



Contraceptive Security



Ministry of Health and Population
Contraceptive Security Project

Contraceptive coverage Rate (CCR) in Monofia Governorate 2007-2012

Final Report

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CHAPTER 1: INTRODUCTION AND BACKGROUND

Introduction

Throughout the period 2002 -2011 the family planning program underwent different challenges resulted in increase in the crude birth rate from 25.5 live births /1000 population in 2005 to 27.9 live births per 1000 population in 2010⁽¹⁾. According to EDHS 2005 – 2008, the contraceptive prevalence rate (CPR) for all methods was 59. 2% in 2005 and 60.3% in 2008 and for modern methods CPR were 56.5% in 2005 and 57.6% in 2008. Unmet needs for FP is maintained at high level i.e. 10.3% in 2005 and 9.2% in 2008⁽²⁾. According to National Population Council, the Contraceptive Coverage Rate (CCR) is used as proxy indicator for monitoring the contraceptive prevalence rate (CPR). CCR is the percent of the distributed FP methods (expressed as couple year protection/CYP) to total number of married women in the reproductive age (MWRA). According to NPC statistics CCR at the national level had shown a decrease from 58% in 2005 to 45% in 2011⁽³⁾.

The study conducted in 2008 to investigate the causes of reduction in CYP in Egypt 2002-2007 had identified that the phasing out of foreign funds that supported FP program in Egypt was associated with reducing different MOHP/PS-FP activities⁽⁴⁾. The findings derived from the study of FHM and its impact on reproductive health services ⁽⁵⁾ had been considered by MOHP/PS policy makers. According to results of that study, RH/FP services become provided in separate clinic from that for family medicine clinic to ensure privacy and promotion of FP services. The studies that emphasized on supporting the FP program through commissioning policy, financial, institutional, and community strategies were aiming at sustainability of effective FP services ^(6, 7, 8, and 9). Integration of FP services with postpartum care and emphasizes on providing FP services for birth spacing in an appropriate time for the mother and child; had been raised in one of the NPC-RMU studies ⁽¹⁰⁾. Promoting the role of NGOs in FP program ^(11, 12) and capitalizing on the extensive network of private clinics and pharmacies to provide quality FP services ⁽¹³⁾ had been considered by the MOHP/FP program planners. However, almost of the MOHP initiatives to involve the NGOs and private sector in FP services were project oriented rather than institutionalized activities. Dealing with financial sustainability issue of FPP was lacking the mechanism of self-reliance and trials to find another donor were one of the alternatives.

Therefore, MOHP/PS in collaboration with UNFPA had introduced the **SCSSP**. The project is composed of a package of institutionalized activities that ensure sustainability of supply of safe and effective FP methods through efficient Egyptian commodity procurement system,

logistic management for rationalization of FP method availability and distribution, involvement of the NGOs and private sector in the FP program and conduction of operations research studies that provide information for timely decision-making. Additionally, operations research studies for evaluation of **SCSSP** activities are integral part of the project.

Background

The MOHP-PS **SCSSP** is aiming at increasing the contraceptive prevalence rate and ensuring the quality of family planning services in ten pilot governorates: Two governorates in Lower Egypt: Menofia and Sharkia, Two Urban Governorates: Cairo and Alexandria and six Upper Egypt Governorates: Asuit, Beni-suif , Fyoum, Menyia , Quena and Souhag. The project started in 2008 and continued to 2012. The strategies employed by the project include ensure the adequate supply of safe and effective contraceptive methods, introducing new method mix to overcome unmet needs and reduce discontinuation of contraceptive methods and training of service providers in contraceptive logistic management and technical services related to counseling and follow up. Menofia Governorate has been included in the project in 2010. Yet there is no comprehensive information that assesses achievement of the project regarding the effectiveness: outcome (Contraceptive Coverage Rate and impact (Crude Birth Rate). Additionally, there no evidence describing efficiency of the project conveyed as output (volume, and characteristics of family planning users). Therefore, having information about strengths, weaknesses, opportunities and challenges to the project at the implementation level could guide for continuous quality improvement of the project activities.

The traditional Demographic and Health Survey, the Management Information System-Service Statistics for the MOHP and NPC have the limitations of not going beyond identification of the problem and the trend in the magnitude of the problem. However, health systems research (HSR) that emphasizes on different aspects of the FP program regarding supply side delineates issues related to: resources (input), management of resources (process) and utilization of FP services (Output). This supply side is institutional/programmatic oriented that consider strengths, weaknesses, opportunities and challenges. HSR considers measuring the outcome of the program (through measuring coverage of the community with the FP services and methods) and impact of the program (indirect effect of FP services on fertility pattern).

CHAPTER 2: GOAL and OBJECTIVES

2.1: Goal

Improving the quality of life of Egyptian mothers and children through providing effective and safe family planning methods and services in RH/FP clinics

2.2: Aim of the study

Evaluate the efficiency and effectiveness of family planning program in one of the Supporting Contraceptive Security System Project (SCSSP) Governorates i.e. Menofia Governorate throughout the period 2007 -2012. This evaluation is concerned with the research question of: **Is SCSSP succeeded in making a difference in FP program efficiency and effectiveness compared with similar (but not included in SCSSP) governorate in Lower Egypt?**

2.3: Specific Objectives

1. Assess the FP program resources in Menofia Governorate: FP clinics and FP Service providers,
2. Scrutinize the management of FP services resources in Menofia Governorate: training of physicians and nurses in FP services,
3. Investigate the trend in FP services utilization in Menofia Governorate: Number of FP clients and their characteristics and used of FP method mix,
4. Explore the trend in outcome of FP program in Menofia Governorate: CCR, contribution of MOHP in CYP and FP Method mix in CYP,
5. Examine the impact of FP program on Fertility pattern in Menofia Governorate: CBR, RNI, GFR and FR,
6. Describe the trend in Efficiency and Effectiveness of FP Services in Menofia Governorate 2007 -2011,
7. Recognize the perspectives of MOHP/ **SCSSP** staff member towards the project concept, justifications, strengths, weaknesses, opportunities and challenges,
8. Identify the perspectives of MOHP-Menofia Governorate physicians and nurses towards **SCSSP** strengths, weaknesses, opportunities and challenges at the implementation level.

CHAPTER 3: METHODOLOGY

3.1 Study Design

The study is health system-operations research. It is an evaluation study that scrutinizes the efficiency and effectiveness of FP program before and after introduction of MOHP/**Supporting Contraceptive Security System Project(SCSSP)** in Menofia governorate. The study design is a time series quasi-experimental pre- intervention –post- intervention control group design. The time series for quantitative data was covering the period 2007-2011: pre-SCSSP 2007 - 2009 and post -SCSSP 2010-2011. Menofia Governorate represented the SCSSP intervention group. Kafr El-Sheikh Governorate, Lower Egypt Governorates and total Egypt Governorates are considered the reference/control groups.

The study included also a cross-sectional study design for SCSSP in 2012, through collecting qualitative data from MOHP/**SCSSP** staff members, and FP directors and nurse supervisors in Menofia Governorate.

3.2 Study Setting

The study had been conducted in:

- MOHP/PS – **SCSSP**
- MOHP/PS –MIS
- NPC Statistics Department
- Menofia Health Directorate

3.3 Sample Size and Sampling Technique

All basic population data regarding the number of married women in the reproductive age (MWRA) /governorate and service statistics on contraceptive methods dispensed in Egypt 2007- 2011 and published by NPC will be incorporated in the study. Statistics on the number and distribution of family planning clinics (public and NGOs FP clinics) are included in the study. The vital statistics including information about crude birth rate and the rate of natural increase 2007-2011 and published in the Statistical Year Book of CAPMAS will be incorporated in the study. MOHP/PS –MIS service statistics data about the number and distribution of FP physicians and nurses and coverage of FP clinics by trained service providers are counted in the study. Data on characteristics of MOHP/FP clients, and FP method users and clinic visits are contained within the study.

The analysis of data has been focused on:

- Menofia Governorate (SCSSP intervention)
- Kafr El-Sheikh (Control Governorate)
 - Not included in SCSSP
 - Located in Lower Egypt
 - Has the semi- equivalent number of districts and health units
- Lower Egypt Governorate: Reference region for all the indicators
- All Egypt Governorates: Reference at the National level for all indicators

3.4 Data Collection:

■ Types and Sources of data

A- Quantitative data

The sources of the quantitative data that cover the period 2007 – 2011 are:

- CAPMAS – Statistical Year Book
- MOHP/PS –MIS
- NPC: Annual Statistics Report

B- Qualitative Data

- In-Depth interview with MOHP/PS **SCSSP** staff members
- Focus Group Discussion with FP district directors in Menofia Governorate
- Focus Group Discussion with Nurse Supervisors at District Level in Menofia Governorate.

■ Instruments and Methods of Data Collection

- MOHP/MIS spread sheets (excel) software material for FP service statistics for Egypt Governorates 2007 -2011
- Spread sheets for NPC statistics
- Spread Sheet for Population Data and vital Statistics: CAPMAS
- Guidelines for Focus Group Discussion and in-depth interviews. The guidelines focused on **Supporting Contraceptive Security System Project** regarding
 - (a) Importance /Justifications of **SCSSP**
 - (b) Strengths
 - (c) Weaknesses
 - (d) Opportunities
 - (e) Challenges

For each point the discussion emphasized on: input, process, output, outcome and impact of the project as well as success stories and learned lessons.

3.5 Data Quality Check

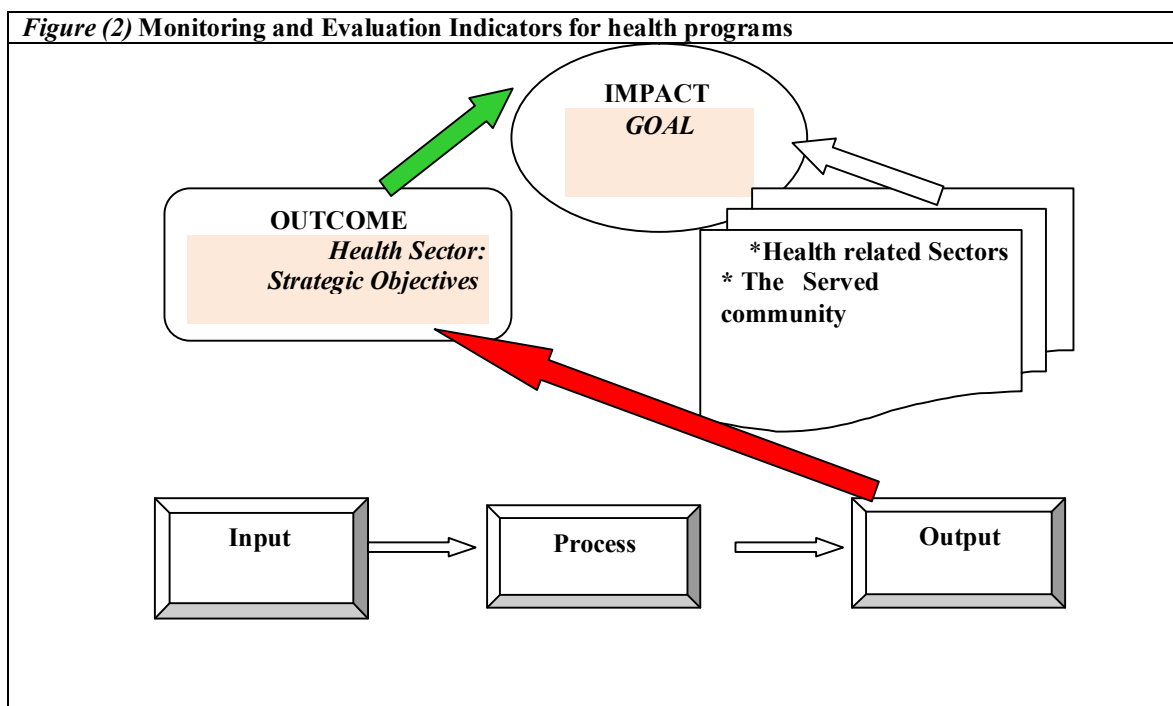
The use of vital and service statistics as source of quantitative data indicates that all the target populations are included in the study without sampling. Therefore, there were no sampling errors. The format used by the MOHP/PS MIS and NPC which are used to issue the monthly and annual reports are used as a source of data for subsequent analysis to answer the research question.

3.6 Data Analysis Plan

Simple statistical methods will be used as mean number of clients per FP clinic per working day. Comparison will be done between Menofia FP statistics and other Lower Egypt Governorates statistics before and after the introduction of **Supporting Contraceptive Security System Project**. The trend in FP services output and outcome (expressed as CCR) will be examined.

