



**United Nations Population Fund
Arab Republic of Egypt**



**Ministry of Health and Population
Contraceptive Security Project**

Implanon Use Pattern among Ministry of Health and Population Clients 2008-2012

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December, 2012

Acknowledgement

The introduction of IMPLANON in Egypt FP program was aiming at responding to women's needs for safe and effective FP method with less side effects as well as fulfillment of social, cultural and financial acceptability. Implanon had potentials to respond to the unmet needs.

The availability of evidence based information about pattern of IMPLANON use in Egypt is fundamental to decision makers in MOHP/PS- Contraceptive Security Department. Therefore the current study was conducted to guide decisions towards re-designing the method mix qualitatively and quantitatively to respond to specific unmet needs that could be satisfied by IMPLANON.

I would like to express gratitude to Dr. **Hussam El-Khateeb**, the Head of the MOHP/PS for his continuous support to conduct this study. My thanks extend also to Dr. Magda Hussin, the Director General of the Contraceptive Commodity Department.

My cordial thanks and appreciation to **Dr. Omayma Zakaria**, the Director of the Contraceptive Security Project for her incessant support and help that made the conduction of the study very interesting and attractive activity. Without the support of **Dr. Omayma**, this study could not be accomplished.

My thanks extend to **Mr. Ibrahim Zaki** – MIS-UNFPA Consultant / Contraceptive Security Project. His intelligent notes and comments were very valuable in data analysis and presentation.

Thanks are due to all the MOHP/PS staff members to whom I have great respect and love. They always cooperative and wholehearted in upgrading their performance based on scientific research findings.

My great appreciations to Cairo, Alexandria–MOHP staff members and FP-Implanon users who expressed enthusiasm and collaboration by providing essential information necessary for the current study.

Finally I express my gratitude and appreciation to UNFPA staff members who financially support the contraceptive security project and the “Pattern of IMPANON Use in Egypt” study. They always respond to the national strategic programs to improve health of mothers and children in Egypt.

Prof. Madiha Said

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List of Abbreviation

CBR:	Crude Birth Rate
CCM:	Current Contraceptive Methods
CCR:	Contraceptive Coverage Rate
CID:	Chemical Industries Development
COC:	Combined Oral Contraceptives
CPR:	Contraceptive Prevalence Rate
CS:	Contraceptive Security
CYP:	Couple Year Protection
EDHS:	Egypt Demographic and Health Survey
FDA:	Food and Drug Administration
FGD:	Focus Group Discussion
FHM:	Family Health Model
FP:	Family Planning
HQ:	Head Quarter
HSRP:	Health Sector Reform Program
FPDD	Family Planning District Director
FPDNS	Family Planning District Nurse Supervisor
IEC:	Information, Education and Communication
IC	Implanon Continuers
ID	Implanon Discontinuers
IU	Implanon Users
IUD:	Intra Uterine Contraceptive Device
OCs:	Oral Contraceptives
PHC:	Primary Health Care
PS:	Population Sector
MDGs	Millennium Development Goals
MIS	Management Information System
MOHP:	Ministry of Health and Population
MSI	Method Shift Index
MWRA	Married Women in the Reproductive Age
NCM:	New Contraceptive Methods
NGOs:	Non-Governmental Organizations
NPC:	National Population Council
NPP:	National Population Policy
SCSSP:	Supporting Contraceptive Security System Project
UFPA:	United Nations Fund for Population
WHO:	World Health Organization

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EXECUTIVE SUMMARY

The introduction of IMPLANON in Egypt - FP program is aiming at responding to women's needs for safe and effective FP methods with less side effects as well as fulfillment of social,

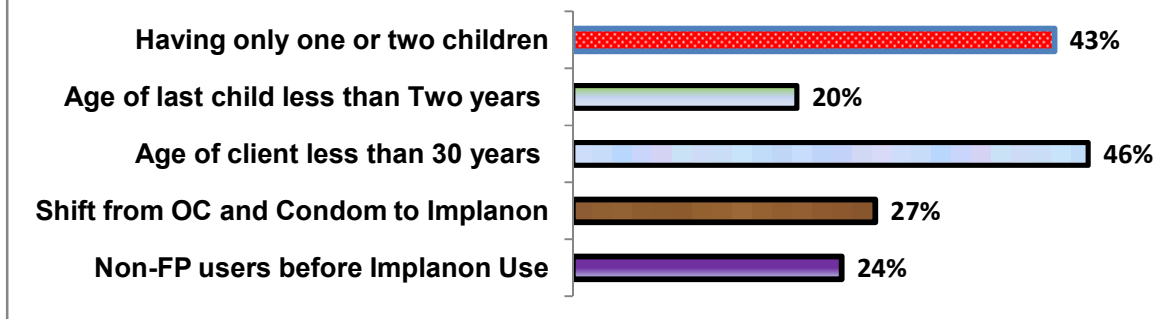
cultural and financial acceptability. Implanon had potentials to respond to the unmet needs. EDHS 2008 showed that one percent of the currently married women who are not using FP methods and intended to use FP had expressed their preference to use implants. According to Egypt FP program, Implanon is available in MOHP facilities only i.e. hospitals and health centers. Service providers are trained in Implanon counseling, insertion and removal.

