent of RH resources. Nongovernmental organizations (3 percent) and other private entities (11 percent), such as private insurance, control the remaining amount of RH funds.

Providers

Public and private providers (45 and 37 percent respectively) dominate the RH service delivery in Jordan. Public hospitals account for 30 percent of curative care while 23 percent of expenditures are incurred at private hospitals. Pharmacies consume a large portion of RH expenditures (15 percent), which is as much or more in comparison with public and private health centers.

The largest portion of household out-of-pocket spending for curative RH services takes place at private hospitals (41 percent) followed by private health centers (25 percent). Households also spend 25 percent of out-of-pocket expenditures at pharmacies.

Typically, the hospitals (public/private/NGO) provided inpatient cure, including deliveries and other RH health services, whereas the health centers provided antenatal care, postnatal care, and family planning services, in addition to all other curative outpatient services. Pharmacies dispensed the pharmaceuticals and contraceptive commodities.

Functions

A majority of RH expenditures are spent on curative care (83 percent) followed by pharmaceuticals and non-durables (15 percent). Within curative care, 47 percent was spent on inpatient care and 36 percent on outpatient care.

Households (35.3 percent) and public sources (35.8 percent) finance a large proportion of curative care expenditures. Households also finance a majority of pharmaceuticals and non-durables (10 percent) followed by private companies. Administration (1.3 percent), prevention and public

health programs (0.5 percent), and other RH expenditures (0.7 percent) make up a relatively small percentage of RH functions.

Maternal health services consume 48 percent of all RH expenditures, with deliveries and antenatal and postnatal expenditures absorbing 24 percent each. Family planning expenditures consist of pharmaceutical expenditures (4 percent) and outpatient care expenditures (8 percent). Other RH expenditures are on inpatient care (23 percent), pharmaceuticals (11 percent), and outpatient care (5 percent). Public health programs, administration, capital formation, and ancillary services together make up less than 3 percent of maternal health and family planning expenditures.

Family Planning Commodities

The overall distribution of family planning commodities across all quintiles appears to be almost even. The top choice for contraception for each quintile is the IUD, followed by pills, condoms, and then injections. Norplant is the least-used contraceptive. Its utilization was less than 1 percent.

The private sector and NGO sector provide two-thirds (66 percent) of the total spending on contraceptives. The public sector accounts for the remaining 34 percent. The NGO sector predominantly constitutes the Jordan Association of Family Planning and Protection (JAFPP) and to a small extent UNRWA health centers. JAFPP is the single largest provider of family planning commodities, 20 percent of the total share. It is the largest provider of IUDs, and because of this, the NGO sector is the lead provider of IUDs. The public sector, (including MOH, RMS, JUH facilities and mobile clinics) is the only provider of Norplant; it is also the lead provider for injectables and female sterilization. The private sector takes the lead in providing pills and condoms.

Policy Implications

The results of this subanalysis highlight three key policy implications.

1. The share of public financing in the total resource envelope for RH services in Jordan is quite low, resulting in a disproportionate burden on the population to pay for the services. Financing health care through private financing has already resulted in unmet demand for these services, as some population groups are unable to pay. In addition to unmet demand, financing of health care though households allows for a possibility of inequity in access to health care. An obvious policy option for the government is to increase funding for these services and/or devote a higher share of public funds towards making RH services available and accessible for the entire population, particularly the vulnerable segments.
2. Expenditure on family planning is low, given the increased emphasis on decreasing the population growth rate. To achieve the desired results, the Government of Jordan needs to rethink its allocation of resources for RH and bring them more into alignment of their overall goals and population strategy.
3. The quality of care administered in public sector facilities is perceived to be lower than the quality in private facilities. The MOH needs to identify mechanisms for private-public sector collaboration in the form of contracting such that the population can avail of the perceived higher quality of care in the private sector without having to incur prohibitively high expenses. The challenge will be to ensure that these initiatives and other financing mechanisms foster good quality, comprehensive RH services, and progress towards true universal access to quality care.

1. Introduction

1.1 Background

Although the last half-century saw major gains globally in women's health, education, and rights, the pace of progress has been inconsistent in different parts of the world. Currently, more than 500,000 women die every year from causes related to pregnancy, abortion, and childbirth (Sass and Ashford 2002). Ninety-nine percent of these deaths occur in less-developed countries, mainly in Africa and Asia. As many as 300 million women in the developing world suffer from short- or long-term illness and injury related to the same causes. In addition, each year, almost 8 million stillbirths and neonatal deaths occur, caused by the same factors that lead to maternal deaths and disability (Sass and Ashford 2002).

The Government of Jordan's commitment to improve the overall quality of life and social standards of its population has paid off as demonstrated in the remarkable health indicators Jordan has achieved in comparison to other countries in the Middle East/North Africa (see Tables 1 and 2). Its under-five and maternal mortality indicators are among the lowest in the region – the under-five mortality rates is lowest and the maternal mortality rate is second lowest, after Iran – and it has achieved a low infant mortality rate (22 per 1,000 live births) (Jordan Department of Statistics and ORC Macro 2003) compared with rates in other developing countries. Its total fertility rate, however, is the second highest in the region (3.7).

Table 1: Regional Comparison of Fertility and Mortality Rates

Country	Total Fertility Rate	Mortality Rate		
		Under Five Years		Maternal Mortality Rate per 100,000
		Male	Female	
Yemen	7.6	109	101	350
Egypt	3.0	46	44	170
Morocco	3.1	58	55	230
Jordan	**3.7**	**27**	**24**	**41**
Iran	2.9	45	39	37
Tunisia	2.2	33	27	70
Lebanon	2.2	34	28	100

Sources: World Health Organization (2002); Jordan Department of Statistics and ORC Macro (2003); United Nations Development Program (2003)

The population of Jordan is 5.3 million (Jordan Department of Statistics 2002) of which 2.5 million are female, and 1.3 million are between the ages of 15 and 49 years (Sass and Ashford 2002). Life expectancy for females is 71 years and 69 years for males. Reproductive health (RH) care

services in Jordan are available through the public, private, and the nongovernmental organization (NGO) sectors. According to the Jordan Population and Family Health Survey 2002, most women (99 percent) are able to access antenatal care, virtually all births are assisted by a health profession, and 97 percent of deliveries take place in a health facility. Use of contraception has increased from 40 percent in 1990 to 56 percent in 2002. Less than half of all women currently in union use a modern method for birth control (41 percent) and 15 percent use a traditional method. There is a relatively low percentage of unmet need for family planning (11 percent).

Table 2: Reproductive Health Indicators in Jordan

Women of reproductive age	1,300,000
Population growth rate	2.8%
Maternal mortality (per 100,000 live births)	41
Total fertility rate (Number of births/ woman of reproductive age)	3.7
Percentage of women in union using a modern birth control method	41.2%
Percentage of women in union using traditional contraceptive method	14.6%
Percentage unmet need for family planning	11%
Percentage of women with access to antenatal care	98.6%
Percentage of births attended by health professional (doctor, nurse, midwife)	99.5%

Source: Jordan Department of Statistics and ORC Macro (2003)

1.2 Using the NHA Reproductive Health Subanalysis for Policy Making

1.2.1 The Policy Context

A key development challenge identified in Jordan is the poor quality of primary health care services (United States Agency for International Development [USAID] 2003). Key constraints to Jordan's future development include large family sizes, lack of sufficient high quality maternal and child health care services, a significant unmet demand for high quality maternal and child health services, and a significant increase in the prevalence of chronic diseases such as diabetes, hypertension, and obesity (Jordan National Population Commission 2000). Jordan's consistently high fertility rate (3.7) is likely to counteract advances made in other economic and social sectors. The high population growth rate and fertility rate have resulted in a rise in the dependency ratio and unemployment rate with a subsequent increase in poverty and pressure on basic social services that is likely to rapidly outstrip Jordan's economic and natural resource base. Although the Government of Jordan has committed to a sustained emphasis on improving the quality and availability of family planning and other maternal child health and primary care services, other more "modern" challenges to ensuring the health and productivity of the population have also begun to warrant attention (Jordan National Population Commission 2000). These challenges include the significant increase in the rate of chronic or "lifestyle" diseases, which have begun to replace infectious diseases as the leading causes of morbidity and mortality and threaten to increase already high curative care expenditures (65 percent of total health expenditures [THE] are on curative care) (Al Halwani et al. 2005).

As a result of the considerable pressure to lower its population growth rate, Jordan passed the National Population Strategy (NPS) 2000-2020 in March 1996 and in April 2004 drafted the Reproductive Health Action Plan (RHAP), a substrategy of the NPS that operationalizes NPS goals. Two key principles of the NPS are as follows (Jordan National Population Commission 2000):

- The "right of families to produce an appropriate number of children and to have access to information and family planning methods in order to make their decisions freely, albeit in line with religious and cultural values."

- "The citizen has the right to enjoy high standards of health care including reproductive health, family planning, and treatment of STDs and AIDS. This is considered a basic human right and is fundamental to NPS."