The views of the interviewed staff at the central and governorate level provide explanation and interpretation to the quantitative data.

The arrangement of the analyzed data considered the flow of information according to system analysis model i.e. input (resources), Process (management of resources), output (utilization of FP services), outcome (direct impact of FP services on the community) and impact (indirect impact of FP services on the community expressed as fertility indicators). Articulation of the study findings by time and place had been tracked during demonstration of the results. The articulation of information by time is aiming at exploring the trend in the different indicators of the FP-system model throughout the period 2007 -2011. This reference period covered the pre MOHP-**SCSSP** intervention 2007 -2009 and the post **SCSSP** intervention 2010- 2011. The articulation of the information by geographical regions endorsed comparison of Menofia Governorate with control groups at governorate, region and national levels. The information derived from the study had been presented according to the 21 indicators organized into 5 groups (resources, management of resources, utilization of FP services, coverage of the community with FP methods and fertility pattern throughout the period 2007-2011). The use of compound indices that present efficiency (input, process and output) and effectiveness (outcome and impact) had been used to conclude the impression of introduction of **SCSSP** in Menofia Governorate compared with the control governorate i.e. Kafr El-Sheikh governorate which is not included in **SCSSP** . Figure (2)



Improvement in performance of a health system at a level of specific Governorate should consider two important issues:

- ☑ The situation of a specific governorate versus another similar governorate regarding number of districts and health units, and the trend over time
- ☑ The situation of specific governorate versus other governorates located in the same geographical region. With consideration of rank ordering categorized as good, medium or bad performance for each type of the system indicators

Therefore the data had been presented as system oriented indicators as input, process, output, outcome and impact at the level of the target governorate “Menofia” and the control governorate “Kafr El-Sheikh”, Total Lower Egypt Governorates and total Egypt Governorates

The following are the “**System Analysis Model**” indicators used by the study:

I- **Input (Resource) Indicators:**

- (1) Number of Married Women in the Reproductive Age per FP clinic (Governmental and NGOs) in a certain year and governorate
- (2) Number of Married Women in the Reproductive Age per MOHP/ FP clinic in a certain year and governorate
- (3) Number of Married Women in the Reproductive Age per FP physician in MOHP clinics in a certain year and governorate
- (4) Number of Married Women in the Reproductive Age per FP Nurse in MOHP clinics in a certain year and governorate

II- **Process (Management of Resources) Indicators:**

- (1) Number of Married Women in the Reproductive Age per Trained FP physician in MOHP clinic in a certain year and governorate
- (2) Number of Married Women in the Reproductive Age per Trained FP Nurse in MOHP clinic in a certain year and governorate
- (3) Percent of MOHP FP trained physicians to total MOHP FP physicians in a certain year and governorate
- (4) Percent of MOHP FP trained Nurses to total MOHP FP nurses in a certain year and governorate

III- **Output (Utilization Pattern of FP Services) Indicators:**

- (1) Mean Number of FP clients per MOHP clinic per working day in certain governorate and year
- (2) Percent of New FP clients to total MOHP FP clients in certain governorate and year
- (3) Percent of FP clients recorded as first visit clients to total MOHP FP clients in certain governorate and year
- (4) Percent of MOHP-FP clients less than 30 years old to total MOHP FP clients in certain governorate and year
- (5) Percent of MOHP-FP clients having less than three children to total MOHP FP clients in certain governorate and year
- (6) Percent of MOHP-FP clients IUD users to total MOHP FP method users in certain governorate and year

IV- **Outcome (Coverage of MWRA with FP methods) Indicators:**

- [1] Contraceptive coverage rate (percent of CYP for the dispensed contraceptive methods to total MWRA) in a certain Year and Governorate

- [2] Percent Contribution of MOHP to total Contraceptive Coverage Rate (CCR) in a certain Year and Governorate
- [3] Percent contribution of IUD to total CYP in a certain Year and Governorate

V- **Impact (Indirect effect of FP services on fertility at the community level) Indicators**

- (1) Crude Birth rate in a certain Year and Governorate
- (2) Rate of Natural Increase in a certain Year and Governorate
- (3) General Fertility Rate in a certain Year and Governorate
- (4) Fecundity Rate in a certain Year and Governorate

Throughout presentation of the current study quantitative data, assessment of performance in family planning was presented as the above 21 indicators. Aggregation of indicators as input, process and output had reflected the performance at the institutional level of MOHP and NGOs in some indicators. The outcome indicators reflect performance of both the public and private sector in FP supply with contraceptives. The impact indicators reflect the indirect effect of FP services as well as the current cultural and attitude of the community towards fertility.

Therefore, assessment of performance considered the following parameters:

- Institutional performance or **efficiency** of using resources to achieve operational objectives at clinic level: Input, process and output
- Programmatic performance or **effectiveness** in achieving the strategic objectives of the FP program) expressed as coverage of MWRA with contraceptive methods: Outcome
- Political and community support to FP program or **effectiveness** in achieving the goal of FP program in reducing the fertility rates: Impact
- Standardized level to assess performance that considers the above indicators in a well-defined community.

The current study has used “**The Best Situation Model**” that considers the rank ordering of governorates within Lower Egypt Region (Nine Governorates) according the value of each indicator. The best situation regarding each indicator considers the rank order from the lowest to highest value according to the objectives of the FP program. The governorate which achieves the best situation for any indicator in any year will get a score of **9 points**. Compound indices had been developed for each category of indicators i.e. the four input indicators will form the resource index. The best situation governorate that had a score of **9 points** for all the four output indicators will have a total score of (9*4= 36).

The efficiency compound index =

$$\frac{\text{Sum \{scores for 4 input indicators, 4 process indicators and 6 output indicators\}}}{\text{The best situation score (14 indicators * 9 = 126)}} \times 100$$

The Effectiveness compound index =

$$\frac{\text{Sum \{scores for 3 outcome indicators and 4 impact indicators\}}}{\text{The best situation score (7 indicators * 9 = 63)}} \times 100$$

Those indices are used to ascertain the trend in efficiency and effectiveness over time irrespective to the value of the compound index.

Despite the compound indices are composed of many indicators that consider all the data for each governorate located in Lower Egypt Region and for several consecutive years, they answer a simple question: Is the performance of specific governorate improve over time?

Figure (3) Example Demonstrating ranking for CBR and Scoring model for Lower Egypt Governorates 2007 - 2011

Rank	Score	2007	2008	2009	2010	2011
1	9	Behera	Dakahlia	Gharbia	Dakahlia	Qualubia
2	8	K.El-Sheikh	Behera	Qualubia	Ismalia	Gharbia
3	7	Qualubia	Sharkia	K.El-Sheikh	Qualubia	Dakahlia
4	6	Gharbia	K.El-Sheikh	Dakahlia	Behera	K.El-Sheikh
5	5	Dakahlia	Qualubia	Menofia	Gharbia	Menofia
6	4	Sharkia	Gharbia	Sharkia	K.El-Sheikh	Sharkia
7	3	Menofia	Menofia	Behera	Sharkia	Damietta
8	2	Damietta	Ismalia	Damietta	Menofia	Behera
9	1	Ismalia	Damietta	Ismalia	Damietta	Ismalia

3.7 Ethical Considerations

There is an approval by the MOHP/PS Technical Committee to conduct the study. Qualitative data are collected after getting verbal consent from the participants. Analysis and presentation of quantitative data depend on already published data for MOHP, NPC and CAPMAS.

3.8 Limitations of the Study

The activities of **Supporting Contraceptive Security System Project** had been implemented in phases. Therefore the current evaluation could not provide a full comprehensive portrait to the project output and outcome especially with the current changing political and social situations in Egypt.

CHAPTER 4: RESULTS

I- Quantitative Data

The situation analysis for family planning program in Menofia Governorate throughout the period 2007 -2011 had been presented in comparison with a quasi-governorate i.e. Kafr El-Sheikh, along with the total FP program situation in all governorates included in Lower Egypt Region as well as all Egypt Governorates. The arrangement of the analyzed data considered the flow of information according to system analysis model i.e. input (resources), Process (management of resources), output (utilization of FP services), outcome (direct impact of FP services on the community) and impact (indirect impact of FP services on the community expressed as fertility indicators). Articulation of the study findings by time and place had been tracked during demonstration of the results. The articulation of information by time is aiming at exploring the trend in the different indicators of the FP-system model throughout the period 2007 -2011. This reference period covered the pre MOHP-**SCSSP** intervention 2007 -2009 and the post **SCSSP** intervention 2010- 2011. The articulation of the information by geographical regions endorsed comparison of Menofia Governorate with control groups at governorate, region and national levels. The information derived from the study had been presented according to the 21 indicators organized into 5 groups (resources, management of resources, utilization of FP services, coverage of the community with FP methods and fertility pattern throughout the period 2007-2011). The use of compound indices that present efficiency (input, process and output) and effectiveness (outcome and impact) had been used to conclude the impression of introduction of **SCSSP** in Menofia Governorate compared with the control governorate i.e. Kafr El-Sheikh governorate which is not included in **SCSSP** .

[1] Family Planning Resources (Input)

(1.1) Family Planning Clinics

In Egypt 2011, total FP clinics affiliated to MOHP and NGOs were 6558 FP clinics. Out of those total Egypt FP clinics 46% are located in Lower Egypt Governorates. The total MOHP FP clinics were 5694 FP clinics and 48% of those clinics are located in Lower Egypt. According to CAPMAS and NPC Statistics 2011, Lower Egypt Population of MWRA form 43% of total Egypt population of MWRA. Such statistics indicates reasonable distribution of the available FP clinics by region for Lower Egypt. Table (1.1) illustrates two indicators describing the FP resources. The first indicator revealed the number of Married Women in the Reproductive Age (MWRA) per FP clinic (those clinics affiliated to MOHP and NGOs). It is obvious that, throughout the period 2007 - 2011 there was an increase in the number of MWRA per FP clinic at the national level, in Lower Egypt and in Menofia Governorate. However, in the control governorate i.e. Kafr El-Sheik, there was increase in number of FP clinics overtime that resulted in decrease in number of MWRA per FP clinic throughout the period 2008-2011. Such indicator when expressed in different way could show a constant pattern at the national and regional levels with five FP clinics per 10,000 MWRA. However, Kafr El-Sheik demonstrated higher constant level of resources where there were six FP clinics per 10,000 MWRA. The condition in Menofia Governorate was different. During years 2007,

2008, 2009 there were six FP clinics per 10,000 women. However, in 2010 -2011, there were five FP clinics per 10,000 MWRA.

The second indicator reflecting FP resources and illustrated in table (1.1) is the percent of MOHP clinics to total FP clinics. It is obvious that the ratio of MOHP to NGOs clinics at the national level was constant, as per each 87 MOHP- FP clinics there were 13 NGOs clinics. The proportion of MOHP- FP clinics in Lower Egypt was higher than that at the national level. In Lower Egypt 90% of the FP Clinics are affiliated to MOHP. The situation in the studied two governorates is not constant. There was a tendency for MOHP clinics to represent more than 90 percent of the total FP clinics in Kafr –El-Sheikh, and less than 90% in Menofia Governorate. Consequently in 2011, FP clinics affiliated to NOGs formed 14% of the Menofia FP clinics versus 13% at the national level, 10% at Lower Egypt level and 8% in Kafr El-Sheikh Governorate.

Table (1.1) Family Planning Resources: Number of MWRA per Family Clinic and Percent of MOHP- FP Clinics to Total Clinics throughout the Period 2007 - 2011

Year	Menofia G.		K.El-Sheikh G.		Lower Egypt		Total Egypt	
	MWRA/FP Clinic	% MOHP -FP Clinics to Total Clinics	MWRA/FP Clinic	% MOHP -FP Clinics to Total Clinics	MWRA/FP Clinic	% MOHP -FP Clinics to Total Clinics	MWRA/FP Clinic	% MOHP -FP Clinics to Total Clinics
2007	1795	88%	1610	93%	1870	90%	1994	87%
2008	1789	88%	1539	92%	1870	90%	2005	87%
2009	1784	86%	1591	94%	1883	90%	2012	87%
2010	1827	86%	1597	95%	1895	90%	2029	87%
2011	1867	86%	1579	92%	1912	90%	2049	87%

To assess the changes of resources over time, the numbers of MWRA and FP clinics for year 2007 were considered the baseline measure. Figure (1.1) delineates that throughout the period 2007-2011 there was increase in number of MWRA by 9.8% at the national level and 9.1% in Lower Egypt. The reported increase in the percent of MWRA in the same reference period was about seven percent in both Menofia and Kafr El-Sheikh Governorates. The percent increase in number of total FP clinics and MOHP clinics was about seven percent at the national level and Lower Egypt Region. Yet, figure (1.1) shows disparity between Kafr El-Sheikh and Menofia Governorates regarding increasing availability of FP clinics to respond to the increase number of MWRA. Kafr El-Sheikh was privileged by increase in total FP clinics by 9.3% (8.8% increases in MOHP clinics and 0.5% in NGOs clinics). However, Menofia governorate had reported minor increase in total FP clinics (2.9%) and almost of the increase in the new clinics was affiliated to NGOs (2.5% increase in NGOs clinics and 0.4% increase in MOHP clinics).