Despite, some FP methods requires more tracking as IMPLANON, the current MIS has no information about the cohorts of women who use IMPLANON regarding continuation and discontinuation of use and those neglecting removal according to the set standards of three years. Consequently, the decisions for sustainability of supply of IMPLANON need information regarding post-marketing effectiveness. The goal of the study is responding to unmet needs for FP by having effective, safe long-acting FP methods. The specific objectives were exploring the situation for Implanon users after completing three years since time of insertion regarding the programmatic issues: safety, effectiveness, acceptability, quality and continuity of care throughout the insertion to removal, and after removal cycle.

Methods: The study is health system-operations research. It is a programmatic post-marketing evaluation study to a cohort of women to whom Implanon was inserted four years ago (in 2008) in MOHP facilities. The study was conducted in MOHP/PS – HQ, MOHP/PS – MIS, MOHP/Health Directorates in Alexandria, and Cairo as well as follow up community-based study to women in Cairo and Alexandria. Multistage, random sampling technique was used and resulted in random selection of seven districts from each of Cairo and Alexandria Governorates. Systematic random sample technique was used with reference to MIS – Implanon recorded data in 2008, to select 30 women/district. The total sample size from the 14 districts in the two governorates was 420 IUs. Both quantitative and qualitative data were collected. The sources of the quantitative data were MOHP/PS MIS service statistics and structured interview with Implanon users done by FP District Nurse Supervisors. The FP-DNS had participated in a training activity that included review and role- play for the pre-tested questionnaire form. Focus Group Discussions with MOHP/PS FP directors and MOHP/PS FP-DNS from Cairo and Alexandria governorates were done.

The findings of the study highlighted the information that Implanon responded to unmet needs of 24% of women who were not using FP methods before Implanon. Almost of IUs were of young age (46% were less than 30 years old), with 20% having their last child less than two years old and 43% had one or two children, and 27% were shifting from OCs and condom use to Implanon.

Figure (1) Characteristics of FP Clients at time of Implanon Insertion



The Implanon use pattern showed that two thirds (67%) who had Implanon insertion in 2008 continued its use for exactly three years, and 5% continued its use for more than three years. Implanon Discontinuers (ID) formed 28% of total IUs in 2008.

FP method mix use-dynamics showed that out of total IU who used FP method **before Implanon** in 2008, 89% had shifted from other modern FP methods to Implanon, and 11% were using Implanon i.e. continuing using the Implanon method. The majority of those shifting to Implanon use were IUD users (41%) and OCs users (25%). After using Implanon in 2008 and completing three years or less the method mix profile had showed changes where continuers of Implanon use had increased to be 35% (42% among IC and 10% among ID). The shift towards Implanon was marked among IUD ex-users (41% before Implanon and 21% after Implanon), with 20 percent points shift from IUD. The Increase in the percent points of Implanon continuers for the reference periods was 24 percent points.

Information about Implanon insertion and removal services by health facility showed that the role of MOHP-hospitals and private sector had increased by 31% points from 24% in Implanon insertion (21% for hospitals and 3% of private sector) to 55% in Implanon removal (42% for hospitals and 13% of private sector). On the other hand the role of MOHP-PHC centers had decreased by 31% points from 76% in Implanon insertion to 45% in Implanon removal. The situation was different for IC and ID (**p=0.001**). For each ten IC, five women got Implanon removal services in MOHP –PHC centers and four women got the service in hospitals and one woman got the service in private clinic. However, for each ten ID, four women got Implanon removal services in MOHP –PHC centers and four women got the service in hospitals and two women got the service in private clinics.

Despite 98% of discontinuers received the information about the duration of use i.e. three years, the mean duration of IU was 2.5 years.

Among IU who desired to have children after removal of Implanon, significantly ($p=0.000$) high proportion of ID got pregnant after Implanon removal (36%) compared to IC (14%). However, the $OR=0.3$ and 95% CI 0.18- 0.49 indicates that Implanon continuation for three years does not reduce the opportunities for women to get pregnant after its use and removal after three years of use.

The time of occurrence of pregnancy after Implanon removal among who got pregnant showed that that 44% of IC got pregnant within three months of Implanon removal, versus 19% ID. Such findings was statistically significant ($p= 0.004$) $OR = 4$ (95% CI = 1.5-10.6). Such statistical findings indicate that those who removed Implanon after completing the three years of use had four times more probability to get pregnant within three months of removal, than those removed the Implanon before three years of use.

Information pertaining to the reported side effects associated with Implanon use showed that about one third of IU (37%) reported complaint from side effects of Implanon. A significantly high proportion of ID (67%) reported the complaints from side effects than IC (25%) ($p=0.000$). Out of those complained from Implanon side effects, spotting ranked the first complaint (61%) followed by increase in body weight (25%) and back pain (23%).

The rank ordering of reported side effects varied between IC and ID. Among IC, spotting ranked the first complaint (81%) followed by increase in body weight (27%) and amenorrhea (25%). Among ID, uterine hemorrhage was reported by 33% of IU and back pain was reported by 28% of IU.