In addition to the goals of the NPS is the more recent Millennium Development Goals (MDG) target to reduce maternal mortality by 75 percent by 2015, which is challenging many countries to improve and expand their RH policies and to do so will need to increase their RH allocations.

1.2.2 Addressing Policy Questions

Jordan is working toward meeting the MDG targets as well as the NPS/RHAP goals. To adequately predict what additional national RH funding is needed, however, requires having accurate information on current RH spending. Data generated from the RH subanalysis using the National Health Accounts (NHA) framework can demonstrate the flow of RH funds and reveal not only what was spent on RH but also what proportion of RH financing comes from private sources, and the types of services that are financed by RH funds. Disaggregating RH expenditures provides policymakers, program managers, and donors with a clearer idea of RH spending patterns, from the national level down to the household level. The subanalysis is also useful for health care monitoring and evaluation purposes.

RH subanalysis estimates also will contribute to government's ability to realize another major RHAP goal – to build a base for sustainable economic development through a gradual decline in population growth and a progressive decrease in the total fertility rate, from 3.7 children per married woman of reproductive age in 2002 to 2.1 children in 2020.

The broader policy questions that can be addressed through the NHA RH subanalysis include:

- How much is spent by public, private, and donor sources on RH services?

- To what extent are different RH services, such as prevention and treatment, being supported by these funds?

- What is the level and equity of current resource flows?

Subanalysis estimates also can answer the following questions of particular policy interest to Jordan:

- How much is Jordan spending on RH in a fiscal year? What percentage of THE is for RH?

- Who are the main financiers of RH services in Jordan?

- Who are the main providers of RH services in Jordan?

- How much is spent on different RH functions, or programs (maternal health services, family planning services, and personal RH services)?

- What policy implications emerge from linking RH expenditure figures with RH indicators such as infant mortality, maternal mortality and contraceptive prevalence rate?

Answering these questions will highlight problems related to sources of funding and spending and enable the design and implementation of targeted interventions that will improve financing of prevention activities and increase access to basic health care services for people wishing to improve their RH status. The information will also support efforts to advocate for additional donor resources.

1.2.3 USAID Support to Improve Access to Quality Population, Health and Nutrition Services[1]

By the end of 2009, it is expected that USAID programs will have contributed significantly to a 20 percent decrease in Jordan's fertility rate (from 3.7 to the projected 2.9 per family). In addition to activities that strengthen the delivery of maternal and child health services, USAID will assist in the improvement of important health indicators such as life expectancy, infant mortality, and morbidity, working at all levels of health system, and particularly at the local level. USAID will also work closely with the Government of Jordan to better integrate ongoing primary health services strategies and programs that prevent and treat chronic diseases. Specifically, USAID will work with private sector health providers to expand community outreach and introduce public-private partnerships to expand RH services. In this area, assistance will be provided to expand the quality assurance systems of private providers, expand private sector provider networks, and strengthen the coordination between public and NGO health providers.

1.3 International Comparison of RH Expenditures

A comparison was made among countries that have carried out RH subanalyses to benchmark Jordan's levels of expenditures for these services (see Table 3).

Table 3: International Comparison of RH Expenditures

Country	GDP Per Capita Intl. $ 2002	(THE) Percent of GDP	RH Percent of (THE)	RH PPP per capita (15-49 women)*	Public Spending	Private Spending	Donors
Jordan	4220**	9.6%	15.32%	$ 99.53	38%	57%	5%
Georgia	3,237	6.5%	11.0%	$ 74.9	9,5%	87,6%	3.0%
Egypt	3,918	3.7%	14.1%	$ 49.9	60.0%	40.00%	
Sri Lanka	3,541	3.4%	11.2%	$ 45.0	65.0%	35.00%	
Morroco	4,043	4.5%	3.5%	$ 27.6	Unknown	Unknown	17.5%
Rajasthan (India)	NA	5.98%	21.4%	$ 72.3	28.9%	71.10%	
Rwanda	873	3.9%	15.6%	$ 42.6	7.7%	12.5%	79.8%

Note: All health expenditure ratios listed for Jordan are for the year 2001

* To provide international comparability between the countries, we used the 2003 PPP$ (purchasing power parity) deflator. Total RH expenditures of National Currency Units were converted in PPP $ by countries using deflator coefficients.

** United Nations Common Database (UNCDB). http://globalis.gvu.unu.edu/indicator_detail.cfm?IndicatorID=19&Country=JO.

[1] This section is based on USAID (2003).

In terms of per capita expenditures, Jordan ranks first. High per capita expenditures reflect the fact that RH services in Jordan are predominantly paid for by the private sector (57 percent), largely by households. Jordan's public sector contributes only 38 percent of the total RH spending, far less than Egypt (60 percent) and Sri Lanka (65 percent), but higher than Georgia, Rajasthan (India), and Rwanda.

2. National Health Accounts Framework and Reproductive Health Subanalysis

2.1 The NHA Framework

NHA has been providing governments, policymakers, and international organizations with health expenditure information in an effort to increase evidence-based decision making. NHA is an internationally accepted tool endorsed and promoted by USAID, the World Health Organization (WHO), the World Bank, and the Swedish International Development Cooperation Agency for use in low- and middle-income countries. It describes how much is spent on health, the sources of financing, where people go to access health care, what type of services are purchased, and who benefits from health expenditures. Because NHA uses an international methodology it allows countries to compare results with one another. Ideally, if conducted on a routine basis, NHA can show spending patterns and the outcomes from health system policy changes.

NHA tracks and sums the flow of funds for one year through the health system displayed in two-dimensional tables:

- From their financing sources (FS), including the ministry of finance, households, and donors
- To financing agents (HF), which have programmatic control of health funds and include the ministry of health and nongovernmental agencies
- To providers (HP), which are the final recipients of health care funds and include hospitals, health clinics, pharmacies, and traditional healers and
- To functions (HC), which are the type of services or products produced and include preventive, curative, and health care administration.

The NHA framework has been adapted to accommodate subanalysis of targeted subsectoral policy concerns and of priority health services such as RH. Adaptations have already been made for estimation of HIV/AIDS-specific expenditures, and malaria and child health subanalysis methodologies are being developed. Generally, a subanalysis is conducted in conjunction with a general NHA to provide the context of what is being spent for overall health care.

2.2 The Reproductive Health Subanalysis

The Jordan RH subanalysis was conducted using solely secondary data sources from the public and private sectors. The allocation principles used for estimating and distributing most expenditures (in Tables FS x HF, HF x HP) are based on the same allocation rules used in the general NHA as these are non-targeted expenditures except for USAID funds, which are targeted specifically for contraceptives. (See tables in Annexes A-D.) Allocation rules for distribution of expenditures by

providers on different health functions (HP x HC) are included in Annex E. The main sources for estimating public expenditures were the Ministry of Health (MOH), Royal Medical Services (RMS), and Jordan University Hospital (JUH). Private sector data were estimated from the Demographic and Health Survey (DHS) and IMS. Because it was determined that there was sufficient secondary data and indirect sources, primary data collection was not necessary. The subanalysis bases its scope on the WHO definition of reproductive health (see Box 1).

Box 1. The WHO Definition of Reproductive Health

Reproductive health is a state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life. Reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproductive and the freedom to decide if, when, and how often to do so. Implicit in this are the right of men and women to be informed and to have access to safe, effective, affordable, and acceptable methods of family planning of their choice, and the right to appropriate health-care services that enable women to safely go through pregnancy and childbirth.

Reproductive health care is defined as the constellation of methods, techniques, and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted infections.

Source: Available at: www.rho.org/html/definition_.htm

The RH services that were captured for the Jordan subanalysis are the following:

- Maternal health
  - Antenatal and postnatal care delivered in ambulatory care providers
  - Deliveries
- Family planning
  - Family planning commodities
- Other RH
- Commodities:
  - Contraceptives
  - Pharmaceuticals
- Prevention and public health services
- Administration
- Training
- Capital investment

These classifications represent an expansion of family planning and maternal health care definitions to capture medical (curative) care for women that is directly related to reproductive functions such as treatment of sexually transmitted infections, urinary tract infections, cancer screening and treatment, infertility, and menopause management.

3. Reproductive Health Subanalysis Findings

3.1 Overview

A summary of the Jordan RH subanalysis findings for 2001 is presented in Table 4. Overall RH expenditures total 91,608,027 JD (or US$129,389,869), 15 percent of overall health spending in Jordan for that year, and 1.5 percent of the gross domestic product (GDP). A further breakdown reveals RH expenditures per women of reproductive age to be to 70JD (or US$99.53). Out-of-pocket (OOP) spending by women of reproductive age equals 28.08JD (or US$39.66).

The majority of RH financing comes from the private sector (57 percent of RH THE), followed by the government (38 percent of RH THE) and donors (5 percent of RH THE). Expenditure on provision of RH services is mainly at the public sector level (45 percent of RH THE) and then at private providers (37 percent of RH THE).