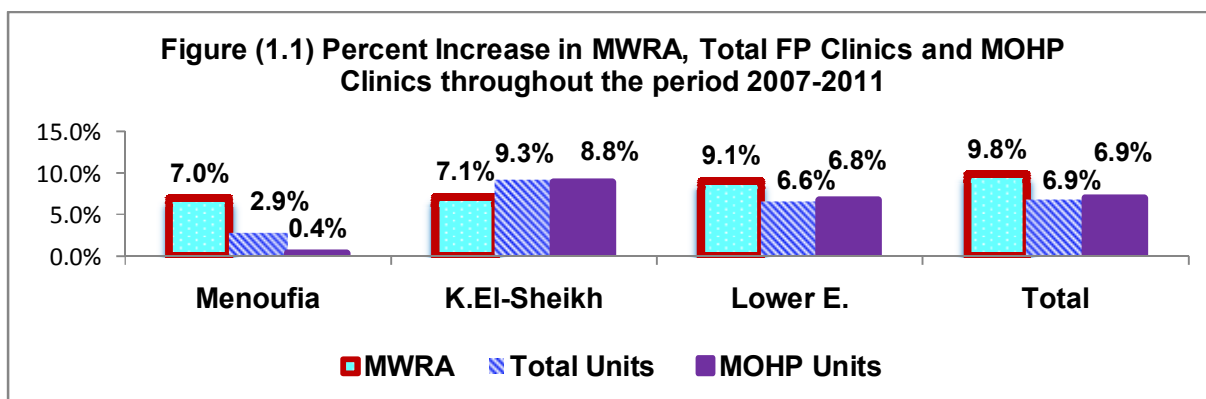


Figure (1.1) Percent increase in MWRA, total FP clinics and MOHP clinics throughout the period 2007-2011

(1.2) Family Planning Manpower Resources

Information about FP manpower resources i.e. physicians and nurses was abstracted from MOHP-service statistics. The availability of physicians is expressed as the ratio of MWRA per FP physician. Table (1.2) mark out that all through the period 2007 - 2011 there was an increase in the number of MWRA per physician at the national level and Lower Egypt. Nevertheless, the continuous supply with FP physicians in Kafr El-Sheikh and in Menofia Governorates resulted in decrease in the number of MWRA served by each one physician. Such indicator when expressed in different way could show shortage in availability of physicians at national and regional level in 2011 compared with 2007. The number of physicians /10000 MWRA decreased from 15 physicians /10000 MWRA in 2007 to be 10 physicians /10000 MWRA in 2011. The shortage in physicians' number in Lower Egypt was estimated at 15 physicians/10000 MWRA in 2007 and 12 physicians /10000 MWRA. Kafr El-Sheik validated higher levels for progressive increase in physicians' availability from 17 physicians /10000 MWRA in 2007 to be 22 physicians /10000 MWRA in 2011. Menofia Governorate reported an increase in availability of physicians from 13 physicians /10000 MWRA in 2007 to be 17 physicians /10000 MWRA in 2011.

Table (1.2) Family Planning Resources: Number of MWRA per FP physician throughout the Period 2007 – 2011

No. of MWRA /FP Physician Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007	776	602	689	646
Year 2008	714	549	648	793
Year 2009	659	519	618	948
Year 2010	633	505	617	944
Year 2011	588	457	808	1046

The availability of nurses in MOHP-FP clinics was assessed as number of MWRA/ nurse. The fluctuation in such indicator over time and place could be a marker to misdistribution of nurses. Table (1.4) illustrates that the number of MWRA /nurse increasing overtime at the national level indicating shortage in supplying with FP nurses at the national level to cope with the steady increase in number of MWRA. In other words, in 2007 there were 16 nurses /10000

MWRA, and this ratio had been gradually decreased to be 11 nurses /10000 MWRA in 2011. Nevertheless, the increase in MWRA was coupled with surplus appointment of nurses in MOHP clinics in Lower Egypt including the two governorates. Consequently, there was a constant pattern /ratio between the number of nurses and MWRA. This pattern of availability of nurses was constant at 18 nurses /10000 MWRA in Lower Egypt, 14 nurses /10000 MWRA in Menofia Governorate and 24 nurses /10000 MWRA in Kafr El-Sheikh Governorate. However, such pattern reflects misdistribution of nurses across the region, as Kafr El-Sheikh Governorate had relatively more nurses than Menofia Governorate.

Table (1.3) Family Planning Resources: Number of MWRA per FP Nurse throughout the Period 2007 – 2011

Parameters /Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
No. of MWRA/ FP nurse 2007	704	421	549	645
No. of MWRA/ FP nurse 2008	770	476	544	653
No. of MWRA/ FP nurse 2009	749	451	527	805
No. of MWRA/ FP nurse 2010	729	435	550	800
No. of MWRA/ FP nurse 2011	709	416	573	930

[2] MANAGEMENT OF FAMILY PLANNING RESOURCES (PROCESS)

(2.1) Trained Family Planning Physicians

Training of physicians in FP is one of the pivotal issues to provide quality FP services. The training process as a function of management is a dynamic process that has to respond to the high turnover of physicians working in the PHC facilities. The MOHP/PS has its training department to respond to the training needs of physicians. Table (2.1) illustrates that throughout the period 2007 -2011 there were **decrease** in number of FP physicians at the national level by 33%. Nevertheless, Lower Egypt FP physicians had reported increase in number by 24% during the reference period. In 2011, physicians working in Lower Egypt MOHP-Clinics represented 74% of all FP physicians at the national level. At the Lower Egypt Governorates, there were significant increases in number of FP physicians that account for 44% in Menofia and Kafr El-Sheikh in the same reference period. Table (2.1) displays the tendency to have more than 60% of at physicians trained in FP at the national level at any point of time. About two thirds of physicians working in Lower Egypt MOHP-Clinics were trained in FP at different points of time. However, for the two studied governorates the pattern of the percent of trained physicians showed variations over time. It is obvious from table (2.1) that the proportions of physicians registered as trained in FP were more than 60% in Menofia Governorate in years 2010 and 2011. The counterpart figures for Kafr El-Sheikh Governorate were less than 60% physicians were trained in FP during the same reference years.

Table (2.1) Management of Resources (Process): Percent of MOHP FP trained Physicians to total MOHP –FP Physicians throughout the Period 2007 – 2011 (MOHP)

Parameters /Years	Menofia Governorate		K.El-Sheikh Governorate		Lower Egypt Region		Total Egypt Governorate	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count
Percent of trained physicians to total MOHP –FP physicians 2007	62%	711	58%	734	62%	7662	72%	19014
Percent of trained physicians to total MOHP –FP physicians 2008	58%	779	57%	813	60%	8218	63%	15627
Percent of trained physicians to total MOHP –FP physicians 2009	61%	865	62%	880	62%	8813	64%	13369
Percent of trained physicians to total MOHP –FP physicians 2010	62%	920	57%	924	63%	9040	65%	13738
Percent of trained physicians to total MOHP –FP physicians 2011	63%	1024	56%	1058	62%	9474	65%	12816

Figure (2.1) illustrates the ratio of trained physicians to MWRA overtime (2007-2011) for the studied region and governorates. As depicted from the figure, at the national level, there was a **decrease** in number of trained physicians per 10,000 MWRA from 11 trained physicians /10000 MWRA in 2007 to be six trained physicians/10000 MWRA in 2011. Yet, at the level of Lower Egypt there was an increase in number of trained physicians per 10,000 MWRA from nine trained physicians /10000 MWRA in 2007 to be ten trained physicians/10000 MWRA in 2011. At the governorate level, **Menofia Governorate** had reported an **increase** in number of trained physicians per 10,000 MWRA from eight trained physicians /10000 MWRA in 2007 to be eleven trained physicians/10000 MWRA in 2011. On the other hand, Kafr El-Sheikh had reported a **decrease** in number of trained physicians per 10,000 MWRA from ten trained physicians /10000 MWRA in 2007 to be seven trained physicians/10000 MWRA in 2011.

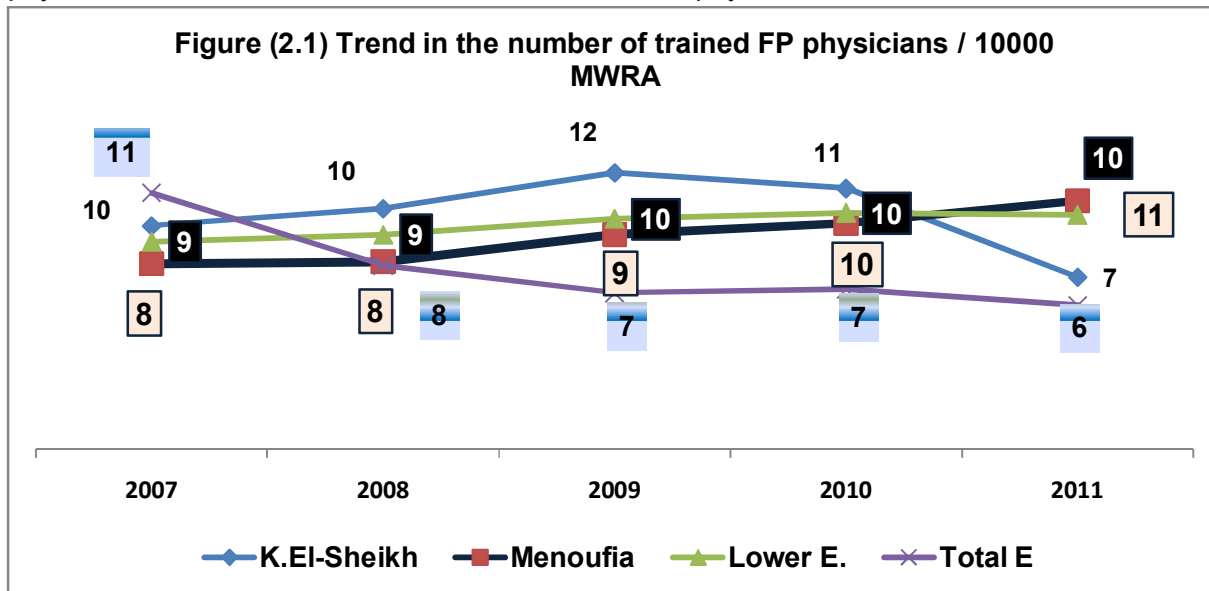


Figure (2.1) Trend in Number of Trained MOHP- FP Physicians per 10000 MWRA throughout the Period 2007 -2011

(2.2) Trained Family Planning Nurses

Table (2.2) illustrates that throughout the period 2007 -2011 there were **decrease** in number of FP nurses at the national level by 24%. Though, Lower Egypt FP nurses had reported **increase** in number by 5% during the reference period. In 2011, nurses working in Lower Egypt MOHP-Clinics represented 70% of all FP nurses at the national level. At the Lower Egypt Governorates, there were significant increases in number of nurses that account for 8% in Menofia and 11% in Kafr El-Sheikh in the same reference period. Table (2.2) displays the tendency to have two thirds of nurses trained in FP at the national level at any point of time. More than 60% of nurses working in Lower Egypt MOHP-Clinics were trained in FP at different points of time. However, for the two studied governorates the pattern of the percent of trained nurses showed variations over time. It is noticeable from table (2.2) that the proportions of nurses registered as trained in FP showed reduction during 2011 compared with 2010 by seven percent points in Menofia Governorate and 16% point in Kafr El-Sheikh Governorate.