The findings demarcated that almost of the causes of discontinuation 80% were related to unsatisfactory quality of counseling (side effects, desire for pregnancy, desire to use another method and physicians' advice against Implanon use).

Implanon users declared the advantages of Implanon use as: no daily use (74%), no gynecological procedures (57%), reasonable cost (42%), no need for frequent follow up (40%) and could be used by lactating women (37%).

The disadvantages of Implanon use were stated by IUs. There was consensus among IC and ID about the unsatisfactory/painful/distressing process of Implanon insertion (70%) and removal (45%).

Qualitative data collected by FGDs with FP directors and nurse supervisors in Cairo and Alexandria affirmed that Implanon responds to unmet needs for FP methods due to the wide spectrum of indications and acceptability by women. However, FGDs' participants cited two

challenges related to the supply side of Implanon: First: Implanon is not available in enough amounts to satisfy needs of new users as well as continuing users, Second: training in Implanon Insertion and removal is not enough to provide quality services. If those issues are considered by FP program, response to unmet needs for FP could be partially solved by Implanon use.

The study concluded that Implanon use is highly effective and acceptable method by women especially lactating women and those need birth spacing for three years. However, there were three limitations that restrict its wide use: limited amounts of Implanon available in MOHP facilities, improper training in counseling, insertion and removal, and lack of follow up system for Implanon users.

CHAPTER 1: INTRODUCTION

Egypt current family planning program strategies depend on the voluntary FP method use that requires sustainable activities for demand creation for FP methods. The financial strategy of FP program relies on the public investment approach, as the GOE is the prime financier of FP methods and services. In almost of the countries that reached to plateau in FP method use, and aiming at sustainability and success of FP program, the most substantial interventions should be directed to respond to unmet needs for FP⁽¹⁾. The introduction of IMPLANON in Egypt FP program was aiming at responding to women's needs for safe and effective FP method with less side effects as well as fulfillment of social, cultural and financial acceptability.

According to EDHS 2008, IMPLANON users constituted 0.5% of the total 57.6% of modern FP method users. IMPLANON is likely to be preferred by special categories of women. IMPLANON users formed higher percentage among special category of FP users i.e. those who have four and more children (0.8%), and those allied to very low economic class (lowest wealth index) (0.6%)⁽²⁾.

Implants had potentials to respond to the unmet needs. EDHS 2008 showed that one percent of the currently married women who are not using FP methods and intended to use FP had expressed their preference to use implants⁽²⁾.

Information about Implanon concluded that Implanon is safe, highly effective and rapidly reversible method of contraception⁽³⁾. Facts about contraceptive technology and its use are utilized in training programs and guidelines for use in FP clinics⁽⁴⁾. Those facts cover different issues as: indication and usage, Dosage and administration, Contraindications, warning and precautions, Adverse reaction, Drug interactions, Use in specific population, Description of use, Clinical Pharmacology, Clinical studies, How supplied/storage and handling and patient counseling information.

According to Egypt FP program, Implanon is available in MOHP facilities only i.e. hospitals and health centers. Service providers are trained in Implanon counseling, insertion and removal. At the same time, Implanon is not available in the private sector and private service providers who are not included in the FP program have no opportunities to access to training in Implanon contraceptive technology.

The substantial performance of MOHP/PS MIS, especially at the district level, could provide information about Implanon users in MOHP facilities⁽⁵⁾. The Information about Implanon users are recorded during the time of insertion. That information recorded in service statistics throughout the last ten years could be retrieved at any time. However, there is no information about continuity of care or findings of the results of periodic visits to clinics or home visits to Implanon users by community workers. Consequently, there is no enough information at the Implanon users regarding continuity of use.

Having information about Implanon users is crucial for effective management of FP program the MOHP/PS-CS department is continuously refining the FP method-mix that fulfills the requirements of availability, safety, accessibility, acceptability and effectiveness. Hence, the MOHP could achieve the strategic objectives of increasing contraceptive prevalence and reducing discontinuation, unmet needs and method failure rates. The current method-mix is composed of IUD, OCs, Injectables, condom and IMLANON. MOHP/PS-CS is continuously adding new FP methods as pilot approach, and continuously evaluates the current method mix regarding the sustainability of supply and demand. However, some FP methods requires more tracking as IMPLANON, because the current MIS has no information about the cohorts of women who use IMPLANON regarding characteristics, continuation of use, discontinuation of use and neglecting removal according to the set standards of three years. Despite IMPLANON is an effective and save method, with an acceptable price of LE 5/ user. On the other hand Implanon is considered most expensive method in Egypt FP program, and the government has the burden of subsidization of such method. Consequently, the decisions for continuing the supply with IMPLANON need information regarding post-marketing effectiveness.

The current study provides scientific evidence that could guide the MOHP –**Supporting Contraceptive Security System Project's** decisionsto improve performance in supply and raise demand with consideration to adjusted FP method-mix and promotion to effective long-acting methods as IMPLANON.