Functions are the types of services or activities that are provided by providers of health care. These can include inpatient and outpatient care, medical goods such as pharmaceuticals, preventive services, and purchase of medical equipment. Breaking down expenditures by function shows that medical (curative) care accounts for a large portion of RH spending (83 percent), pharmaceuticals for 15 percent of RH spending. A very small amount goes toward RH-related programs on prevention and public health (0.5 percent of RH THE).

Table 4: Summary of Jordan Reproductive Health Subanalysis Findings, 2001

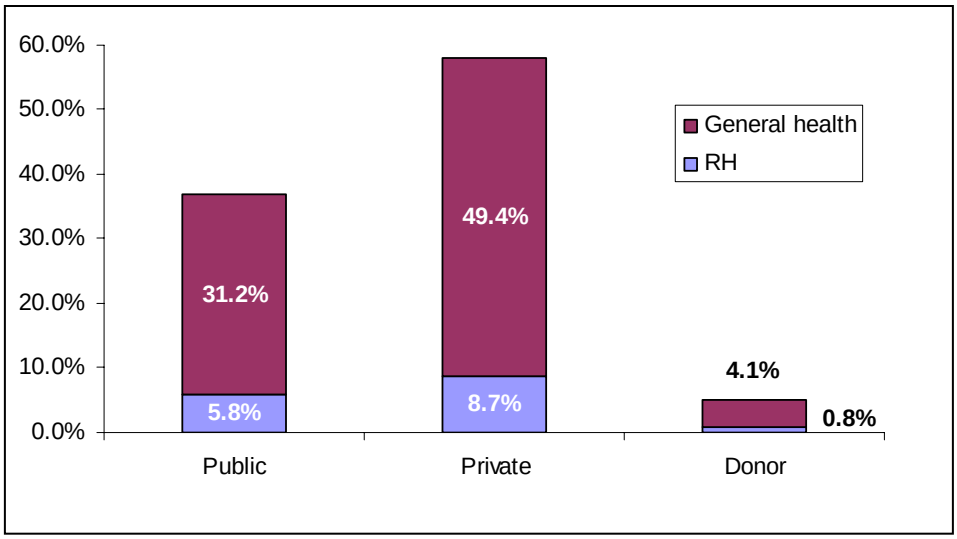
General Indicators	Value
Total RH expenditures in JD	91,608,027
Total RH expenditures in US $	$129,389,869
RH expenditures per woman of reproductive age in JD	70
RH expenditures per woman of reproductive age in US $	$99.53
RH expenditures as a % of GDP	1.5%
RH expenditures as a % of total of overall health spending	15.32%
RH pharmaceutical expenditures per woman of reproductive age in JD	10.26
RH pharmaceutical expenditures per woman of reproductive age in US $	$14.49
Financing Sources of RH Funds	
Public (incl. parastatals) as a % of THE for RH	38%
Private as a % of THE for RH	57%
Donor as a % of THE for RH	5%

Household Spending	
Total HH spending as a % of THE for RH	45.6
OOP spending as a % of THE for RH	40%
OOP spending per woman of reproductive age in JD	28.08
OOP spending per woman of reproductive age in US$	$39.66
Providers	
Public provider spending as a % of THE for RH	45%
-Public hospital spending as a % of THE for RH	30.19%
-Public health center spending as a % of THE for RH	15.02%
Private provider spending as a % of THE for RH	37%
-Private hospital spending as a % of THE for RH	23.02%
-Private clinic spending as a % of THE for RH	13.51%
Independent pharmacies/shops/dispensaries as a % of THE for RH	15%
Provision of prevention and public health programs as a % of THE for RH	0.5%
Donor	2%
Administration	1%
Other	0.3%
Functions	
Curative care as a % of THE for RH	83%
Prevention and public health programs as a % of THE for RH	0.5%
Pharmaceuticals and other nondurables as a % of THE for RH	15%
Capital formation as a % of THE for RH	0.7%
Ancillary services as a % of THE for RH	0.2%
Other as a % of THE for RH	0
Breakdown by Reproductive Health Functional categories	
Maternal health services (curative care) as a % of THE for RH	75.1%
Family planning as a % of THE for RH	22.2%
Prevention and public health programs on maternal and child health and family planning as a % of THE for RH as a % of THE for RH	0.5%
Administration as a % of THE for RH	1.3%
Other as a % of THE for RH	0.7%

* Exchange rate used for 2001 is 1US$ = .708 JD

A breakdown of RH financing sources (see Figure 1) shows that the public sector contributed 5.8 percent to RH spending. The private sector financed 8.7 percent (mostly by households, as seen in Figure 2 in the next section) and donors contributed 0.8 percent. Of all donor health spending on health, 16 percent was on RH services. Of households' total spending on health, approximately 15 percent was on RH services.

Figure 1: Contribution to Reproductive Health by Financiers of Overall Health Care

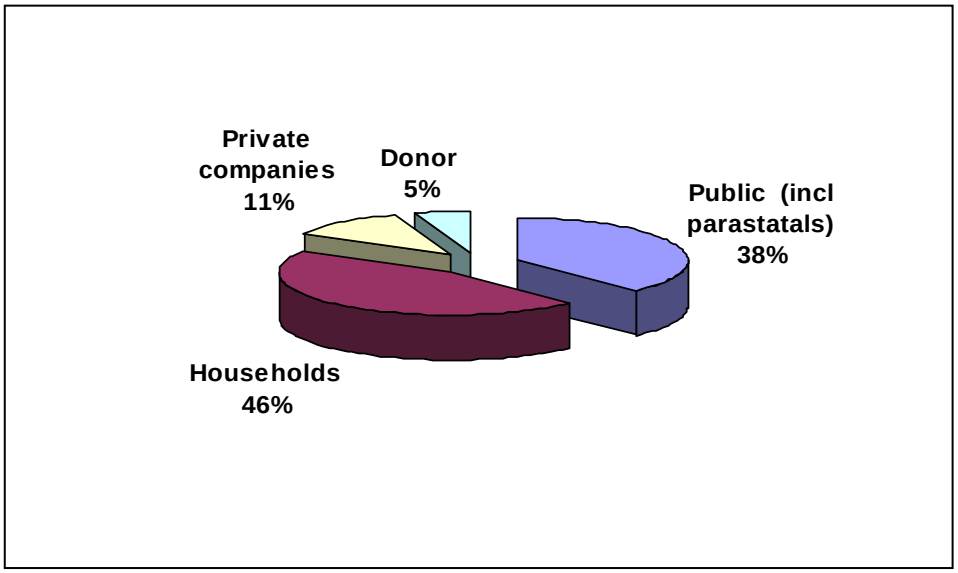


3.2 Reproductive Health Findings by NHA Dimensions

3.2.1 Financing Sources

As has been noted, total RH spending in Jordan for 2001 was approximately JD 91,608,027 (or US$129,389,869), and JD70 (or US$99.53) was spent on each woman of reproductive age. The table in Annex A demonstrates the flow of RH funds from the financing sources to the financing agents. The largest financing source for RH is the private sector, which contributes 57 percent; of this, households contribute 46 percent. The public sector contributes 38 percent, and donors 5 percent.

Figure 2: Financiers of Reproductive Health in Jordan



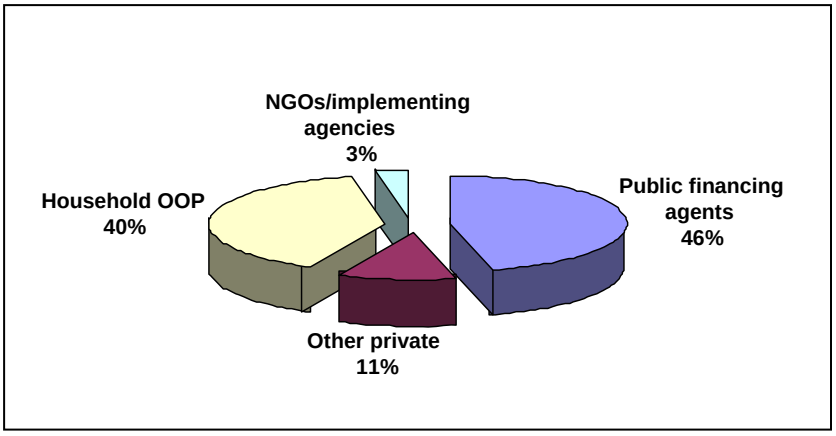
3.2.2 Financing Agents

The four main paths through which RH monies flow are:

- From central government through the MOH
- From household through their own OOP spending
- From donors through government entities
- From donors through NGOs/implementing agencies

Approximately 45 percent of resources for RH are transferred directly from financing sources to providers; the balance is administered by other financing agents. Public financing agents and households are the main managers (or programmers) of RH funds distributed to providers (see Figure 3). The MOH manages 46 percent of RH funds. Households manage 40 percent, most (87 percent) through OOP spending. Controlling the remaining RH funds are NGOs (3 percent) and other private entities (11 percent) such as private insurance companies.