Table (2.2) Management of Resources (Process): Percent of MOHP FP trained Nurses to total MOHP –FP Nurses throughout the Period 2007 – 2011 (MOHP)

Parameters /Years	Menofia Governorate		K.El-Sheikh Governorate		Lower Egypt Region		Total Egypt Governorate	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Percent of trained Nurses to total MOHP –FP Nurses /2007	69%	784	67%	1050	62%	9620	64%	19033
Percent of trained Nurses to total MOHP –FP Nurses /2008	71%	723	73%	938	62%	9786	64%	18959
Percent of trained Nurses to total MOHP –FP Nurses/ 2009	65%	761	66%	1013	60%	10331	63%	15744
Percent of trained Nurses to total MOHP –FP Nurses/ 2010	67%	799	62%	1073	63%	10143	65%	16198
Percent of trained Nurses to total MOHP –FP Nurses/ 2011	60%	849	46%	1162	65%	10055	68%	14410

Figure (2.2) elucidates the ratio of trained nurses to MWRA overtime (2007-2011) for the studied region and governorates. As depicted from the figure, there was a **decrease** in number of trained nurses per 10,000 MWRA from 10 trained nurses /10000 MWRA in 2007 to be seven trained nurses/10000 MWRA in 2011. Nonetheless, at the level of Lower Egypt there was a constant ratio in number of trained nurses per 10,000 MWRA over time at eleven trained nurses /10000 MWRA.

At the governorate level, **Menofia Governorate** had reported a constant level in number of trained nurses per 10,000 MWRA at nine trained nurses /10000 MWRA throughout the period 2008 - 2011. Nevertheless, Kafr El-Sheikh had reported a **decrease** in number of trained nurses per 10,000 MWRA from 16 trained nurses /10000 MWRA in 2007 to be 13 trained nurses /10000 MWRA in 2011.

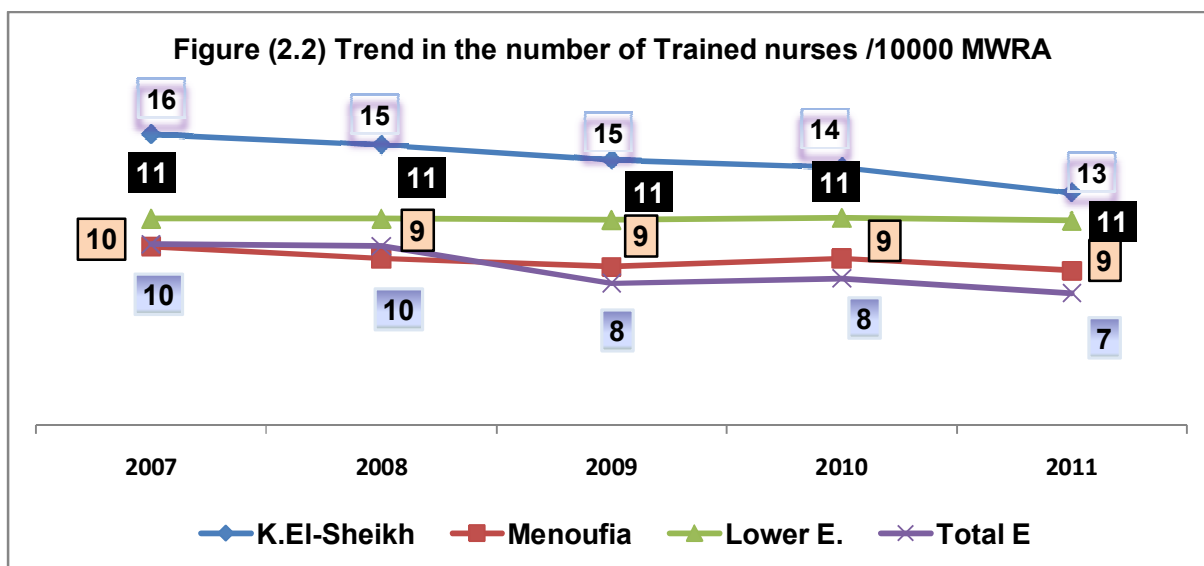


Figure (2.2) Number of Trained MOHP- FP nurses per 10000 MWRA throughout the Period 2007 - 2011

[3] Utilization of Family Planning Services in MOHP Clinics (Output)

(3.1) Mean Number of FP Clients/Clinic/Day

The mean number of FP clients per day per MOHP clinic covering the period 2007-2011 had been estimated from service statistics, and findings are displayed in figure (3.1). At the national level, MOHP-FP clinics witnessed a progressive increase in the mean number of FP clients per clinic per day from 4.4 clients per clinic per day in 2007 to be 5.7 clients per clinic per day in 2011. Simultaneously, Lower Egypt region reported an increase in the mean number of FP clients per clinic per day from 4 clients per clinic per day in 2007 to be 5.9 clients per clinic per day in 2011. Throughout the period 2007-2011, Menoufia Governorate had demonstrated pronounced increase in the mean number of FP clients per clinic per day from 1.9 clients per clinic per day in 2007 to be 6.2 clients per clinic per day in 2011. This increase could be estimated as 4.5 clients per clinic per day. This is contrary to Kafr El-Sheikh governorate where the estimated volume of increase was 0.3 clients per clinic per day for the same reference years.

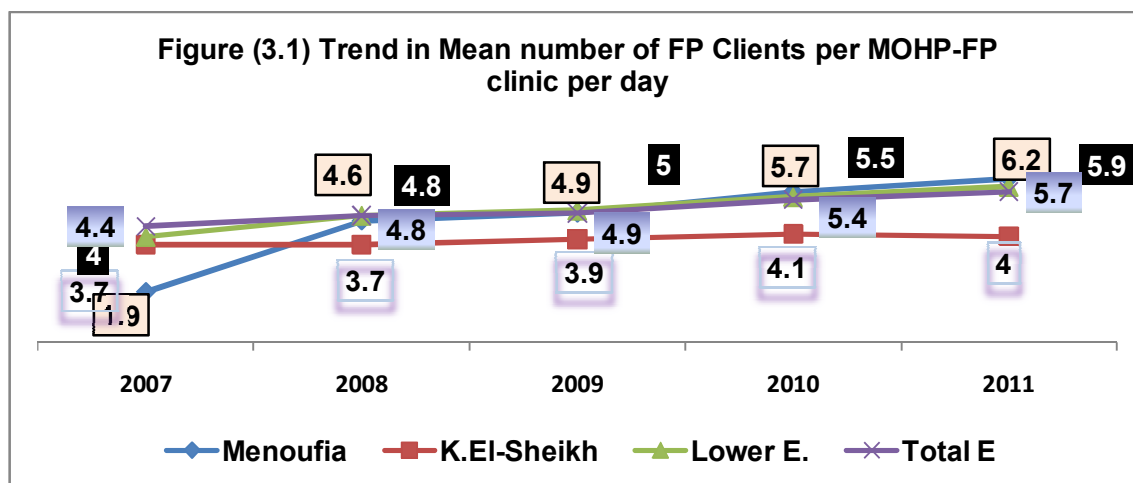


Figure (3.1) Trend in Mean number of FP Clients per MOHP-FP Clinic per Day (MOHP 2007-2011)

(3.2) Percent of New FP Clients to Total Clients

New FP clients as defined by MOHP/PS is the first time user of FP method and the discontinuers for more than one year and started to be re-FP users. This indicator is influenced by the contraceptive prevalence in a specific community. According to EDHS 2008, the current use of any family planning method were 60.3% at the national level, 64.3% in Lower Egypt, 66.3% in Menoufia Governorate and 62.1% in Kafr El-Sheik Governorate.

Table (3.1) shows that at the governorate level, there was decrease in the proportion of new FP clients from 26% in 2007 to 23% in 2011 in Menoufia. However the mode regarding the proportion of new FP clients was 23%. This situation could predict that for each 25 current FP users in the community, there will be 10 new FP clients in MOHP clinics if the CPR 2008 remains constant (66.3%). For Kafr El-Sheikh Governorate there was decrease in the proportion of new FP clients from 29% in 2007 to 26% in 2011. However the mode regarding the proportion of new FP clients was 26%. This situation could predict that for each 21 current FP users in the community, there will be 10 new FP clients in MOHP clinics if the CPR 2008 remains constant (62.1%). The information derived from data in table (3.1) indicates that more than 70% of MOHP clients are return visit clients who attend the clinic to get the method, change the method, management of side effects etc.,

Table (3.1) Utilization Pattern of MOHP/FP Clinics (output):Percent of New FP Method Users Clients to total MOHP FP Clients throughout the Period 2007 – 2011 (MOHP)

Parameters /Years	Menoufia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Percent of New FP Clients to Total Clients -- 2007	26%	29%	27%	29%
Percent of New FP Clients to Total Clients -- 2008	25%	28%	27%	29%
Percent of New FP Clients to Total Clients -- 2009	23%	26%	25%	27%
Percent of New FP Clients to Total Clients -- 2010	24%	26%	26%	28%
Percent of New FP Clients to Total Clients -- 2011	23%	26%	24%	29%
Mode (2007 -2011)	23%	26%	27%	29%
CPR according to EDHS 2008	66.3	62.1	64.3	60.3
Ratio of Current Contraceptive users to new FP users in MOHP clinics	25:10	21:10	25:10	26:10

(3.3) Percent of First Visit FP Clients to Total Clients

Labeling the first time that a FP client coming to MOHP/ FP clinics (whether she is FP user or non-user) as first visit could indicate that, she is new FP user and selected MOHP clinics to get the service, or she was shifting from other clinics whither related to MOHP or private clinics or pharmacies. Table (3.2) exemplifies the proportion of first visit clients at MOHP/FP clinics throughout the period 2007 – 2011. The pattern of first visit clients in 2007 indicates that about 30% of the clients were first visit clients. Consequently, about 70% of MOHP/FP clients were return visit clients who attend the clinic to get the already prescribed method during the previous visit, or to seek management of side effects or to change the method. The illustrated trend in the proportion of the MOHP/FP clinic first visit clients indicates that such proportion is decreasing over time from 35% in 2007 to be 27% in 2011 at national level. Comparing the proportion of the MOHP/FP clinic first visit clients for year 2010 with that of 2007 showed that Menofia Governorate had reported decrease by four percent points, versus the decrease by six percent points for Kafr El-Sheik Governorate for the same reference periods.

Table (3.2) Utilization Pattern of MOHP/FP Clinics (output):Percent of Clientsreported as First Visit FP Clients to total MOHP FP Clients throughout the Period 2007 – 2011 (MOHP)

Parameters /Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Percent of 1 st Visit FP Clients to Total clients - 2007	30%	32%	32%	35%
Percent of 1 st Visit FP Clients to Total clients -- 2008	28%	29%	31%	34%
Percent of 1 st Visit FP Clients to Total clients -- 2009	26%	28%	28%	32%
Percent of 1 st Visit FP Clients to Total clients -- 2010	26%	26%	29%	32%
Percent of 1 st Visit FP Clients to Total clients -- 2011	21%	22%	24%	27%
Decrease in the percent of 1 st Visit FP Clients to Total clients in 2010 compared to 2007	-4%	-6%	-3%	-3%

(3.4) Percent of FP Clients Less than 30 Years old to Total Clients

Successful FP services are those who attract young MWRA for appropriate time for contraceptive method use especially for birth spacing. According to EDHS 2008, the total fertility rate for women 15-<30 was 2.02 live births/woman and for those 30-49 the total fertility rate was 1.0 live birth/woman. Therefore, it could be claimed that women less than 30 years old are the target for birth spacing. Table (3.3) explores the proportion of MOHP/FP clients whose age less than 30 years. It is obvious that, national level data delineates that about 50% of MOHP/FP clients were less than 30 years old and 50% are 30 and above years old. The trend in the proportion of MOHP/FP clients less than 30 years old was increasing over time. Menofia Governorate had reported increase by four percent points in the proportion of the MOHP/FP clients less than 30 years old for year 2010 compared with that in 2007. Yet, there were increase by five percent points for Kafr El-Sheik Governorate, and two percent points at Lower Egypt and national level for the same reference periods.

Table (3.3) Utilization Pattern of MOHP/FP Clinics (output): Percent of Clients less than 30 years old to total MOHP FP Clients throughout the Period 2007 – 2011 (MOHP)

Parameters /Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Clients Less than 30 Years old -Year 2007	44%	46%	55%	49%
Clients Less than 30 Years old -Year 2008	46%	48%	53%	51%
Clients Less than 30 Years old -Year 2009	47%	49%	54%	52%
Clients Less than 30 Years old -Year 2010	48%	51%	53%	51%
Clients Less than 30 Years old -Year 2011	46%	50%	52%	50%
Increase in the percent of FP clients less than 30 years old in 2010 compared to 2007	+4%	+5%	+2%	+2%

(3.5) Percent of FP Clients having Less than Three Children to Total Clients

The gradual increase of the proportion of clients who have 0-2 children is a marker for success in motivating women for birth spacing or limiting during the early phase of fertility life. Table (3.4) illustrates that the proportion of MOHP/ FP clients having less than 3 children was between 40% and less than 50%. Consequently clients having three children and more formed between 60% and more than 50%. With consideration that Lower Egypt is a homogenous community regarding the proportion of women in the different stages of fertility periods; it is the function of management of the clinic that could attract special category of mothers for FP services. Menofia Governorate succeeded in increasing the proportion of FP clients having less than 3 children in 2010 and 2011 to be 44% of all clients versus 40% in year 2007. Also in Kafr El-Sheikh Governorate; the proportion MOHP/ FP clients having less than 3 children showed increase from 43% in 2007 to be 46% in 2011.