CHAPTER 2: GOAL AND OBJECTIVES

2.1 Goal

Improving Health of Egyptian mothers and children through responding to unmet needs for FP by having effective, safe long acting methods in FP program

2.2 Aim of the study

Explore the situation for Implanon users after completing three years of use regarding the programmatic issues: safety, effectiveness, acceptability, quality and continuity of care throughout the insertion to removal, and after removal cycle.

2.3 Specific Objectives

- 1- Data about Implanon users who started use in 2008 and interviewed in 2012 had been collected with the objective of:
 - [1] Describe the socio-demographic background of Implanon users
 - [2] Designate Implanon users by reproductive health Parameters
 - [3] Explore the pattern of family planning method use before and after Implanon use
 - [4] Scrutinize the occurrence of pregnancy after Implanon use
 - [5] Identify the side effects of Implanon
 - [6] Understand the causes of Implanon removal before 3 years of insertion
 - [7] Investigate services related to follow up of Implanon users
 - [8] Identify the perspectives of Implanon users regarding advantages of Implanon
 - [9] Identify the perspectives of Implanon users regarding causes of non-use of Implanon

- 2- Identify the perspectives of MOHP-FP directors and FPDNS regarding advantages and limitations of introduction of Implanon in FP program

CHAPTER 3: METHODS

3.1 Study Design

The study is health system-operations research. It is a programmatic post-marketing evaluation study to a cohort of women to whom Implanon was inserted four years ago in MOHP facilities. The study is community based study to the cohort of Implanon users recorded in MOHP facilities in 2008.

3.2 Study Setting

The study was conducted in:

- MOHP/PS – HQ
- MOHP/PS –MIS
- MOHP/Health Directorate in Alexandria and Cairo
- Follow up community-based study to women in Cairo and Alexandria

3.3 Sample Size and Sampling Technique

Multistage, random sampling technique was used for the current study. Stage (1) was selection of governorates, Stage (2) was selection of districts and Stage (3) was selection of Implanon users in 2008.

Selection of Governorates: According MOHP/PS-MIS 2008, the total FP clients in 27 governorates who attended FP clinics for FP method use were 7504513 clients. Implanon users constituted 0.6% of FP method users (n=41605). Out of the total Implanon users in 2008, 10% were in Cairo Governorate and 7% were in Alexandria Governorate. Those two governorates, compared to other Egypt Governorates had reported the highest level of Implanon use. Therefore, Cairo and Alexandria Governorates had been selected to be included in the study.

Selection of Districts: Implanon users in 2008 were found to be distributed across all districts in the two governorates. A randomly selected seven districts from each governorate was done as it is considered reasonable number for the study.

Selection of Implanon Users: Selection of 30 Implanon users from each district was considered satisfactory to have 420 Implanon users in 2008. The selection of women to be included in the study was based on systematic random sampling technique for Implanon users recorded in MIS of each district.

Sample of FP District nurse directors: For the studied governorates FP directors and FP district nurse supervisors had participated in the FGDs. One FGD was held in Alexandria-Health Directorate, and one FGD was held in Cairo- MOHP/HQ.

3.4 Data Collection:

■ Types and Sources of data

A- Quantitative data

The sources of the quantitative data were MOHP/PS MIS service statistics. Structured interview with Implanon users was done by FP District Nurse Supervisors. The FP DNS had participated in a training activity that included review and role-play for the pre-tested questionnaire form (see Annex).

B- Qualitative Data

- Focus Group Discussion with MOHP/PS FP directors and MOHP/PS FP Nurse Supervisors from Cairo and Alexandria governorates

■ Instruments and Methods of Data Collection

- **Spread sheets** to include data about the target women (those selected women by systematic random sample from MIS records). The sheet includes the name, address, date and place of insertion of Implanon, and age at time of insertion of Implanon in 2008.
- **Questionnaire** form which includes (see Annex):
 - ◆ Socio-demographic background of Implanon users
 - ◆ Implanon users by reproductive health Parameters
 - ◆ Family planning method use before and after Implanon use
 - ◆ Pregnancy after Implanon use
 - ◆ Side effects of Implanon
 - ◆ Causes of Implanon removal before 3 years of insertion
 - ◆ Follow up of Implanon users
 - ◆ Advantages of Implanon
 - ◆ Causes of non-use of Implanon

➤ Guidelines for Focus Group Discussion

- Implanon responds to unmet needs for FP methods:
- Availability of Implanon in MOHP FP Facilities
- Training in Implanon Insertion
- Training in Implanon removal
- Limitations for using Implanon in FP Program

3.5 Data Quality Check

The use of service statistics as a source of quantitative data indicates and as sampling frame was acceptable for sample selection. The data collected by trained nurse supervisors had been reviewed by MOHP/SCSSP staff before data entry to ensure completeness and accuracy of data. Data quality check for the collected structured questionnaire formats had been office- reviewed and further revision had been done during data entry and preliminary analysis.

3.6 Data Analysis Plan

Both the quantitative and qualitative data were organized, articulated, analyzed and interpreted to answer the research questions.