Figure 3: Managers of Reproductive Health Funds: A Breakdown of Financing Agents

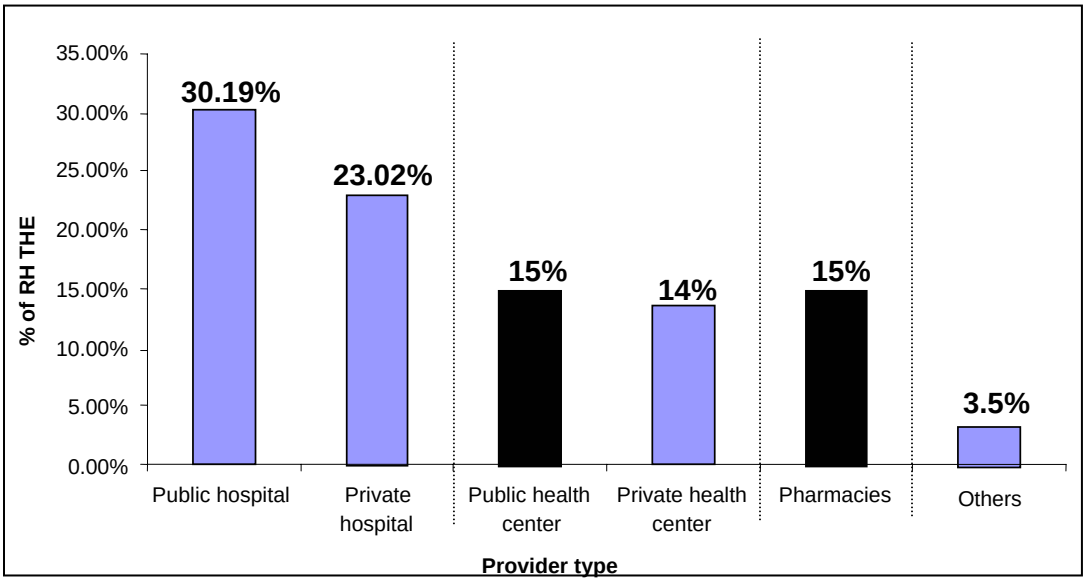


Donors, which provide 5.3 of RH financing, channel 60 percent of their funds through the government, the remaining 40 percent through NGOs/implementing agencies. The government, which provides 37.9 percent of RH spending, directs a sizeable majority (75 percent) of its funds through the MOH and the remainder to the RMS (23 percent) and other public financing agents such as JUH and public universities.

3.2.3 Health Providers

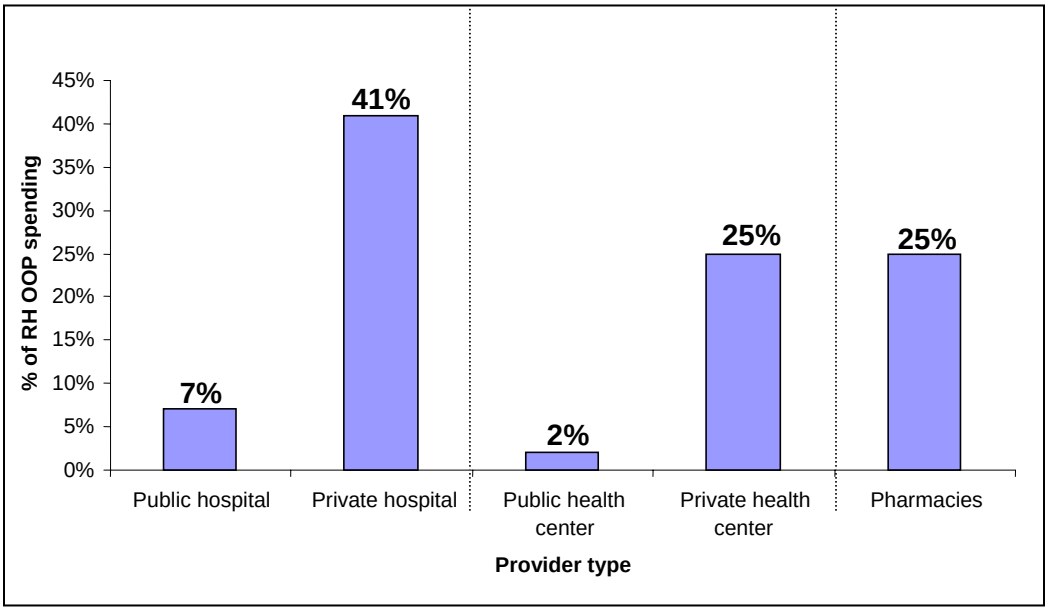
Public and private providers (45 and 37 percent respectively) dominate the RH service delivery in Jordan. RH expenditures on health centers are almost even between centers in the public sector (15 percent) and private sector (14 percent). Thirty percent of expenditures on curative RH care occur at public hospitals, 23 percent at private hospitals. Pharmacies consume a large portion of RH expenditures (15 percent), which is as much or more than spending at public and private health centers.

Figure 4: Where are Reproductive Health Funds Spent?



The largest portion of household OOP spending for curative RH services takes place at private facilities: 41 percent at private hospitals and 25 percent at private health centers (see Figure 5). Another 25 percent of OOP expenditures are made at pharmacies. Public facilities receive a smaller proportion of OOP funds, 7 percent at hospitals and 2 percent at health centers. Typically, the hospitals (public, private, and NGO) provide inpatient cure, including deliveries and other RH health services, and the health centers provide antenatal and postnatal care and family planning services (in addition to all other curative outpatient services). Pharmacies dispense pharmaceuticals and contraceptive commodities.

Figure 5: Out-of-pocket Reproductive Health Sending on Providers



3.2.4 Health Functions

Figure 6 breaks down the flow of funds from financing agents to functions, showing the services and products on which RH funds are spent. A majority of RH expenditures are on curative care (83 percent), followed by pharmaceuticals and nondurables (15 percent). Very little was spent on preventive care, health administration, capital formation, and ancillary services. Within curative care, 47 percent was spent on inpatient care and 36 percent on outpatient care. The large percentage spent on curative care relative to the very small amounts spent on other RH services and products raises the question of not only how RH funds are spent but if this is the best allocation of these resources to improve RH.

Figure 6: Reproductive Health Spending by Function

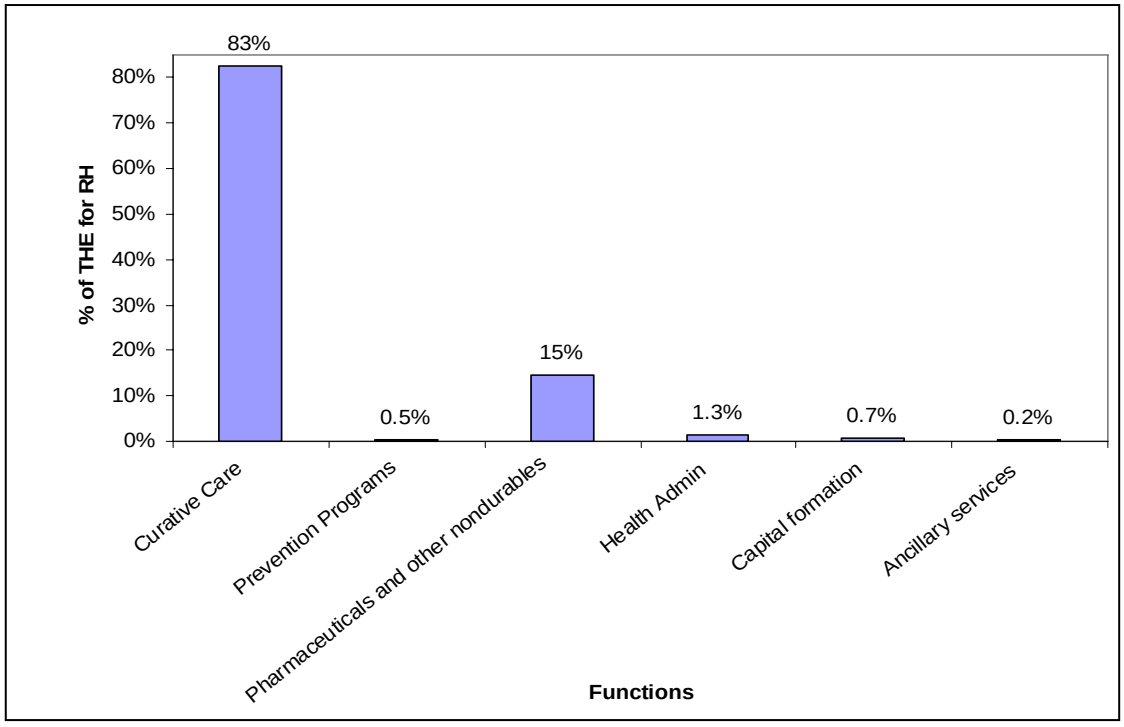
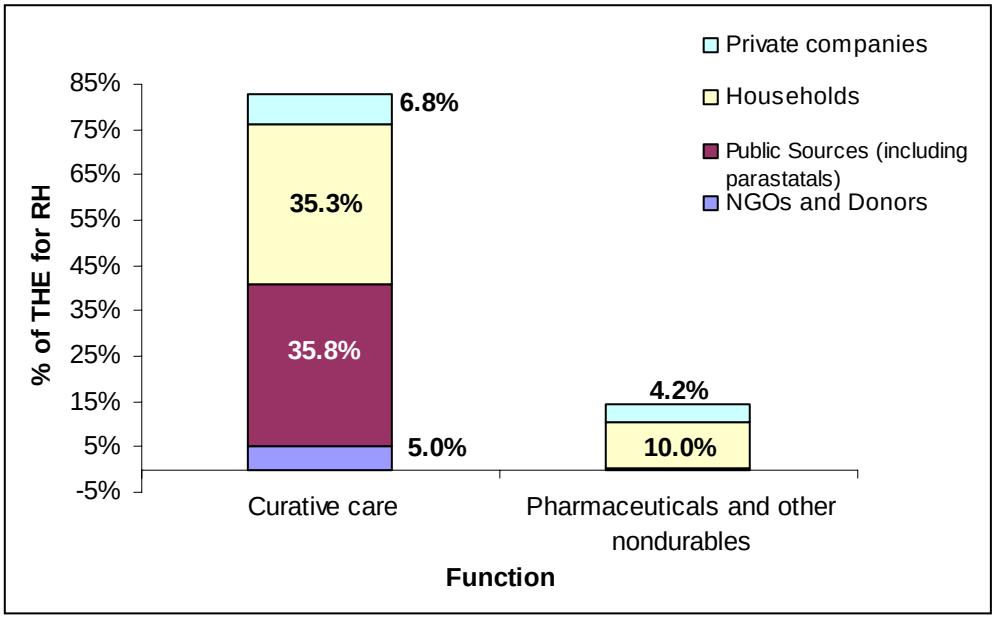