Table (3.4) Utilization Pattern of MOHP/FP Clinics (output): Percent of Clients having less than Three Children to total MOHP FP Clients throughout the Period 2007 – 2011 (MOHP)

Parameters /Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Clients having less than Three Children - 2007	40%	43%	48%	41%
Clients having less than Three Children - 2008	41%	45%	47%	43%
Clients having less than Three Children - 2009	43%	47%	48%	44%
Clients having less than Three Children - 2010	44%	47%	48%	44%
Clients having less than Three Children - 2011	44%	46%	47%	43%
Mode	44%	47%	48%	44%

(3.6) Percent of FP Method Users by Method- Mix

The pattern of FP method-mix use by MOHP/FP clients is a function of the availability of the method, and the results of counseling that depends on informed-choice as well as the availability of well-trained physician who is competent to provide the suitable method that is acknowledged by the client. Figure (3.2) presents MOHP/FP clients-FP method users by method used throughout the period 2007 - 2011. It is evident from the figure that, at the national level, there is significant increase of OCs clients in 2011 (45%) compared with the level recorded for 2007 (27%). At the same time there was a decrease in IUD FP clients from 18% in 2007 to be 11% in 2011. This pattern of shift from IUD to OCs use among MOHP clients was obvious across all Governorates.

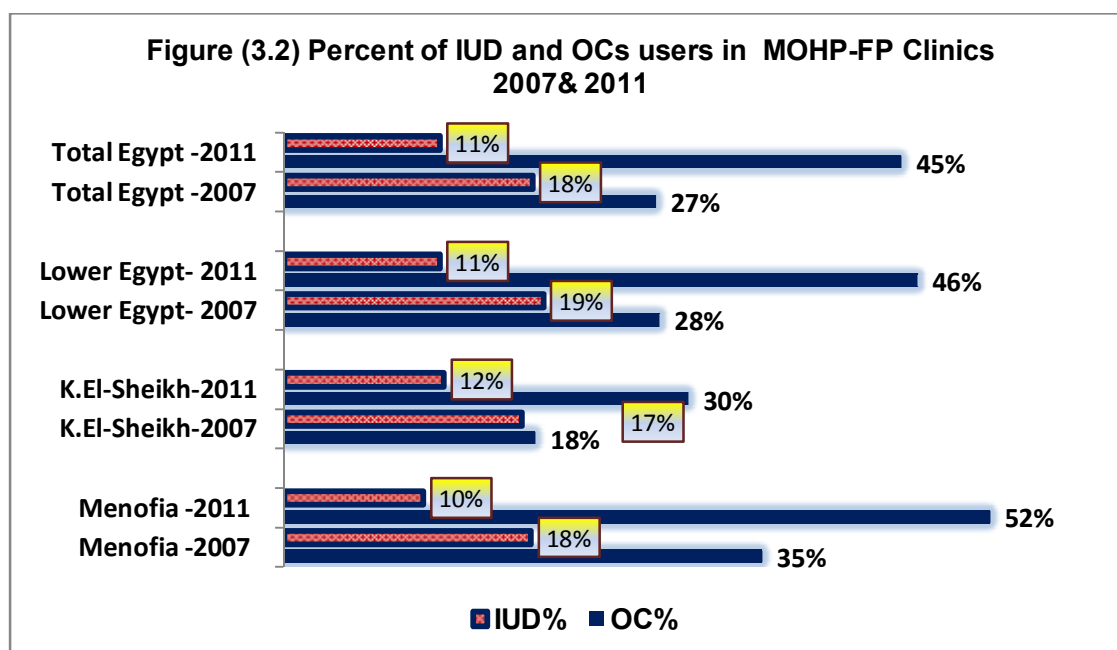


Figure (3.2) Percent of IUD and OCs users in MOHP –FP clinics 2007-2011

Table (3.5) presents detailed information and table (3.6) provides summary information about the percent distribution of MOHP-FP method user clients by method mix in the studied governorates throughout the period 2007-2011. It is observable from both tables that at the national level in 2007 injectable users constituted the highest proportion of MOHP/FP method users (47%) followed by OCs users (27%) and IUD users (18%). However, in 2011, there were significant increase in the proportion of OCs clients and marked reduction in IUD users at the national, Lower Egypt and Menofia Governorate. The profile of FP use in MOHP clinics indicates gradual tendency for shift from IUD use to hormonal contraceptives as OCs and Injectables.

Table (3.5) Utilization Pattern of MOHP/FP Clinics (output): Percent of MOHP/FP Method Users by Type of the FP Method throughout the Period 2007 – 2011 (MOHP)

Years /Method	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007:				
OC	35.0%	18.4%	27.5%	27.2%
IUD	18.1%	17.4%	19.0%	18.2%
Condom	3.7%	1.9%	2.7%	3.2%
Injectables	42.9%	62.1%	50.4%	47.1%
Implanon	0.4%	0.2%	0.3%	0.4%
Year 2008				
OC	37.6%	21.8%	32.0%	32.0%
IUD	16.0%	15.2%	16.7%	16.7%
Condom	3.5%	1.9%	2.6%	2.6%
Injectables	42.4%	60.8%	48.4%	48.4%
Implanon	0.4%	0.3%	0.4%	0.4%
Year 2009				
OC	41.7%	26.5%	35.5%	35.0%
IUD	14.0%	14.1%	15.3%	15.4%
Condom	3.4%	1.8%	2.5%	3.1%
Injectables	40.6%	57.3%	46.2%	45.8%
Implanon	0.4%	0.3%	0.5%	0.6%
Year 2010				
OC	46.1%	29.2%	39.0%	37.8%
IUD	13.4%	14.0%	15.0%	15.3%
Condom	3.0%	1.7%	2.5%	3.2%
Injectables	37.1%	54.8%	43.1%	43.3%
Implanon	0.3%	0.2%	0.3%	0.4%
Year 2011				
OC	51.7%	29.6%	46.4%	45.2%
IUD	10.2%	11.7%	11.4%	11.4%
Condom	2.6%	1.7%	2.2%	2.7%
Injectables	35.2%	56.6%	39.5%	40.1%
Implanon	0.3%	0.3%	0.5%	0.6%

Table (3.6) Summary map for the MOHP/FP method user clients by FP method in Egypt 2007-2011 (percent of clients by method used)

Year	Total Egypt				Lower Egypt				Menofia G.				Kafr El-Sheikh G			
	OCs	IUD	Inj	OFF	OCs	IUD	Inj	OFF	OCs	IUD	Inj	OFF	OCs	IUD	Inj	OFF
2007	27	18	47	8	28	19	50	3	35	18	43	4	18	17	62	3
2008	32	17	48	3	32	17	48	3	38	16	42	4	22	15	61	2
2009	35	15	46	4	36	15	46	3	42	14	41	3	27	14	57	2
2010	38	15	43	4	39	15	43	3	46	13	37	4	29	14	55	2
2011	45	11	40	4	46	11	40	3	52	10	35	3	30	12	57	1

[4] Contraceptive Coverage Rate (Outcome)

(4.1) Percent of Couple Year Protection of Dispensed FP Methods to MWRA

Contraceptive Coverage Rate (CCR) is a proxy indicator for Contraceptive Prevalence Rate. The CCR is the percent proportion of total number of dispensed contraceptives expressed as CYP to total MWRA in a certain year and locality. CCR as indicator for direct assessment of the outcome of FP services on the served community has many advantages. It reflects the

performance of public and private sectors including pharmacies in contraceptive method distribution. The data are available at all level from the health unit up to the central level at MOHP and NPC. Accordingly it reflects the total situation rather than a sample of data. CCR could be calculated annually, monthly and, quarterly. Therefore, CCR is an important indicator for periodic monitoring and evaluation of the FP program at the national, governorate and unit level. Additionally, CCR could be used in setting targets during strategic and action plan settings at all levels. The components of CCR which include the CYP could be used to explore the profile of method mix use by sector and by governorate to assess contraceptive dynamics at all levels.

Figure (4.1) illustrates CCR for two comparable years 2007 and 2011 for the studied governorates. As depicted from the figure, there was an overall decrease in CCR in 2011 at national and governorate level compared with the situation in 2007. The 2011 CCR in Egypt was 45%. Yet, higher level of CCR was reported for Lower Egypt region (50%) than the national level. CCR in Menoufia (48%) and Kafr El-Sheikh (47%) in 2011 were slightly lower than that reported for Lower Egypt Region.

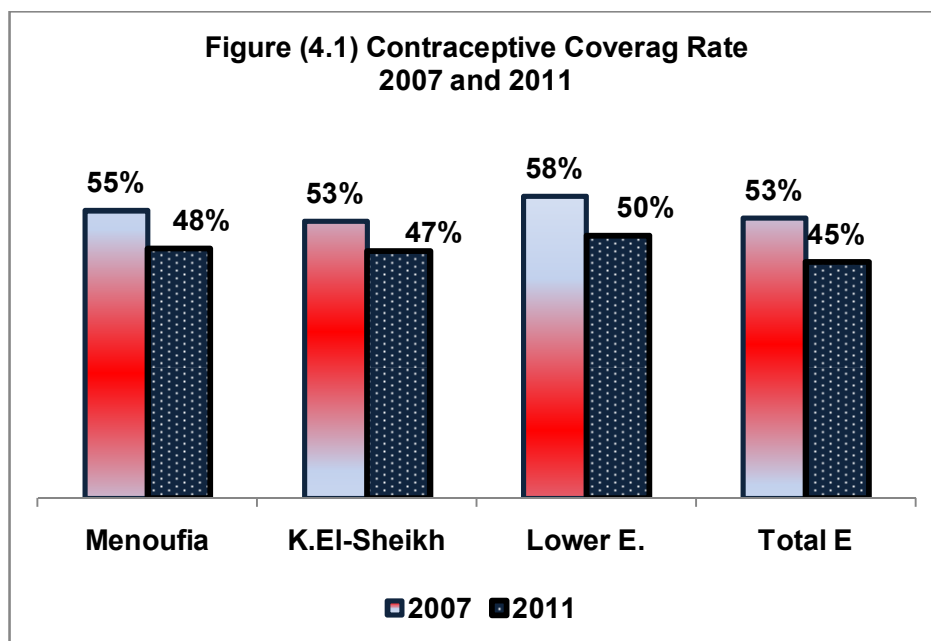


Figure (4.1) Contraceptive Coverage rate at National Level, Lower Egypt, Menoufia and Kafr El-Sheikh Governorates 2007 and 2011 (NPC).

Table (4.1) demonstrates the trend in CCR throughout the period 2007-2011. It is obvious that throughout the period 2007 -2009 there were gradual decrease in CCR over time. However, in 2010 compared with 2007, there was stability at CCR 53.4% at the national level. But in the same comparable years 2007 and 2010 Menoufia Governorate had reported an increase by 1.7% points in CCR.

Table (4.1) Outcome of Family Planning Program: Contraceptive Coverage Rate throughout the Period 2007 – 2011 (NPC)

Parameters /Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
CCR - Year 2007	54.8%	52.8%	57.5%	53.4%
CCR -Year 2008	55.0%	50.7%	57.0%	53.7%
CCR-Year 2009	51.4%	50.4%	55.3%	50.9%
CCR - Year 2010	56.5%	54.1%	58.1%	53.4%
CCR - Year 2011	47.6%	47.1%	50.1%	45.1%
Increase in CCR in 2010 compared to 2007	+1.7%	+1.3%	+0.6%	+0.0%
Decrease in CCR in 2011 compared to 2007	-7.2%	-5.7%	-7.4%	-8.3%

(4.2) Percent Contribution of MOHP in total CYP

The percent contribution of dispensed contraceptive methods by MOHP, expressed as CYP is an important indicator that measures the direct impact of MOHP –FP clinic services on the community. Increasing the value of such indicator across time indicates increasing effectiveness of MOHP FP clinics in satisfying needs of the served community with contraceptive methods. Table (4.2) provides evidence that MOHP clinics in Menofia Governorate had reported the highest percent contribution in total CYP 84.3% in 2011. Despite the overall increase in the contribution of MOHP clinics in total CYP in 2011 compared with 2007 (1.9% at national level, 2.1% at Lower Egypt Level and 2.9% in Menofia Governorate), Kafr El-sheikh Governorate reported decrease contribution of MOHP clinics in total CYP by 5.7% points in 2011 compared with 2007 levels.