The quantitative data had been analyzed for the total Implanon users who further categorized into three groups according to the Implanon Use Pattern:

- 1- Implanon Continuers: IU who used the method for three years according to the technical standards
- 2- Implanon over-continuers: IU who used the method for more than three years
- 3- Implanon Discontinuers: IU who used the method for less than three years

Simple statistical methods had been used using **independent variables** as: the socio-demographic background and the sources and features of the received Implanon services from the different health services outlets. The **dependent variables** were the use pattern categorized as IC (used Implanon for three years and more) and ID (used Implanon for less than three years). Chi square test of significance was used to assess the differences between the studied groups (IC and ID) and according to the components of each independent variable.

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

3.7 Ethical Considerations

There was an approval by the MOHP/PS Technical Committee to conduct the study. Qualitative data are collected after getting verbal consent from the participants. Verbal consent of the interviewed women to respond to the questionnaire was done. The collection of data by nurse supervisors had very satisfactory impact on home-visited women who appreciated that representative from the health authorities conducted such follow up activities.

3.8 Limitations of the Study

Due to limited resources the study included only two governorates. Therefore, the study does not provide information about situation in other Lower Egypt and Upper Egypt Governorates regarding Implanon use pattern.

CHAPTER 4: RESULTS

The findings of the study were presented for 427 women recorded in MOHP-MIS in 2008 as IUs and interviewed by data collectors in 2012 during home visits. The findings were organized according to the following parameters:

- 1- Socio-demographic background of Implanon users
- 2- Implanon users by reproductive health Parameters
- 3- Family planning method use before and after Implanon use
- 4- Pregnancy after Implanon use
- 5- Side effects of Implanon
- 6- Causes of Implanon removal before 3 years of insertion
- 7- Follow up of Implanon users
- 8- Advantages of Implanon
- 9- Causes of non-use of Implanon

1- Socio-demographic background of Implanon users

Providing information about the background characteristics of Implanon users is crucial for FP services providers. Adding Implanon to the cafeteria of contraceptive methods is aiming at satisfying clients with special unmet needs. The socio-demographic characteristics of Implanon users included age, education, governorate and work status, age at marriage, obstetric performance (history of pregnancy wastage). Beside the background information about Implanon users in general, the pattern of use regarding continuation (three years and more) and discontinuation (less than three years) was used as dependent variable that highlight information about the characteristics of Implanon continuers versus discontinuers.

1.1 Implanon Users by Governorate, Age and Education

Table (1.1) illustrates that the mean current age of Implanon users was 34.3±6.2 years and median age was 34 years. Such findings indicate that 50% of Implanon users were less than 34 years old and 50% were more than 34 years of age. The education status indicated that 40% of Implanon Users (IU) was not educated. There was no insignificant differences between IU in Alexandria and Cairo regarding age distribution ($p= 0.1$) and education status ($p=0.2$).

Table (1.1) Percent Distribution of Implanon Users by Socio-economic Background in Cairo and Alexandria Governorates

Characteristics	Cairo Governorate		Alexandria Governorate		Total		Mean ±SD
Current Age*							
<30 Years	48	23%	58	27%	106	25%	Mean=34.3 years± 6.2
30-	60	28%	70	33%	130	30%	
35-	53	25%	56	26%	109	26%	Median = 34
40-	33	15%	20	9%	53	12%	Mode =34
45 and above	19	9%	10	5%	29	7%	
Total	213	100%	214	100%	427	100%	
Years of Education **							
Non-educated	76	36%	94	44%	170	40%	Mean= 6.5 years±5.8
< 6 years	9	4%	8	4%	17	4%	
6 -<9	17	8%	21	10%	38	9%	Median = 6.0
9 -<12	21	10%	21	10%	42	10%	Mode =6.0
12 and more	90	42%	70	33%	160	37%	Minimum= 0
Total	213	100%	214	100%	427	100%	Maximum= 18

1.2 Implanon Users by Duration of Implanon Use

Figure (1.1) illustrates that IUs were categorized according to the standard duration of Implanon use of 3 years. It is obvious from the figure that two thirds (67%) who had Implanon insertion in 2008 continued its use for exactly three years, and 5% continued its use for more than three years. Implanon Discontinuers (ID) formed 28% of total IUs in 2008.