Figure 7 shows the ultimate financiers of the curative care and pharmaceuticals/other nondurables functions.[2] Households and public sources finance a large proportion of curative care expenditures, 35.3 percent and 35.8 percent respectively. Households also finance a majority of pharmaceuticals and nondurables (10 percent) followed by private companies (4 percent). Administration (1.3 percent), prevention and public health programs (0.5 percent), and other RH expenditures (0.7 percent) make up a relatively small percentage of RH functions.

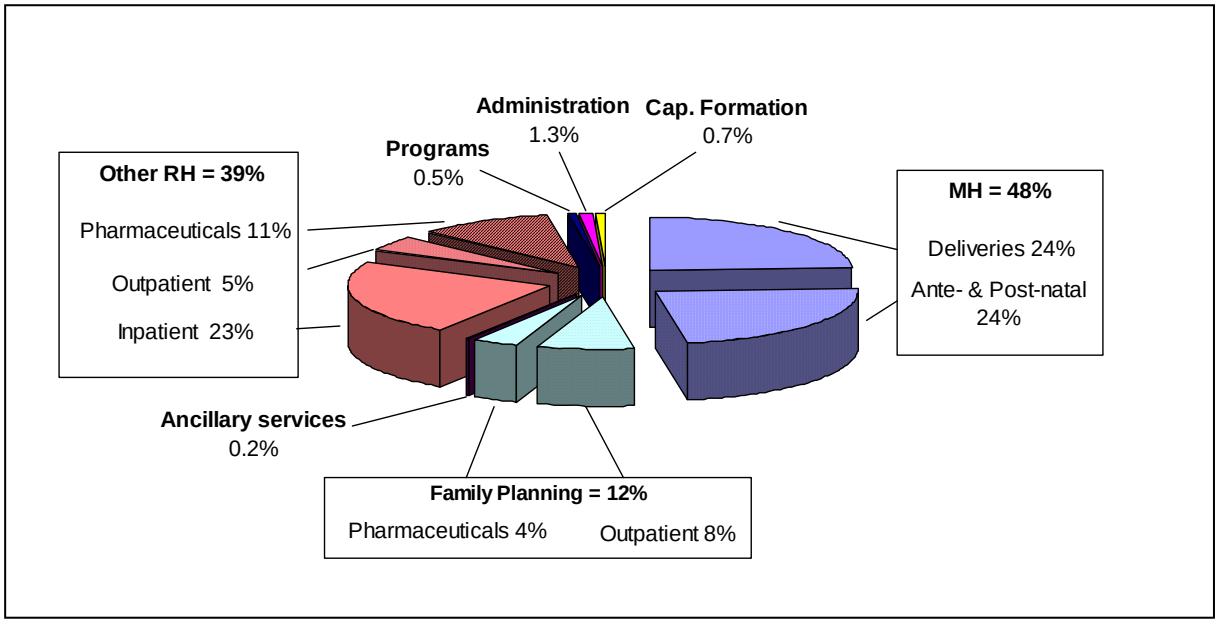
[2] Sources contributing less than one percent to any function were not included in the figure because these small proportions were difficult to display graphically.

Figure 7: Financiers of RH Functions



A breakdown of functions is shown in Figure 8. Maternal health services consume 48 percent of all RH expenditures, with deliveries and antenatal and postnatal expenditures contributing 24 percent each. Family planning expenditures consist of spending on pharmaceuticals (4 percent) and outpatient care (8 percent). Other RH expenditure comprises inpatient care (23 percent), pharmaceuticals (11 percent), and outpatient care (5 percent). Public health programs, administration, capital formation, and ancillary services together constitute less than 3 percent of maternal health and family planning expenditures.

Figure 8: Functional Breakdown by Reproductive Health Categories



3.3 Family Planning Commodities

Figure 9 illustrates the use of family planning commodities by income quintile. The overall distribution of family planning commodities across all quintiles appears to be almost equal. The first choice for contraception for each quintile is the intrauterine device (IUD), followed by pills, condoms, and then injections. Norplant is the least used contraceptive; its utilization was less than 1 percent.

Figure 9: Utilization of Commodities by Income Quintile

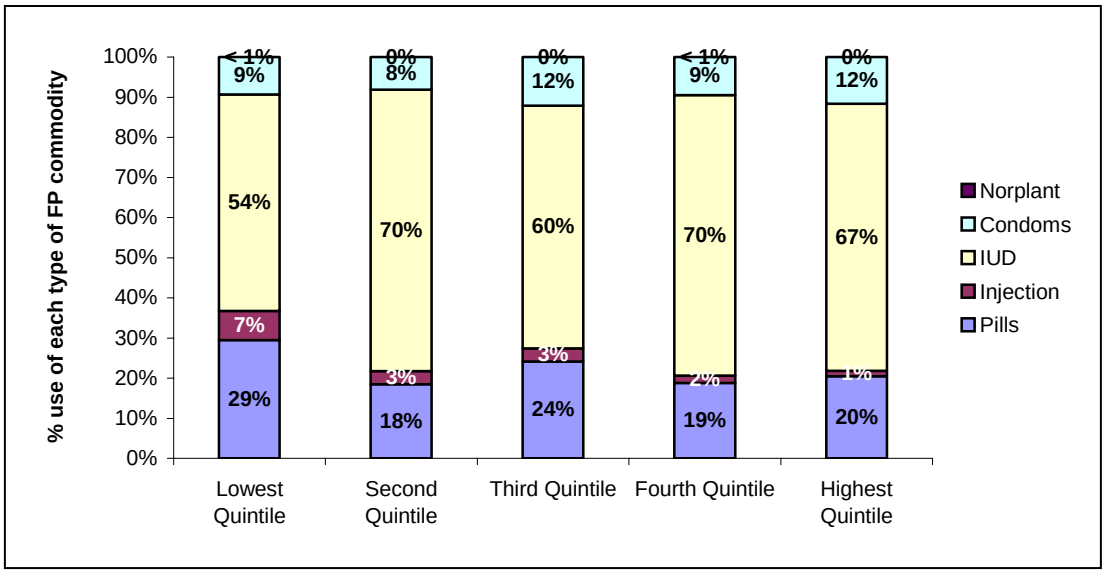
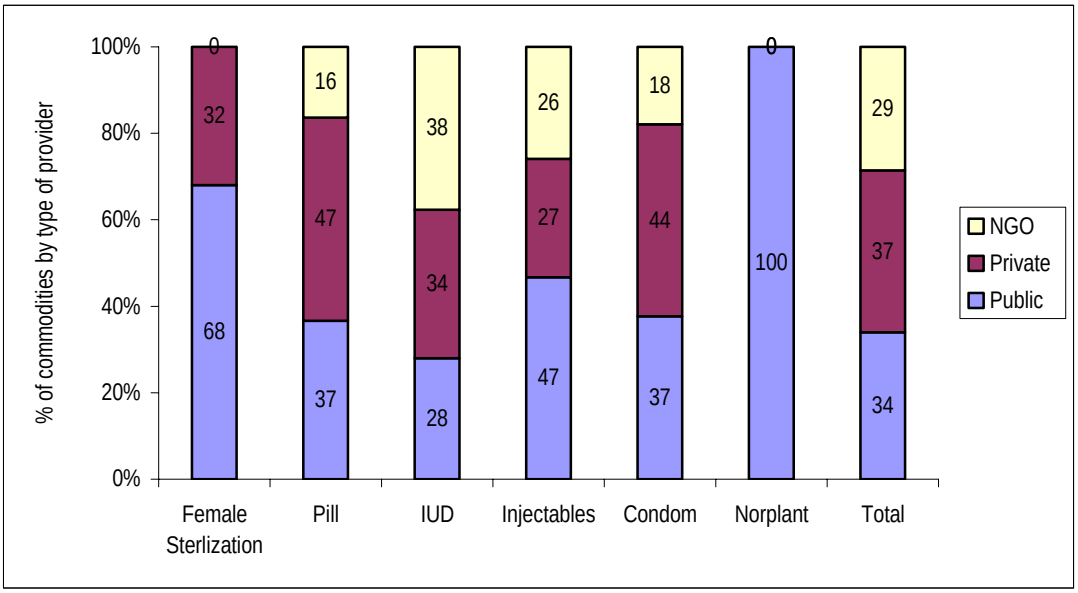