Table (4.2) Outcome of Family Planning Program: Percent Contribution of MOHP/PS Contraceptive Coverage Rate throughout the Period 2007 – 2011 (NPC)

Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007	81.4%	88.4%	82.0%	79.9%
Year 2008	80.5%	87.5%	81.1%	78.9%
Year 2009	81.8%	86.9%	81.5%	79.8%
Year 2010	81.3%	84.2%	82.5%	80.4%
Year 2011	84.3%	82.7%	84.1%	81.8%
Difference in the level of MOHP contribution to CYP in 2011 compared to 2007	2.9%	-5.7%	2.1%	1.9%

(4.3) Percent Contribution of different FP Methods in total CYP

To explore the percent contribution of IUD and OCs in total CYP in two reference years 2007 and 2011 in the studied governorates Figure (4.2) was designed. It is clear from the figure that there was a general tendency for reduction in the percent contribution of IUD in total CYP and some increase in the percent contribution of OCs in total CYP 2011 compared with 2007. At the national level, there were reduction in the percent contribution of IUD in total CYP by 8

percent points and increase in the percent contribution of OCs in total CYP by 3% in 2011 compared with 2007. Corresponding figures for Lower Egypt , Menofia and Kafr El-Sheikh governorates were six, seven and seven percent points as decrease in the percent contribution of IUD in total CYP 2011 compared with 2007 for the studied governorates respectively. The increase in the percent contribution of OCs n total CYP 2011 compared with 2007 were two, three, and four percent points for the corresponding studied governorates respectively . This decrease in contribution of IUD in total CYP indicates the reduction of IUD use by MWRA over time and reflects a shift from use of loge- acting low discontinuation rate method to other methods with high discontinuation rate.

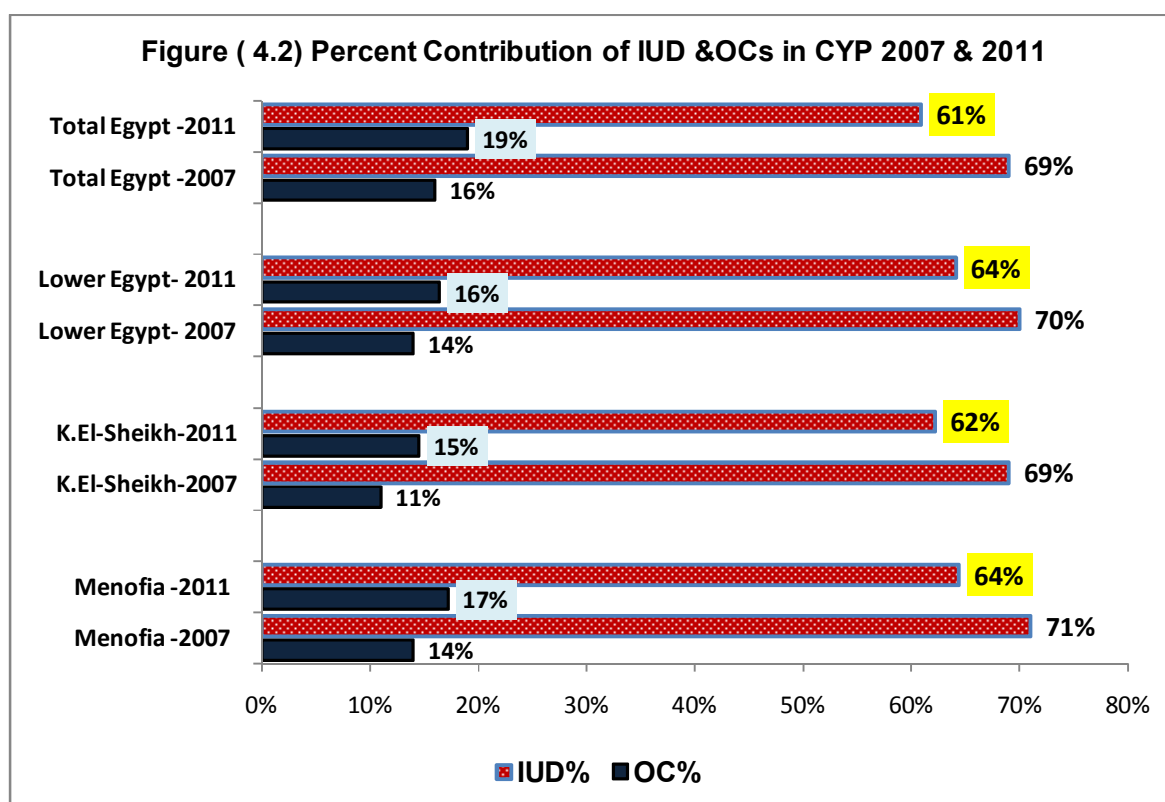


Figure (4.2) Percent Contribution of dispensed IUDs and OCs in Total CYP 2007 and 2011 (NPC)

Table (4.3) presents detailed information and table (4.4) provides summary information about the percent contribution of FP method-mix in the studied governorates throughout the period 2007-2011. It is obvious from both tables that FP program depends on IUD as it forms 60%-70% of the total CYP throughout the period 2007 -2011. OCs ranked the second FP method as a percent contribution in total CYP (11% -19%). Three-month Injectables ranked the third FP method as a percent contribution in total CYP (12% -22%). Implanon ranked the fourth FP method as a percent contribution in total CYP (<1% - 2%). One-month Injectables and condom ranked the fifth FP methods as a percent contribution in total CYP (< one percent). However, this pattern in the percent contribution of dispensed contraceptive methods is constant to some extent by time and governorates regarding ranking, but there were variations in the percent distribution CYP by FP method mix by governorate and across the

time period 2007-2011. At the national level and across the reference time period 2007-2011, there was gradual increase in the percent contribution of OCs to total CYP, as well as increase in the contribution of Implanon and the three-month and one-month Injectables in the last year (2011). This situation could be smeared in all governorates. However, looking at the summary map of Method-Mix –CYP it could be abstracted that Menofia Governorate ranked all the time as the governorate with that reported highest percent contribution of IUD to total CYP. Kafr- El-Sheikh Governorate ranked all the time as the governorate with that reported highest percent contribution of three-month Injectables to total CYP.

From both tables, it could be claimed that there is a tendency of FP program in Egypt to increase the use of hormonal contraceptives as OCs, three-month and one-month Injectables and Implanon.

Table (4.3) Outcome of Family Planning Program: Percent Contribution of Method Mix to Total Couple Year Protection (CYP) throughout the Period 2007 – 2011 (NPC- National Data)

Year	Governorates	OC%	IUD%	Condom	3 -Month Injectables	one- Month Injectable	Implanon
2007	Menofia Governorate	14.0%	71.0%	0.5%	12.0%	0.2%	1.0%
	K.El-Sheikh	11.0%	69.0%	0.3%	19.0%	0.1%	0.4%
	Lower Egypt Region	14.0%	70.0%	0.5%	14.0%	0.4%	0.8%
	Total Egypt Governorates	16.0%	69.0%	0.6%	13.0%	0.6%	0.9%
2008	Menofia Governorate	16.9%	68.2%	0.5%	13.0%	0.2%	1.2%
	K.El-Sheikh	13.5%	65.2%	0.4%	19.9%	0.2%	0.8%
	Lower Egypt Region	16.6%	67.0%	0.5%	14.5%	0.5%	1.0%
	Total Egypt Governorates	18.5%	65.4%	0.6%	13.5%	0.7%	1.3%
2009	Menofia Governorate	15.6%	68.1%	0.5%	14.1%	0.4%	1.3%
	K.El-Sheikh	14.9%	63.8%	0.4%	19.8%	0.3%	0.9%
	Lower Egypt Region	17.0%	65.8%	0.5%	14.9%	0.5%	1.3%
	Total Egypt Governorates	18.3%	64.5%	0.6%	14.2%	0.7%	1.7%
2010	Menofia Governorate	18.1%	66.5%	0.5%	13.3%	0.6%	1.1%
	K.El-Sheikh	15.3%	65.0%	0.3%	18.6%	0.2%	0.5%
	Lower Egypt Region	17.0%	66.7%	0.5%	14.3%	0.7%	0.8%
	Total Egypt Governorates	18.4%	65.4%	0.6%	13.8%	0.9%	1.0%
2011	Menofia Governorate	17.2%	64.4%	0.6%	16.0%	0.5%	1.4%
	K.El-Sheikh	14.5%	62.2%	0.4%	21.5%	0.4%	1.0%
	Lower Egypt Region	16.4%	64.1%	0.5%	16.5%	0.8%	1.6%
	Total Egypt Governorates	19.0%	60.9%	0.6%	16.1%	1.4%	1.9%

Table (4.4) Summary map for the percent contribution of FP Method Mix in total CYP in Egypt 2007-2011

Year	Total Egypt				Lower Egypt				Menofia G.				Kafr El-Sheikh G			
	OCs	IUD	3MI	OPF	OCs	IUD	3MI	OPF	OCs	IUD	3MI	OPF	OCs	IUD	3MI	OPF
2007	16	69	13	2	14	70	14	2	14	71	12	3	11	69	19	1
2008	19	65	14	2	17	67	15	1	17	68	13	2	14	65	20	1
2009	18	65	14	3	17	66	15	2	16	68	14	2	15	64	20	1
2010	18	65	14	3	17	67	14	2	18	67	13	2	15	65	19	1
2011	19	61	16	4	16	64	17	3	18	65	14	3	15	62	22	1

[5] Fertility Pattern (Impact of FP Services)

(5.1) Crude Birth Rate

Crude Birth Rate (CBR) is one of the fertility indicators that relate number of live births to 1000 population. CBR had limitations related to specificity and sensitivity in measuring fertility due to variability in age and sex structure of the population. However, this indicator is one of the vital statistics indicators that have strong system for recording. CBR is the bases of calculation of other indicators as the rate of natural increase, GFR and Fecundity Rate.

Table (5.1) elucidates CBR for the studied governorates and regions throughout the period 2007-2011. It is obvious from the table that CBR is increasing allover Egypt. CBR at the national level was 30.4 live births / 1000 population in 2011, with estimated increase by 3.8 live births/1000 populations than 2007 figure for CBR at 26.6 live births /1000 population. On the other hand, the level of increase in CBR in 2011 compared with 2007 is not alike across the governorates. Generally, Lower Egypt Governorates reported increase in CBR by 3.1 live births /1000 population for year 2011 compared to 2007. Menofia governorate reported CBR in 2011 at 30 live births /1000 population which if compared with CBR in 2007 (27.3 live births/ 1000 Population) indicated an increase by 2.7 live births/ 1000 Population. Such increase in CBR in Menofia Governorate was not as much of that reported for Kafr El-Sheikh governorate (3.9 live births/ 1000 Population) for the same reference years.

Table (5.1) Impact of Family Planning Program: Crude Birth Rate (number of live births per 1000 population) throughout the Period 2007 – 2011 (CAPMAS)

Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007	27.3	25.5	26.5	26.6
Year 2008	28.4	26.0	26.8	27.7
Year 2009	28.8	28.0	28.6	29.2
Year 2010	28.1	27.4	26.6	27.8
Year 2011	30.0	29.4	29.6	30.4
Increase in CBR in 2011 compared to 2007	2.7	3.9	3.1	3.8

(5.2) Rate of Natural Increase

The Rate of Natural Increase (RNI) is the percent difference between the CBR and CDR. Table (5.2) exemplifies RNI for the studied governorates and regions throughout the period 2007-2011. It is manifest from the table that RNI is increasing allover Egypt. RNI at national level was 2.42 % in 2011, with estimated increase by 0.37 percent points than 2007 figure for RNI at 2.05 %. Though, the level of increase in RNI in 2011 compared with 2007 was not equal across the governorates. In general, Lower Egypt Governorates reported increase in RNI by 0.28 percent points for year 2011 compared to 2007. Menofia governorate reported RNI in 2011 at 2.4% which if compared with RNI in 2007 (2.12%) designated an increase by 0.28 percent points. Such increase in RNI in Menofia Governorate was not as much of that reported for Kafr El-Sheikh governorate (0.30 %) for the same reference years.