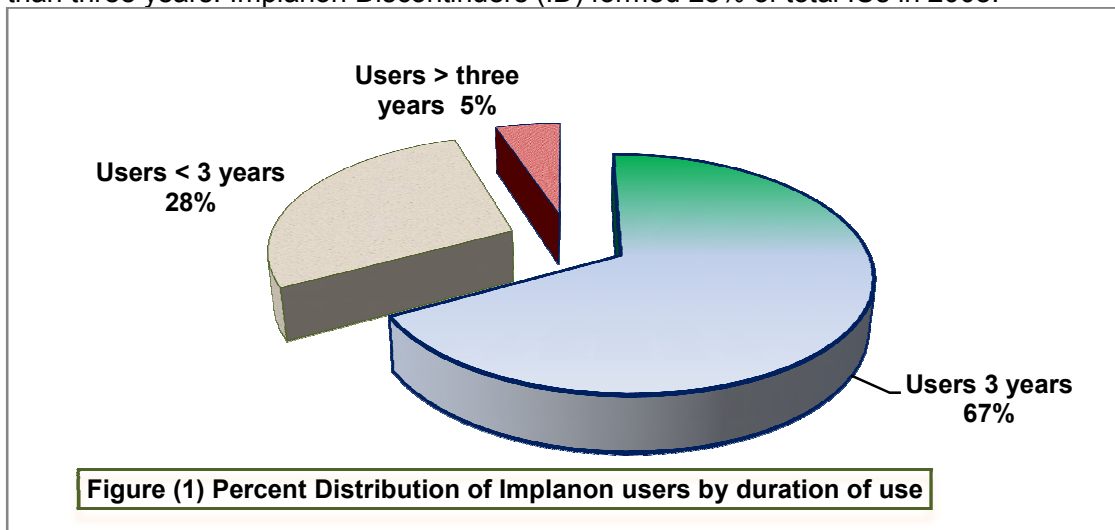


Figure (1.1) Percent Distribution of Implanon Users by Duration of Use

1.3 Implanon Users by Age at Time of Implanon Insertion

Figure (1.2) highlights the age of the IUs at time of Implanon insertion. As depicted from the figure, three quarters (74%) of IU were less than 35 years old at time of Implanon Insertion. Additionally, about half of IUs (46%) was less than thirty years old.

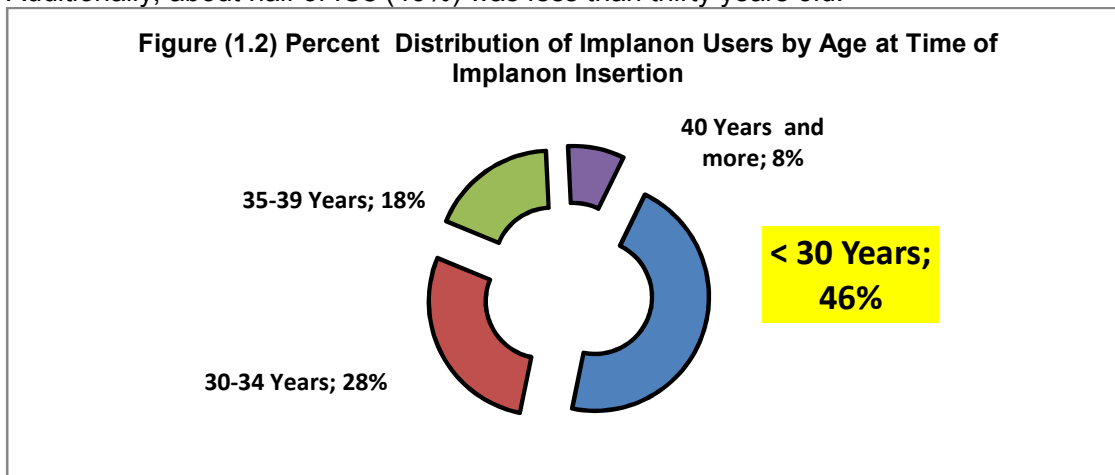


Figure (1.2) Percent Distribution of Implanon Users by Age at Time of Implanon Insertion

Table (1.2) shows the percent distribution of Implanon Users (IUs) by age at time of Implanon Insertion. As observed from the table, there was tendency for ID to be younger in age than Implanon Continuers (IC). For ID 55% of women were less than 30 years old at time of

Implanon insertion versus 42% of IC. There was a statistically significant difference in the age distribution of (IC) who used the method for three years and more and ID at time of Implanon insertion ($P= 0.014$)

Table (1.2) Percent Distribution of Implanon Continuers and Discontinuers by age at time of Implanon Insertion

Age Group	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
< 30	130	42%	66	55%	196	46%
30-	96	31%	24	20%	120	28%
35-	52	17%	25	21%	77	18%
40 and more	29	9%	5	4%	34	8%
Total	307	100%	120	100%	427	100%

1.4 Implanon Users by Education levels

The percent distribution of IU by number of years of education is demonstrated in table (1.3). It is clear from the table that 42% of ICs were not educated versus 34% of ID. Those who had history of school education 12 years and more had formed 37% of IC and 38% of ID. There was no statistically significant difference between IC and ID regarding the educational status ($P= 0.58$).