Figure 10 shows the distribution of the sources of supply for most modern contraceptives. The private sector and NGO sectors provide two-thirds (66 percent) of all contraceptives. The NGO sector is represented primarily by the Jordan Association of Family Planning and Protection (JAFPP) and, to a lesser extent, United Nations Relief and Works Agency (UNRWA) health centers. JAFPP is the single largest single provider of family planning commodities, 20 percent of the total share. It is the largest provider of IUDs, which makes the NGO sector the lead provider of IUDs. The public sector (including the MOH, RMS, JUH facilities, and mobile clinics) supplies the remaining 34 percent of family planning commodities. It is the only provider for Norplant. It is also the lead provider for injectables and female sterilization. (The private sector takes the lead in providing pills and condoms.)

Figure 10: Source of Supply for Modern Contraception



4. Summary and Policy Implications

This NHA RH subanalysis was the first analysis to quantify patterns of RH spending in Jordan. Many of its findings have relevance to policy making, especially in light of Jordan's efforts to achieve national and MDG RH-related targets.

The RH subanalysis showed that the private sector finances a majority of RH care (57 percent); 46 percent is from households. Women of reproductive age in Jordan spend on average US$39.66 out of pocket on RH. (Looked at another way, spending on women of reproductive age, who represent 26 percent of the Jordanian population, amounts to US$99.53 per woman.) Donors contribute a small amount of financing (5 percent). The government finances 38 percent; this would need to increase in order to put the government in a greater stewardship role of RH resources.

Because of their large contribution to RH spending, 87 percent of which comes from out of pocket, households control nearly as much as public sector financing agents do in terms of where RH finances are spent, 40 percent and 46 percent, respectively. The large OOP share highlights the need for the government to create financing mechanisms to reduce this burden on households.

RH expenditures account for 15.3 percent of THE for general health care, and 1.5 percent of GDP. Most RH spending is on curative care (83 percent) and only 0.5 percent is on preventive care; a more even balance between curative and preventive care should be achieved. Among specific RH categories (maternal health, family planning, pharmaceuticals, prevention and public health programs, administration, and capital formation), maternal health consumes nearly half of all expenditures (48 percent) while only a small share is spent on prevention and public health programs for maternal–child health and family planning. Perhaps more information is needed to determine why investment in prevention services and public health programs is so low and to reallocate spending so that RH can be improved while meeting the MDG targets for Jordan.

Like other signatory countries to the International Conference on Population and Development Programme of Action (Cairo 1994) and the Millennium Declaration, Jordan has a responsibility to work toward attaining the health care targets outlined in each of these documents, as well as its own NPS. In particular it must focus on improving RH services and family planning programs.

Subanalysis findings highlight three key policy implications. The share of public financing in the total resource envelope for RH services in Jordan is quite low, resulting in a disproportionate burden on the population to pay for the services. Financing health care through private financing has already resulted in unmet demand for these services, as some population groups are unable to pay. In addition to unmet demand, financing of health care though households allows for a possibility of inequity in access to health care. An obvious policy option for the government is to increase funding for these services and/or devote a higher share of public funds toward making RH services available and accessible for the entire population, particularly the vulnerable segments.

The second finding with implications for policy is the low expenditures on family planning (part of preventive RH care), especially given the increased emphasis on decreasing the population growth rate. As Table 5 shows, the global average is more than twice that of Jordan, and expenditures on

curative services are 27 percent higher than the global average. To achieve the desired results, the Government of Jordan needs to rethink its resource allocation for RH, bringing it into alignment with overall goals and population strategy.

Table 5: Functional Distribution of RH Expenditures in Jordan, Compared to Global Average

Program	Jordan 2001	Global
RH curative care	87%	60.0%
Family planning	12%	29.4%
Public health program, administration, capital formation	<3%	n/a
The sexually transmitted diseases/HIV/AIDS prevention program	n/a	7.6%
Basic research, data, and population and development policy analysis program	n/a	2.9%
Total (%)	100.0%	100.0%

Note: Jordan figures may not add up exactly to 100 percent because of rounding.

Finally, the public sector must work toward improving the quality of care it administers, as it is perceived as being of lower quality than in the private sector. As a result, people seek care in the more costly private sector. An increase in public financing may take time; in the interim, the MOH needs to identify mechanisms for private-public sector collaboration in the form of contracting such that the population can avail themselves of the perceived higher quality of care in the private sector without having to incur prohibitively high expenses. The challenge will be to ensure that these initiatives and other financing mechanisms foster good quality, comprehensive RH services, and progress toward true universal access to quality care.

Annex A. Financing Sources to Financing Agents

	Financing Sources							
Financing Agents	**MOF FS.1.1.1**	**MOP FS.1.1.2**	**Other Gov Ent FS.1.1.3**	**Priv Firms FS.2.1.1**	**HH FS.2.2**	**UNRWA FS.3.1**	**Other Donors FS.3 2**	**Total**
MOH HF.1.1.1.1	25,715,886	228,555	191,134	-	4,166,615	-	1,707,671	**32,009,861**
RMS HF.1.1.1.2	5,563,515	40,624	2,476,115	121,760	577,982	-	-	**8,779,997**
JUH HF 1.1.1.3	-	7,672	127,196	14,514	3,940	-	17,873	**171,195**
Other Public Entit HF.1.1.1.3	-	-	-	-	-	-	197,388	**197,388**
Public Univ HF. 1.1.1.4	-	-	348,728	-	174,798	-	-	**523,526**
Social Security HF.1.2	-	-	-	330,525	-	-	-	**330,525**
Private Insurance Enterprise HF.2.2	-	-	-	2,996,619	267,295	-	-	**3,263,914**
Household HF.2.3	-	-	-	-	36,498,653	-	-	**36,498,653**
NGOs HF.2.4	-	-	-	-	-	-	1,155,234	**1,155,234**
Private Firms HF.2.5	-	-	-	6,671,438	-	-	139,111	**6,810,549**
Private Universities HF.2.5.1	-	-	-	125,415	87,319	-	-	**212,733**
UNRWA HF.3.1	-	-	-	-	-	1,654,452	-	**1,654,452**
Total	**31,279,401**	**276,851**	**3,143,173**	**10,260,270**	**41,776,602**	**1,654,452**	**3,217,278**	**91,608,027**

Annex B: Financing Agents to Providers

		Financing Agents												
Providers		**MOH HF.1.1.1.1**	**RMS HF.1.1.1.2**	**JUH HF.1.1.1.3**	**Other Public Ent HF.1.1.2**	**Public Univ HF1.1.1.4**	**SS HF.1.2**	**Priv Insu HF.2.2**	**HH.HF.2.3**	**NGOs HF.2.4**	**Priv Firms HF.2.5**	**Priv Univ HF .2.5.1**	**UNRWA HF.3.1**	**Total**
HP.1.1.1	MOH Hospitals	16,485,061							818,352				58,508	**17,361,921**
HP.3.4.9.2	MOH Clinics	11,333,708	1,162,212						807,880					**13,303,799**
HP.5	MOH Provision and Adm of Public Health Prog	440,158												**440,158**
HP.6.1	MOH Adm	210,000												**210,000**
HP.nsk	MOH N.S.K	-												**-**
	MOH Facilities Total	*28,468,927*	*1,162,212*	-	-	-	-	-	*1,626,232*	-	-	-	*58,508*	***31,315,879***
HP.1.1.1.2	RMS Hospitals	589,957	6,630,786						239,721					**7,460,463**
HP.3.4.9.2	RMS Clinics		410,434											**410,434**
HP.6.1	RMS Adm		576,565											**576,565**
	RMS Facilities Total	*589,957*	*7,617,785*	-	-	-	-	-	*239,721*	-	-	-	-	***8,447,462***
HP.1.1.1.3	JUH Hospitals	1,368,940		26,395					1,436,580					**2,831,915**
HP.3.9.4.3	JUH Clinics			21,255										**21,255**
HP.6.1	JUH Adm			123,545										**123,545**
HP.7.1	JUH HP N.S.K													
	JUH Facilities Total	*1,368,940*	-	*171,195*	-	-	-	-	*1,436,580*	-	-	-	-	***2,976,715***
HP1.1.2	Private Hospitals	1,272,096				369,495	283,565	1,225,804	11,252,961		2,796,721	87,358		**17,288,000**
HP3.1	Private Clinics					154,031		565,634	8,901,142		1,290,517	40,310		**10,951,634**
HP3.5	Medical and diagnostic laboratories				197,388									**197,388**
HP.4.1	Private pharmacies	309,942					46,959	1,193,628	8,978,561		2,723,311	85,065		**13,337,467**
	Private HP N.S.K													