Table (5.2) Impact of Family Planning Program: Rate of Natural Increase (percent differences between birth and death rates) throughout the Period 2007 – 2011

Parameters /Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007	2.12	2.09	2.09	2.05
Year 2008	2.23	2.17	2.12	2.17
Year 2009	2.26	2.24	2.27	2.29
Year 2010	2.23	2.24	2.09	2.14
Year 2011	2.40	2.39	2.37	2.42
Increase in RNI in 2011 compared to 2007	0.28	0.3	0.28	0.37

(5.3) General Fertility Rate

General Fertility Rate (GFR) is the number of live births per 1000 WRA in a certain year and locality. GFR is a more refined fertility indicator as it relates births to WRA. Table (5.3) illustrates GFR for studied governorates and regions throughout the period 2007-2011. It is evident from the table that GFR is increasing all over Egypt. GFR at national level was 121 live births / 1000 WRA in 2011, with estimated increase by 15 live births/1000 WRA than 2007 figure for GFR at 106 live births /1000 WRA. Nevertheless, the level of increase in GFR in 2011 compared with 2007 was not identical across the governorates. Generally, Lower Egypt Governorates reported increase in GFR by 12 live births /1000 WRA for year 2011 compared to 2007. Menofia governorate reported GFR in 2011 at 120/1000 WRA which if compared with GFR in 2007 (109 live births/ 1000 WRA) indicated an increase by 11 live births/ 1000 WRA. Such increase in GFR in Menofia Governorate was not considerable as that reported for Kafr El-Sheikh governorate (15 live births/ 1000 WRA) for the same reference years.

Table (5.3) Impact of Family Planning Program: General Fertility Rate (number of live births per 1000 women in the child bearing period) throughout the Period 2007 – 2011

Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007	109	102	106	106
Year 2008	114	104	107	111
Year 2009	115	112	114	117
Year 2010	113	109	106	111
Year 2011	120	117	118	121
Increase in GFR in 2011 compared to 2007	11	15	12	15

(5.4) Fecundity Rate

The fecundity rate (FR) is one of the fertility indicators that reflect the number of live births per 1000 MWRA. Table (5.4) shows that fecundity rate is increasing at the national level throughout the period 2007-2011. The increase in fecundity rate in 2011 compared with 2007 was 22 live birth /1000 MWRA at the national level and 19 live birth /1000 MWRA at Lower

Egypt Region level. Higher level of increase in the fecundity rate was reported for Kafr El-Sheikh Governorate (23 live birth /1000 MWRA) compared with Menofia Governorate (16 live birth /1000 MWRA) for the same reference years.

Table (5.4) Impact of Family Planning Program: Fecundity Rate (number of live births per 1000 married women in the child bearing period) throughout the Period 2007 – 2011

Years	Menofia Governorate	K.El-Sheikh Governorate	Lower Egypt Region	Total Egypt Governorate
Year 2007	164	153	159	160
Year 2008	171	156	161	166
Year 2009	173	168	172	175
Year 2010	169	164	160	167
Year 2011	180	176	178	182
Increase in FR in 2011 compared to 2007	16	23	19	22

[6] SUMMARY OF PERFORMANCE OF MENOFIA GOVERNORATE IN FAMILY PLANNING PROGRAM 2007 - 2011

Throughout presentation of the current study quantitative data, assessment of performance in family planning was presented as 21 indicators. In addition, the current study has used “the best situation model” that consider the rank ordering of governorates within Lower Egypt Region (Nine Governorates) according the value of each indicator. Theefficiency compound index is composed of input, process and output indicators (14 indicators). The effectiveness compound index is composed of outcome and impact indicators (7 indicators). Those indices are used to ascertain the trend in efficiency and effectiveness over time irrespective to the value of the compound index.

The compound indices are composed of many indicators that consider all the data for each governorate located in Lower Egypt Region had be estimated for several consecutive years, to answer a simple question: Is the performance in FP of specific governorate improving over time?

Figure (6.1) Presents a summary of performance in Family Planning Program (2007 -2011) – using the Ranking Model (best Situation Model) at Lower Egypt Level for Menofia Governorate. It is obvious from the figure that there is positive situation as the trend in efficiency index designates progressive improvement at the institutional level especially MOHP regarding improvement of resources, management of resources and utilization of MOHP FP clinics.

Additionally, the figure delineates the positive situation as the trend in effectiveness index points toward progressive improvement overtime. Such situation is the function of outcome of performance of different FP sectors (MOHP and NGOs and private sector) and the role of the community in adopting fertility control measures.

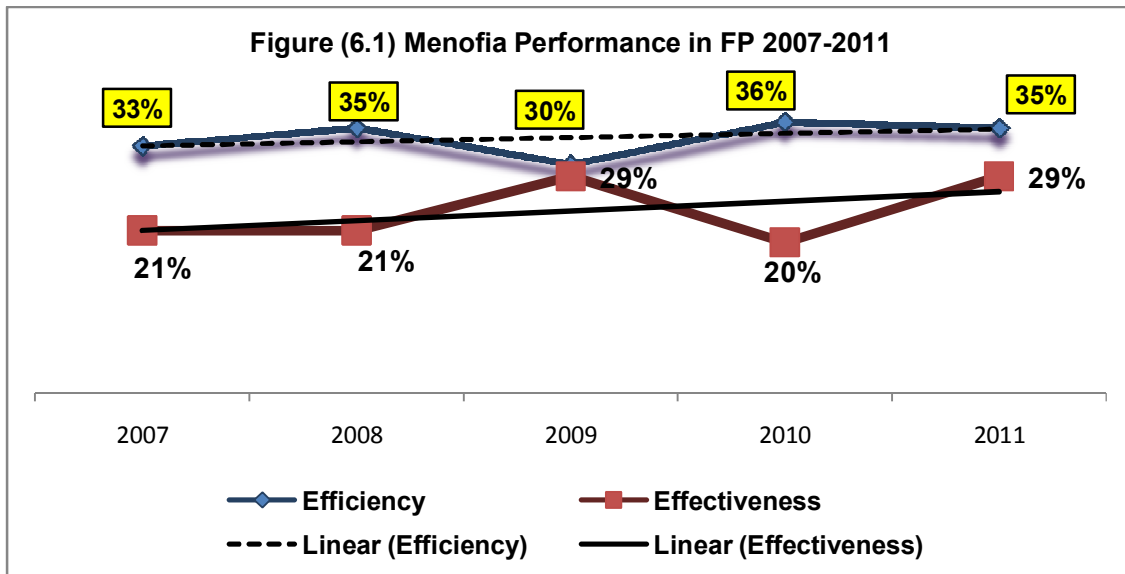


Figure (6.1) Trend in efficiency and effectiveness compound indices for FP program in Menofia Governorate 2007 - 2011

Figure (6.2) displays a summary of performance in Family Planning Program (2007 -2011) – using the “the Best Situation Model” at Lower Egypt Level for Kafr El-Sheik Governorate. It is evident from the figure that there is negative situation as the trend line of the efficiency index indicates progressive decline at the institutional level especially MOHP that could be attributed to improper management of resources to improve the output /volume of services at MOHP/FP clinics.

Furthermore, the figure demarcates the undesirable situation as the trend line for effectiveness index indicates progressive decline overtime. Such situation is the function of outcome of performance of different FP sectors (MOHP and NGOs and private sector) and the role of the community in adopting fertility control measures in Kafr El-Sheik Governorate.

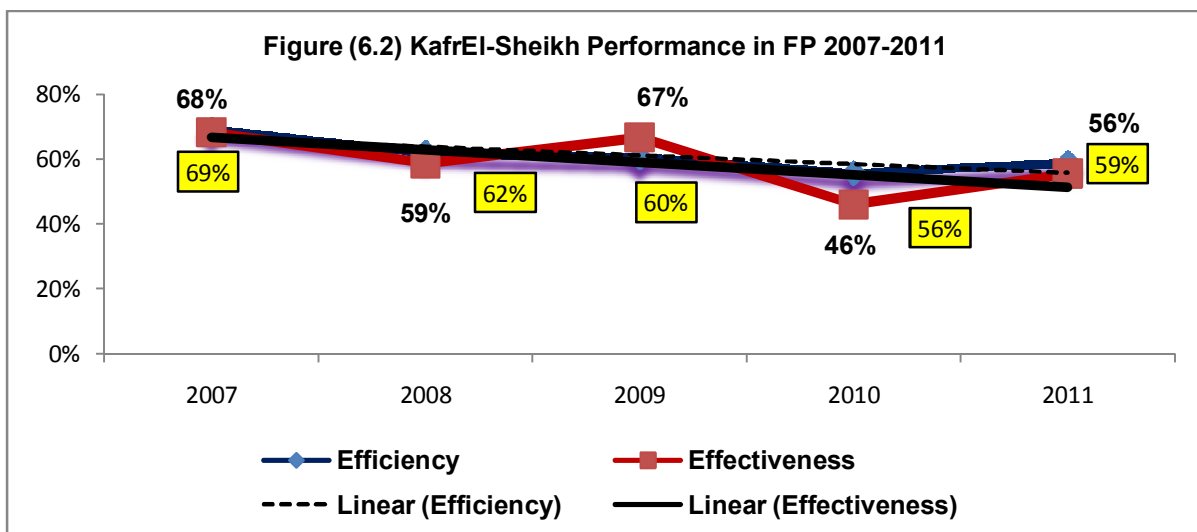


Figure (6.2) Trend in efficiency and effectiveness compound indices for FP program in Kafr El-Sheikh Governorate 2007 - 2011

II- Qualitative Data

Qualitative data derived from in-depth interview with MOHP/PS-**SCSSP** team members were analyzed according to the situation analysis model regarding the themes concerned with the project design and implementation. This analysis model focuses on strengths, weakness, opportunities and challenges (SWOC). The data derived from Focus Group Discussions (FGDs) with FP director, Nurse supervisor and ten FP physicians/ district directors and ten nurse supervisors in Menofia Governorate had been analyzed to present the feedback of **SCSSP** at governorate level in addition to opportunities and challenges to optimize the benefits form the **SCSSP** at the implementation level.

I- Perspectives of MOHP/PS- Staff Members to SCSSP

■ How MOHP/PS- SCSSP support FP Program in Egypt:

The **SCSSP** team members highlighted specific unique points that make **SCSSP** as vital *project* to MOHP to support FP program in Egypt:

- The goal of the project is to ensure sustainability of quality FP services and methods through articulated activities at the central and peripheral levels i.e. governorate levels,
- Ensure adequate supply and keeping strategic stocks of different contraceptive methods at all levels: Central, Governorate and health units,
- Rationalize the distribution of contraceptive methods across the service delivery points through capacity building of service providers and warehouse officers in using the methodology of assessment of the Maximum- Minimum needed amounts of different contraceptive methods
- Optimization and coordination of the relationship with different partners involved in contraceptive security issues:
 - ☑ Collaboration with the Egyptian Pharmaceutical Trade Company (EPTC) in the training programs that aim at ensuring contraceptive security during storage and transport and reducing wasted contraceptive methods due to improper storage
 - ☑ Support establishment of consensus between the MOHP Department for Pharmacy and the Pharmaceutical Companies to set up clear and simple policies and procedures for registration and pricing of contraceptive methods especially the new methods that had been added to the current method mix,
 - ☑ Advocate for financial support of FP methods through establish communication channels with the Ministry of Finance to increase the budget allocated for procurement of contraceptive methods. The outcome of such activities had resulted in increase the annual budget for FP methods from LE 37 million 2008-2009 to be LE 56 million 2010-2011 and LE 80 million 2011-2012,
- Development of standard of practice manual for contracting and procurement which ensure that the process of contracting and procurement is well-organized according to

time schedule and specific requirements. Such step is crucial to get the needed amount and types of contraceptive methods in the most reasonable time,

- Capacity building of the FP warehouse officers through different training courses in the different governorates so as to have the skills of FP logistic management especially the stocking-supplying cycle,
- Promoting the role of the private and NGOs sectors in FP program so as to reach to the target groups according to market segmentation of the service delivery points. The Private Sector Initiative had been introduced as an important component in **SCSSP** to help the private physicians, NGOs and pharmacies to access to different FP methods. Consequently, increase the contribution of the private sector in FP program could overcome the achieved plateau in contraceptive prevalence that resist any added improvement unless non-traditional out-of-box ideas are added to FP program,
- Enrichment of the contraceptive methods cafeteria with new contraceptive methods as Emergency Pills, Levonorgestrel 0.75 mg (Contraplan II), vaginal spermicidal suppositories, Nonoxynol (No Gravida), monthly injection 50 mg norethisterone enanthate + 5 mg estradiol valerate (Mesocept). The introduction of the three new methods was coupled with conduction a pilot assessment study in Menofia Governorates to assess acceptability of the new FP methods. The findings of the study concluded that the introduction of the new methods was a successful intervention to reduce unmet needs and help in reducing discontinuation rates.