Table (1.3) Percent distribution of Implanon Users by Number of years of Education

Education Group	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Non-educated	129	42%	41	34%	170	40%
< 6 years	11	4%	6	5%	17	4%
6 -<9	25	8%	13	11%	38	9%
9 -<12	28	9%	14	12%	42	10%
12 and more	114	37%	46	38%	160	37%
Total	307	100%	120	100%	427	100%

1.5 Implanon Users by Working Status

The majority (87%) of IUs was not working for cash (table 1.4). Such observation of non-working status could be applied for IC (87%) and ID (88%) with no statistically significant difference ($P= 0.47$)

Table (1.4) Percent distribution of Implanon Users by current working status

Working Status n	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Working for Cash	41	13%	15	12%	56	13%
Non-working	266	87%	105	88%	371	87%
Total	307	100%	120	100%	427	100%

2- Implanon Users by Reproductive Health Parameters

Reproductive health - Cultural background characteristics of IU were expressed as the age at time of marriage and findings were illustrated in table (2.1). The mean, mode and median age at marriage for IU was 20 years. Teen age marriage was obvious among IC (41%) versus

(36%) of ID. However, the differences in distribution of IC and ID by age at marriage was not statistically significant ($P= 0.29$)

Table (2.1) Percent distribution of Implanon Users by Age at time of marriage

Age at marriage	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Less than 16	22	7%	10	8%	32	7%
16-	103	34%	34	28%	137	32%
20-	132	43%	62	51%	194	44%
25-	43	14%	10	8%	53	12%
30 and more	7	2%	4	3%	11	3%
Total	307	100%	120	100%	427	100%

Mean 20±3.8 median 20 Mode 20

History of abortion was reported by 21% of IUs (table 2.2). More than one quarter (27%) of ID had history of abortion versus 19% of IC. Yet, the differences between IC and ID regarding the percent of those had history of abortion was not statistically significant ($p=0.16$).

Table (2.2) Percent distribution of Implanon Users by History of Abortions

Number of Abortions	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
None	248	81%	88	73%	336	79%
One and more	59	19%	32	27%	91	21%
Total	307	100%	120	100%	427	100%

History of stillbirth was reported by 2% of IUs (table 2.3). Only 1% of ID had history of stillbirths versus 2% of IC. Yet, the difference between IC and ID regarding the percent of those had history of stillbirth was not statistically significant ($p=0.3$).

Table (2.3) Percent distribution of Implanon Users by Number of Stillbirths

Number of Stillbirths	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
None	301	98%	119	99%	420	98%
One and more	6	2%	1	1%	7	2%
Total	307	100%	120	100%	427	100%

IUs characterized by being of low parity at time of Implanon insertion. Those having less than four children constituted 73% of all IUs. Out of the total IUs 9% were having one child at the time of Implanon insertion (figure 2.1).

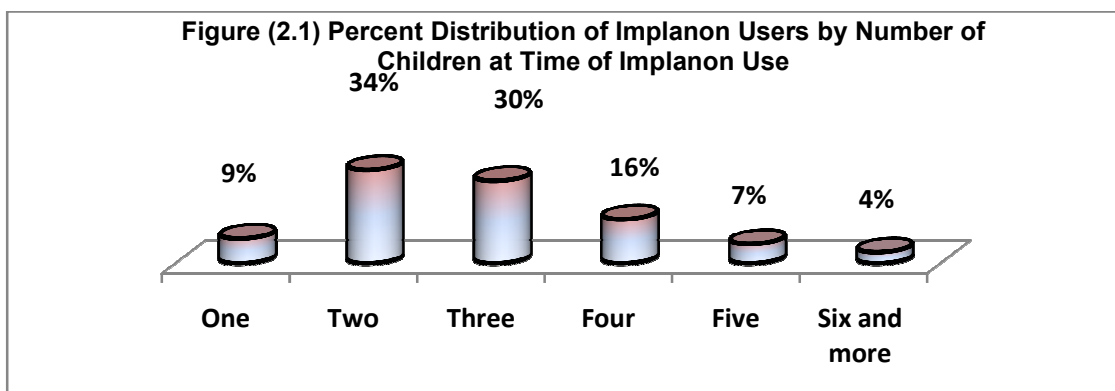


Figure (2.1) Percent Distribution of Implanon Users by Number of Children at Time of Implanon Use

Table (2.4) displays information about the number of children that the IU had at the time of Implanon Insertion by use dynamics: IC and ID. It could be noticed that 13% of ID had one child versus 7% of IC. Additionally, 6% of IC had six or more children versus 1% of their counterparts of ID. However, the difference between IC and ID regarding the number of children they had at time of Implanon insertion was not statistically significant ($p=0.1$).

Table (2.4) Percent distribution of Implanon Users by number of Children at time of Implanon

No of Children	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
One	21	7%	16	13%	37	9%
Two	101	33%	45	38%	146	34%
Three	99	32%	27	23%	126	30%
Four	47	15%	22	18%	69	16%
Five	21	7%	9	8%	30	7%
Six and more	18	6%	1	1%	19	4%
Total	307	100%	120	100%	427	100%

Age of the last child at time of Implanon insertion is illustrated in figure (2.2). For all the IUs 80% of women had their last child 2 years old or more. However, for 30% of ID, the age of the last child was less than two years at time of Implanon insertion, versus 16% of IC.