	Private Facilities Total	*1,582,038*	*-*	*-*	*197,388*	*523,526*	*330,525*	*2,985,067*	*29,132,664*	*-*	*6,810,549*	*212,733*	*-*	***41,774,490***
HP.1.1.3	NGOs Hospitals								3,797,153					**3,797,153**
HP.3.4.9.4	NGOs Clinics								266,303	1,155,234				**1,421,537**
	NGOs Facilities Total	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*4,063,456*	*1,155,234*	*-*	*-*	*-*	***5,218,689***
HP.3.4.9.6	Private University facilities													**-**
HP.3.4.9.7	Public University facilities													**-**
HP.9.1	UNRWA												1,595,944	**1,595,944**
HP.9.2	Treatment Abroad	-	-											**-**
HP.6.4	Other (private) insurance adm							278,848						**278,848**
	Total	**32,009,861**	**8,779,997**	**171,195**	**197,388**	**523,526**	**330,525**	**3,263,914**	**36,498,653**	**1,155,234**	**6,810,549**	**212,733**	**1,654,452**	**91,608,027**

Annex C: Financing Agents to Functions

		Financing Agents												
		MOH HF.1.1.1.1	RMS HF.1.1.1.2	JUH HF.1.1.1.3	Other Public Ent HF.1.1.2	Public Univ HF1.1.1.4	SS HF.1.2	Priv Insu HF.2.2	HH.HF.2.3	NGOs HF.2.4	Priv Firms HF.2.5	Priv Univ HF .2.5.1	UNRWA HF.3.1	Total
Functions														
HC.1.1	Inpatient curative care	16,032,517	4,979,274	21,439	-	369,495	283,565	1,225,804	17,052,526	-	2,796,721	87,358	46,868	**42,895,568**
	Deliveries	8,212,720	2,875,258	10,122	-	188,408	144,592	625,046	8,665,724	-	1,426,066	44,544	24,075	**22,216,556**
	Other RH	8,406,758	2,104,016	11,317	-	181,087	138,973	600,759	8,386,802	-	1,370,655	42,814	22,793	**21,265,974**
HC.1.3	Outpatient curative care	14,634,339	2,991,299	22,500	-	154,031	-	565,634	10,438,084	1,155,234	1,290,517	40,310	1,606,685	**32,898,633**
	Antenatal and postnatal	8,662,216	1,877,509	2,688	-	127,090	-	466,701	8,121,849	165,198	1,064,796	33,260	1,124,680	**21,645,986**
	FP	4,433,818	512,656	17,856	-	7,878	-	28,928	915,807	577,617	66,001	2,062	479,320	**7,041,943**
	Other RH	1,538,305	601,134	1,955	-	19,063	-	70,005	1,400,429	412,418	159,719	4,989	2,685	**4,210,704**
HC.4	Ancillary services	-	-	-	197,388	-	-	-	-	-	-	-	-	**197,388**
HC.5.1.1+ HC.5.1.2	Pharmaceuticals	309,942	-	-	-	-	46,959	1,193,628	8,978,561	-	2,723,311	85,065	-	**13,337,467**
	FP commodities	79,233	-	-	-	-	12,005	305,138	2,295,271	-	696,185	21,746	-	**3,409,578**
	The others	230,709	-	-	-	-	34,955	888,490	6,683,290	-	2,027,126	63,319	-	**9,927,889**
HC.5.1.3	Other medical non-durables	-	-	-	-	-	-	-	-	-	-	-	-	**-**
HC.6	Prevention and public health services	-	-	-	-	-	-	-	-	-	-	-	-	**-**
HC.6.1	MCH-FP	353,600	-	-	-	-	-	-	-	-	-	-	-	**353,600**
HC.6.2	School health programs	4,435	-	-	-	-	-	-	-	-	-	-	-	**4,435**
HC.6.3	Prevention of communicable diseases	68,133	-	-	-	-	-	-	-	-	-	-	-	**68,133**
HC.6.9	All other misc public health services	13,990	-	-	-	-	-	-	-	-	-	-	-	**13,990**
HC.7	Health admin & insurance	-	-	-	-	-	-	-	-	-	-	-	-	**-**

HC.7.1	General government administration of health	210,000	576,565	123,545	-	-	-	-	-	-	-	-	-	**910,109**
HC.7.2	Health administration and insurance	-	-	-	-	-	-	278,848	-	-	-	-	-	**278,848**
HCR.1	Capital formation for health care institution	382,906	232,859	3,711	-	-	-	-	29,481	-	-	-	899	**649,855**
HC.nsk	Expenditure not specified by any other kind	-	-	-	-	-	-	-	-	-	-	-	-	**-**
	Column Total - THE	32,009,861	8,779,997	171,195	197,388	523,526	330,525	3,263,914	36,498,653	1,155,234	6,810,549	212,733	1,654,452	**91,608,027**
HCR.2	Education & training of health personnel													**-**
HCR.3	Research and development													**-**
	Column Total NHE	**32,009,861**	**8,779,997**	**171,195**	**197,388**	**523,526**	**330,525**	**3,263,914**	**36,498,653**	**1,155,234**	**6,810,549**	**212,733**	**1,654,452**	**91,608,027**

Annex D: Providers to Functions

Function		Provider							
		HP.1.1.1	HP.3.4.9.2	HP.5	HP.6.1	HO.8.2	HP.1.2	HP.1.1.1.2	HP.3.4.9.2
		MOH Hospitals	MOH Clinics	MOH Provision and Adm of Public Health Prog	MOH Adm	MOH Training Inst.	MOH Facilities Total	RMS Hospitals	RMS Clinics
HC.1.1	Inpatient curative care	13,907,909					13,907,909	5,602,306	
	Deliveries	7,144,115					7,144,115	3,235,025	
	Other RH	6,763,794					6,763,794	2,367,281	
HC.1.3	Outpatient curative care	3,187,346	13,170,466				16,357,811	1,698,874	330,793
	Antenatal and postnatal	2,231,142	7,407,179				9,638,321	1,189,212	173,462
	FP	159,367	5,004,145				5,163,512	84,944	
	Other RH	796,836	759,142				1,555,978	424,719	157,330
HC.4	Ancillary services								
HC.5.1.1+HC.5.1.2	Pharmaceuticals								
	FP commodities								
	The others								
HC.5.1.3	Other medical non-durables								
HC.6	Prevention and public health services								
HC.6.1	MCH-FP			353,600			353,600		
HC.6.2	School health programs			4,435			4,435		
HC.6.3	Prevention of communicable diseases			68,133			68,133		
HC.6.9	All other misc public health services			13,990			13,990		
HC.7	Health admin & insurance								
HC.7.1	General government administration of health				210,000		210,000		
HC.7.2	Health administration and insurance								
HCR.1	Capital formation for health care institution	266,667	133,333				400,000	159,283	79,642
HC.nsk	Expenditure not specified by any other kind								
	Column Total-THE	17,361,921	13,303,799	440,158	210,000	-	31,315,879	7,460,463	410,434
HCR.2	Education & training of health personnel					300,000	300,000		
HCR.3	Research and development								
	Column Total-NHE	**17,361,921**	**13,303,799**	**440,158**	**210,000**	**300,000**	**31,615,879**	**7,460,463**	**410,434**

* Table continued on next page.

Provider												
HP.6.1	HP.8.2		HP.1.1.1.3	HP.3.9.4.3	HP.6.1	HP.8.2		HP1.1.2	HP3.1	HP3.5	HP.4.1	HP.8.2
RMS Adm	RMS Trainig inst.	RMS Facilities Total	JUH Hospitals	JUH Clinics	JUH Adm	JUH Training inst.	JUH Facilities Total	Private Hospitals	Private Clinics	Medical and diagnostic laboratories	Private pharmacies	Private Training inst.
			2,300,200					17,288,000				
			1,085,958					8,815,265				
			1,214,242					8,472,736				
			524,429	17,612					10,951,634			
			288,436						9,036,115			
			26,221	17,612					560,102			
			209,771						1,355,417			
										197,388		
											13,337,467	
											3,409,578	
											9,927,889	
576,565					123,545							
		238,925	7,287	3,643			10,930					
576,565	-	8,447,462	2,831,915	21,255	123,545	-	2,976,715	17,288,000	10,951,634	197,388	13,337,467	-
	122,683	122,683				9,627	9,627					
												3,469,200
576,565	**122,683**	**8,570,146**	**2,831,915**	**21,255**	**123,545**	**9,627**	**2,986,341**	**17,288,000**	**10,951,634**	**197,388**	**13,337,467**	**3,469,200**

* Table continued on next page.