■ Strengths of the MOHP/CSP

MOHP/**SCSSP** staff members had identified the significant points of strength of **SCSSP**:

- The project concepts, goals, strategies are imperative to MOHP/PS as a leader for FP program in Egypt
- There is political support to the project interventions that allows more autonomy to work with other departments in the MOHP as well as other Ministries as Ministry of Finance. Additionally, there is autonomy to have technical/scientific committees that support the project for ensuring the supply of safe and effective FP methods,
- Institutional support through having qualified staff who work as a team within the MOHP/PS. Such staff includes personnel with different experiences as MIS, training, finance, contraceptive technology, negotiations, communication and advocacy for key FP policy issues etc.,
- The strong relation between **SCSSP** and the Contraceptive Commodity Department in the MOHP/PS has created the best environment to communicate with pharmaceutical companies that could play a major role in Corporate Social Responsibility as for example providing new methods in the pilot area, participation in the training activities etc.,
- The creativities regarding adding new interventions that support FP program and extend beyond the contraceptive security activities as working with the NGOs, private sector in addition to advocacy activities,
- The use of operations research that focuses on specific issues related to contraceptive security and its impact on the served community. Such approach of using operations

research helps in guiding decisions towards improving the efficiency and effectiveness of FP program,

- Despite the project is working in ten Egypt Governorates, the including of the central MOHP/PS staff in the different activities of the project could help in scaling-up the successful intervention to be at the national level.

■ Weaknesses of the MOHP/SCSSP

The success in achieving objectives of the **SCSSP** at the central level depends on external factors outside the project team:

- The supply of different types and amounts of contraceptive methods according to the operational objectives of the project depends on availability of the FP methods in the pharmaceutical companies. Therefore any shortcoming in the performance of the pharmaceutical companies will negatively influence the role of the project in contraceptive security,
- MOHP-Procurement and Contracting Department is responsible for accomplishment of the essential steps between the MOHP/PS- Contraceptive Commodity Department and the pharmaceutical companies. Consequently, complicated Bureaucratic procedures could influence the functions of **SCSSP** to make contraceptives available in the proper time.

■ Opportunities to MOHP/SCSSP

- The current opportunities for MOHP/PS-CSP are related the financial support from UNFPA. This financial support cover different activities especially those related to training , supervision, operations research, workshops etc.,
- There are different Egyptian pharmaceutical companies which manufacture some contraceptives and reduce the need for importing some contraceptives,
- Having a well-designed MOHP/PS system for logistic management facilitates implementation and upgrading the project activities at different levels, and
- The investment in extensive network of NGOs and private facilities adds good assets to the project beyond the MOHP facilities which serve specific strata of the populations,
- Despite the current unstable community in Egypt (after January 25 ,2011 revolution) , unclear vision regarding the population programs, etc., makes **SCSSP** a leading project in providing information to set strategic plans according to a new vision for human development in Egypt, with consideration to mother and child health.
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■ Challenges to MOHP/SCSSP:

The challenges confronting the MOHP/PS-**SCSSP** are related to the following:

- Despite the success stories achieved by **SCSSP**, and the potentials to expand the project to include all Egypt governorates, overtime, there is a decrease in the UNFPA fund to the project in this critical time of the FP program in Egypt,

- Limited number of pharmaceutical companies involved in FP methods supply. Therefore, the current limited number of companies could make different types of pressure due to monopoly/domination and dependency on such companies for strategic products as FP methods,
- The MOHP- Pharmacy Department does not have enough control measures over private pharmacies so as to prevent leakage of subsidized contraceptives. However, there is no periodic reporting on this issue to **SCSSP** for timely responding to any contraceptive security problems.
- Promoting the role of NGOs in FP program constitutes a great burden on the project. NGOs depend on MOHP to support establishing physical infrastructure of RH clinics, equipment, FP methods, and seconding physicians and nurses.
- Lack of studies for cost-efficiency and cost- effectiveness of different FP methods that could help in setting the FP method-mix that could help in increasing CPR,
- The contraceptive use dynamics is changing due to different determinants. For example, the IUD users at MOHP facilities were influenced by the standard of training and the incentive system. The inadequacies in such systems could result in imbalance between supply and use at MOHP clinics,

II- Perspectives of MOHP FP physicians directors and Nurse Supervisors Towards SCSSP

Strengths of CSP at the implementation level

- Training in Maximum-Minimum level for FP methods for nurses and storehouse officers resulted in proper assessment of the needs and rationalization of use. Currently the quota of FP method system is not working. Quota system was associated with waste in some FP methods and shortage in others,
- Well-established contraceptive security measures at all levels make it easy to access to contraceptive methods in reasonable amounts and at any time,
- Availability of standard of practice including logistic management for each contraceptive method,
- The introduction of the new form to record FP methods dynamics facilitated, monitoring the amount received, amount available, and identify the requirements to request more specific contraceptives to keep the strategic stock,
- Rationalize the use of FP methods due to the acquired skills in proper storage of contraceptive methods specially Injectables had reduced the waste damaged/unsafe to use contraceptives,
- Follow safety measures as availability of fire distinguishers in the warehouses, is one of **SCSSP** interventions,
- The developed skills of shelf-organization and arrangement according to expiration date and proper dispensing of contraceptives according to the innocent/label card for each contraceptive,

- Improved counseling process as informed-choice is working well in case of having all methods available in the clinic. Before the **SCSSP**, women were guided towards use of the available method irrespective to the outcome of counseling process,
- Introduction of new contraceptive methods added new FP clients and reduced the unmet needs,
- Physicians and nurses got the experience of rationalizing the use of FP methods. For example, only one packet of OCs has to be dispensed to the client per months, instead of just selling two or more packet per visit to the clients,
- Supervisory visits of the **SCSSP** staff to health districts and units motivate the service providers for continuous quality improvement of the FP services,
- The Community Workers (RaidatRefiat) acquired new concepts and material to take wonderful new FP messages to target women. Those messages that cover information about the availability of new FP methods attracted new FP users to the health units.

Weaknesses of SCSSP at the implementation level

- The introduction of new method was not associated with parallel strategy of sustainability of availability of the new methods. Consequently, dissatisfaction of the clients from such incomplete initiatives could have negative impact on FP services,
- The warehouse officer is a pharmacist who focus on availability of medications/essential drugs with less interest to ensure having enough amounts of different contraceptives,
- Shortage in availability of syringes for the one-moth injectable, results in losing opportunity to have new clients for the new methods,
- High turnover of physicians results in shortage in availability of trained physicians in the health units. This included trained physicians in new contraceptive methods.

Opportunities of SCSSP at the implementation level

- The opportunities to focus the message of use of FP methods for birth spacing for the sake of health of mother and children
- The new program of Egypt President that focus on education and economic development could reduce the motives for high fertility

Challenges of SCSSP at the implementation level

At MOHP level:

- High turnover of physicians results in unavailability of physicians in the health units for a period that could exceed three months
- Compared to the era of FP projects that included incentives to physicians, currently the physicians become no more interested in training in FP skills. The same could be applied to FP nurses
- Nurses lost keenness to FP program. Nurses become no more interested to communicate with women and disseminate information about the benefits of FP for health of mother and child. FP nurses consider themselves work more than their

nurse-teammate in MOHP facilities but they are deprived from the benefits of the Ministerial decree No. 60 which includes incentives to nurses per shift.

- Despite there is shortage in brochures and leaflets that facilitates communication in FP, still there is an item concerned with availability of FP leaflet in the quality checklist that assess performance of the health unit and its staff members,
- Mobile units continue to be an activity that produce client shift from fixed clinics to mobile clinics as the contraceptive methods are delivered free of charge to mobile clinics clients. Mobile clinics clients, get the service but miss follow up services, that could lead to high discontinuation rate.

At the FP Programmatic Level:

- Marked reduction in mass communication activities related to FP program, resulted in spread of the culture of “asking friends”. Consequently, irregular use of OCs, continue use of POP after the sixth months after delivery, improper use of the safe period, improper understanding the lactational amenorrhea as a natural contraceptive method, misunderstanding that birth spacing etc.,
- With the increase in the proportion of deliveries by Cesarean Section, women and physicians do not prefer IUD insertion. Such change in the medical/obstetrics services results in reduction of IUD users.
- Depending on private physicians who are not well-trained in FP exposes the woman to method failure
- Pharmacists provide OCs without counseling results in method user failure

At the community level:

The current changes in the community present important challenges to FP program if the goal of reducing fertility rate remains as a major purpose of the population policy. Those changes had happened in the last 5 years and especially in the last two years. The following are the examples mentioned by nurse supervisors:

- With the current decrease in economic level of the families marriage rate increases especially young girls,
- Establishment of new industrial areas with newly married couples is associated with high fertility,
- Migration from Cairo to rural areas, due to the high rate of unemployment, and lack of security resulted in returning back to the rural culture which prefer high fertility
- The newly married couples, who suffered from the family planning concept, adopted by their parents, have negative attitude towards FP with spread of the culture of fertility preference to have large families,
- Religious leaders motivate people to have large families,
- High illiteracy rate among rural population, work of children and other cultural motives for high fertility become more prevailing among the people,
- The increasing rate of unemployment especially with privatization policies in the last few years resulted in having married men staying at home , and finding pleasure of having large number of children,

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

Conclusion:

The study concluded that implementation of MOHP/**SCSSP** in Menofia Governorate is associated with improved utilization of FP services, rationalization of use of FP methods and improve availability and accessibility of contraceptives in both the public and private sectors. Compared to similar Governorate in Lower Egypt, Menofia succeeded in increasing contraceptive coverage rate and reported positive trend for efficiency and effectiveness of FP program.

Recommendations:

The following are the suggested recommendations to capitalize on success of **SCSSP** in improving availability and accessibility of safe and effective FP methods to Egyptian community:

(1) Scaling up the SCSSP activities

- Include more governorates in the **SCSSP**,
- Expanding **SCSSP** activities related to training courses on determination of maximum –minimum needs for different contraceptive methods,
- Backing **SCSSP** activities related to activation of NGOs-FP clinics
- Dissemination of **SCSSP** accomplishments related to logistic management and rationalization of FP method use,
- Patronage the **SCSSP** private sector initiatives in FP program

(2) Sustainability of supply with New Contraceptives

- Establish a mechanism for continuous supply of new contraceptive methods to reduce the unmet needs and discontinuation rates
- Periodic review of the international scientific articles that publish information about new contraceptive methods
- Review experiences of other countries that succeeded in reducing the unmet needs through new contraceptives,
- Encourage pharmaceutical companies for introducing new contraceptives in the Egyptian market

(3) Injecting Creative Communication activities and include the following messages:

- Birth spacing and its importance for mother and child health,
- Safety and effectiveness of different traditional and modern contraceptive methods,
- Importance of FP counseling and informed- choice,
- Determinants for using traditional methods for FP

(4) Periodic monitoring and evaluation of FP program for timely decision- making

- Proper utilization of MOHP –MIS data to provide policy briefs to policy makers for timely decision- making,
- Use of compound indices that direct towards actions to improve the program,
- Capitalize on multiple sources of FP data and statistics derived from MOHP, CAPMAS and NPC to have broad picture for creative ideas

(5) Upgrade training programs in FP

- Activate the on-job training in FP through the clinical supervisors,
- Motivate physicians to participate in training in FP,
- Periodic evaluation of the training activities for continuous quality improvement,
- Training of MOHP staff members at all levels in health system research especially operations research for exploring service problems and testing the impact of new interventions at the health unit levels.

(6) Advocacy to allocate more resources for FP services

- Supporting advocacy activities of **SCSSP** in allocating more funds from Ministry of Finance for contraceptive methods
- Advocacy to improve salaries /incentives to physicians working in FP services,
- Advocacy to improve salaries /incentives to nurses working in FP services,
- Advocacy to support NGOs/FP clinics to increase efficiency in FP Program,
- Advocacy to improve policies and regulations to facilitate procurement of different contraceptive methods

(7) Encouragement of Corporate Social Responsibility

- Pharmaceutical companies could sponsor some MOHP activities as training of FP service providers in counseling,
- Pharmaceutical companies could sponsor some activities as training of private physicians and pharmacists in FP counseling and contraceptive technology,
- Pharmaceutical and equipment production companies could supply MOHP/FP clinics with syringes for on-month Injectables,
- Religious Associations could conduct seminars in MOHP/FP clinics and focus on the topic of “importance of birth spacing”

(8) Special Studies are needed to provide information for decision-making for contraceptive security issues

- Cost-efficiency and Cost- Effectiveness studies for FP Method-Mix
- Evaluation of FP program in the ten governorates included in **SCSSP**
- Efficiency of NGOs-FP clinics supported by MOHP/PS
- Perspectives of service providers (Physicians and Nurses) towards method-mix
- Evaluation of counseling in FP: Service providers’ performance and impact on clients’ satisfaction
- Biomedical research to identify the most acceptable FP methods for women delivered by CS

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