Provider						Total
	HP.1.1.3	HP.3.4.9.4		HP.9.1	HP.6.4	
Private Facilities Total	NGOs Hospitals	NGOs Clinics	NGOs Facilities Total	UNRWA	Other (private) insurance adm	
	3,797,153					
	1,936,193					**42,895,568**
	1,860,960					
		1,421,537		1,595,944		
		203,280		1,117,161		**32,898,633**
		710,768		478,783		
		507,489				
						197,388
						13,337,467
						-
						-
						353,600
						4,435
						68,133
						-
					278,848	**910,109**
						278,848
						649,855
41,774,490	3,797,153	1,421,537	5,218,689	1,595,944	278,848	**-**
						91,608,027
3,469,200						**432,310**
45,243,690	**3,797,153**	**1,421,537**	**5,218,689**	**1,595,944**	**278,848**	**3,469,200**
						95,509,537

Annex E: Reproductive Health Subanalysis Methodology

The following estimates and triangulation techniques are specifically for the HP x HC 2001 table.

Public Sector Estimates

Inpatient RH

- Allocation ratios were developed for the Ministry of Health (MOH) hospitals to estimate the percent of inpatient RH-related services using MOH inpatient utilization data and the PHR*plus* cost analyses for two MOH hospitals. MOH hospitals were grouped into four categories depending on bed size (small, medium, large, largest). Patients days were used with the cost per admission from the two cost studies to estimate the relative share of inpatient RH services cost to total hospital inpatient services cost for each hospital, and then averaged to calculate the category share. Then each hospital was given a weight relative to its size; this was used later to adjust for the allocation factor of each hospital category. At the end, the total allocation factors for all MOH RH inpatient services were calculated adding the allocation factor for the four hospital categories. This allocation factor (24.4 percent) was then multiplied by the amount spent for inpatient MOH services to estimate the amount spent on inpatient RH. A similar methodology was used for estimating the allocation factor for the Royal Medical Service (RMS) and Jordan University Hospital (JUH). It was assumed that the PHR*plus* cost analysis for MOH hospitals could be used for the RMS, since they are public facilities with common features. However, the JUH allocation factor was developed separately, depending only on utilization data and patients days, because costs in teaching hospitals are usually much higher, and we lack any estimate on that.

- Utilization data for delivery was then used to estimate the ratio of maternal health related services relative to all RH services. Number of deliveries, patient days, and hospital weight was used to estimate the allocation factor for maternal health, that was used later to distribute the figure into maternal health services and other RH services for inpatients.

Outpatient RH

- The allocation factor for outpatient RH services was estimated using the relative share of RH-related visits to total outpatient visits in all MOH, RMS, and university hospitals. This factor (13.97 for MOH) was then multiplied by total outpatient expenditure to get the RH figure.

- The figure for outpatient RH was then distributed between antenatal care (ANC), postnatal care (PNC), family planning, and other RH services according to interview results with consultants in five MOH hospitals, the RMS head of obstetric/gynecology, and the general obstetric/gynecology specialist at JUH. The MOH and RMS distributed them as follows: 70

percent for ANC + PNC, 5 percent family planning, and the remaining 25 percent for other RH services. The JUH stated 55 percent for ANC + PNC, 5 percent family planning, and 40 percent for other RH services.

Primary Health Care RH Services

- Three types of utilization data were used for the MOH estimates. RH services are provided in the general primary health care clinics, through Maternal and Child Clinics, and through what used to be the comprehensive post-partum (CPP) project that now has clinics in 14 hospitals offering ANC, PNC, family planning, and child care that are considered primary health care and its utilization data are reported separately from the other two sources (hospital outpatient and the primary health care).

- Cost per different type of service that was done by the Primary Health Care Initiatives (PHCI) project was used to estimate the relative share of different RH services, such as the cost for ANC, PNC, family planning, immunization, and general care visit, using unit cost * number of visits for each type, that are regularly reported and published in the MOH Annual Statistical Report in the general primary health care clinics, maternal–child health, and CPP clinics.

- The allocation factor for primary health care RH services was then multiplied by expenditure figure for MOH clinics to estimate RH expenditure. RMS has only a very few general care clinics that are not related to hospitals that offer only ANC and gynecology services, no family planning. Their relative share was calculated using relative RH visits to overall clinics visits. JUH general clinics have very few RH-related services, around 5 percent, mainly for family planning according to interview results with staff physicians.

MOH Administration

- The figure in cell F25 was supplied by the MOH. It represents .05 of the total expenditure figure on the MOH administration. This ratio was used for the estimation of the RH share of the administration expenditure for the RMS and JUH

MOH Capital Formation

- This figure was again estimated and supplied by the MOH. It represent .03 of total capital formation. This ratio was used to estimate the RH capital formation figure for RMS and JUH.

- The total RH capital formation figure was distributed between outpatient and inpatient using the ratio estimated from the cost analysis study for the two MOH hospitals (see note under the matrix). This same ratio was used for RMS and JUH;

MOH RH Training

- Again, this figure was estimated by the MOH. It represents 0.1 of the total training figure. This ratio was applied to RMS and JUH to estimate their RH share in training expenditures

Research

- This expenditure figure was assumed to be totally RH related since it was spent on carrying DHS and other research by the CMS project that are assumed to be RH related.

Private Sector Estimates

Inpatient RH Services

- The number of RH-related admissions and patient days as reported in the MOH Annual Statistical Book was used to estimate the RH allocation factor for the private hospitals and NGO hospitals. This factor was then multiplied by total expenditure in private and NGOs hospitals to estimate RH expenditures to obtain their respective totals.

- Also, the total number of deliveries, total deliveries patient days, and total patient days were used to calculate the allocation factor for deliveries and other RH services. The MOH Annual Statistical Book and the DHS were sources of the data. This allocation factor was then multiplied by the RH expenditure figure to distribute the amount between deliveries and other RH care.

Private Clinics

Some MOH allocation factors, DHS data, and private health insurance data as reported by the Policy Study, were used in this estimation.

Certain assumptions were used in using the above sources in calculating the allocation factor for RH-related services out of total expenditures in private clinics:

- For the share of maternal health-related services, the insurance claim percentage reported by private insurance and some TPA of 10 percent was assumed to be the allocating factor for maternal health (they stated that on average 10 percent of insurance claims annually are for maternal health; we assumed that the population attending private clinics will behave in the same way).

- For family planning, the allocation factor was calculated from the DHS, where the number of users multiplied by average cost for different methods divided by total expenditure was used to calculate the family planning allocation factor (.006198).

- For other RH services, we assumed it will be similar to the MOH outpatient ratio (.015), then we summed 0.10+0.006198+0.015 = 0.121198 as the total allocation factor for RH services in private clinics.

- This factor was then multiplied by the total expenditure in private clinics amount to estimate the total RH in private clinic.

- This figure was further distributed between maternal health, family planning, and other RH using allocation factors developed through estimating the share of each service out of the total RH share (family planning = .006/.12=.05, .05* RH in private clinics.

Private Ancillary Services

- The ratio of RH-related tests in the MOH medical laboratory was used to estimate the percentage of RH-related services ratio for the ancillary services in the private sector. Since the MOH is the largest insurer for the Jordanian population, we assumed that the population using the private sector would have the same ratio. The MOH ratio was calculated using the RH-related tests done in the outpatient.

NGOs Clinics

- These figures and distribution of them were calculated using the percentages supplied by the largest NGOs series of clinics that provide almost exclusive RH services, namely the Jordan Association for Family Planning and Protection (JAFPP).

UNRWA

- These figures were supplied by the UNRWA.

Annex F: References

Al Halwani Fatina, Dwayne A. Banks, Ali Madani, Maher Odeh, and Tassir Fardous. November 2005. *Jordan National Health Accounts 2000-2001*. Bethesda, Maryland: The Partners for Health Reform*plus* Project, Abt Associates Inc.

Jordan Department of Statistics. 2002. *Jordan in Figures*. Amman, Jordan: Jordan Department of Statistics.

Jordan Department of Statistics and ORC Macro. 2003. *Jordan 2002 Population and Family Health Survey*. Amman, Jordan and Calverton, Maryland: Measure DHS.

Jordan National Population Commission. September 2000. *The Updated National Population Strategy: Concepts, Foundation, and Goals 2000-2020*. Amman, Jordan.

Sass, Justine and Lori Ashford. 2002. *2002 Women of Our World*. Population Reference Bureau.

United Nations Common Database (UNCDB). Available at: http://globalis.gvu.unu.edu/indicator_detail.cfm?IndicatorID=19&Country=JO.

United Nations Development Program. 2003. *Human Development Report 2003*. New York: Oxford University Press.

USAID. October 2003. *USAID/Jordan Strategy 2004-2009: Gateway to the Future*. Washington, DC.

World Health Organization. 2002. *The World Health Report 2002 Reducing Risks, Promoting Health Life*. Geneva, Switzerland.