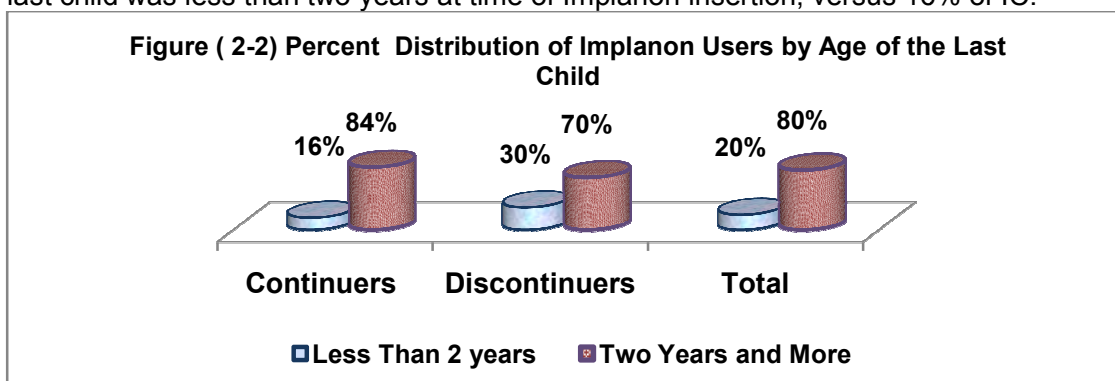


Figure (2-2) Percent Distribution of Implanon Users by Age of the Last Child

Table (2.5) illustrates the percent distribution of Implanon Users by age of the last child at the time of Implanon insertion. If it was assumed that those have their children in the first year of life and were on breast feeding, it could be concluded from the table that 14% of IU were lactating mothers at time of Implanon insertion (11% of IC and 21% of ID).

Another marker for the dynamic of Implanon use in relation to the postpartum period could be abstracted from the table. For 10% of IU, the use within 6 months after delivery/child birth was 9% of IC and 13% of ID.

It could be concluded from the statistically significant difference ($P=0.009$) regarding the distribution of IC and ID according to age of the last child at time of Implanon insertion, that High proportion of ID (13%) compared to IC (9%) used Implanon during the first six months after delivery.

Table (2.5) Percent distribution of Implanon Users by Age of last child at the time of Implanon insertion

Age of Last Child	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
< 6 months	28	9%	15	13%	43	10%
6- <11months	6	2%	9	8%	15	4%
12 - <18 months	13	4%	10	8%	23	5%
18 – < 24 months	3	1%	2	1%	5	1%
Two years and more	257	84%	84	70%	341	80%
Total	307	100%	120	100%	427	100%

3- Family planning method use before and After Implanon use

Information about FP method use dynamics before and after Implanon use are markers for predicting the ability of a FP method as Implanon to respond to unmet needs, or attracting new FP users. Figure (3.1) shows that 76% of IUs were ever users of FP methods before Implanon. In other words 24% of IUs were new FP users, or Implanon had met the need for women who were non-FP users. However, after Implanon removal, the net outcome was non-FP use for 32% of women who were 100% users during Implanon use.

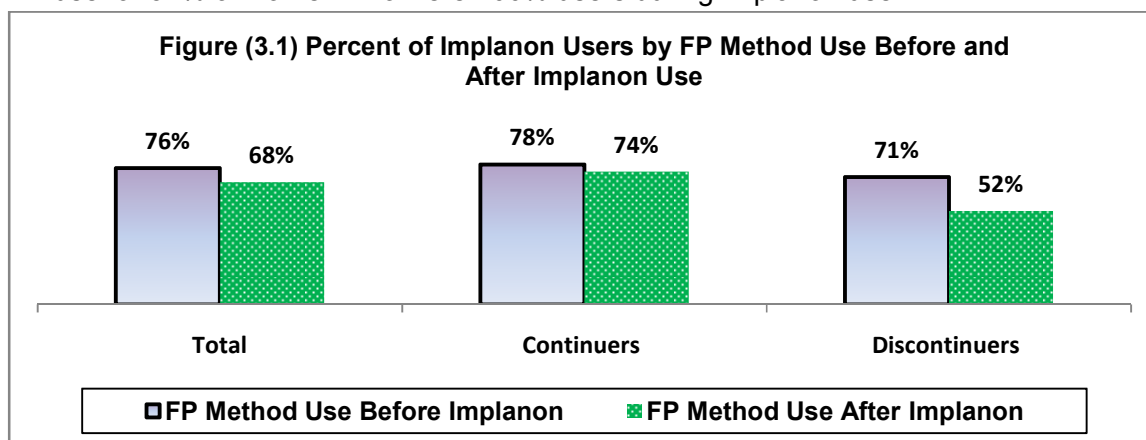


Figure (3.1) Percent of Implanon Users by FP Method Use before and After Implanon Use

Figure (3.2) highlights information that considers more meticulous information about FP method use dynamics among IUs. The situation could be simplified that, out of each 100 IU users in 2008, 24 women were new FP users, and 76 women were using other FP methods. After Implanon removal for both ID and IC, out of each 100 women 73 women were eligible to use FP methods (those who desired for pregnancy and those with absence of the husband were excluded). Out of those eligible 73 women, 68 women used FP methods and 5 women did not use FP methods. Therefore the net effect of Introduction of Implanon in FP method mix was introduction of new FP method users (responding to unmet needs for 24% of non-users who become IU). After Implanon removal there were 7% of the eligible women for FP use, did not use FP method. Implanon net meeting needs for FP methods could be estimated as 13%.

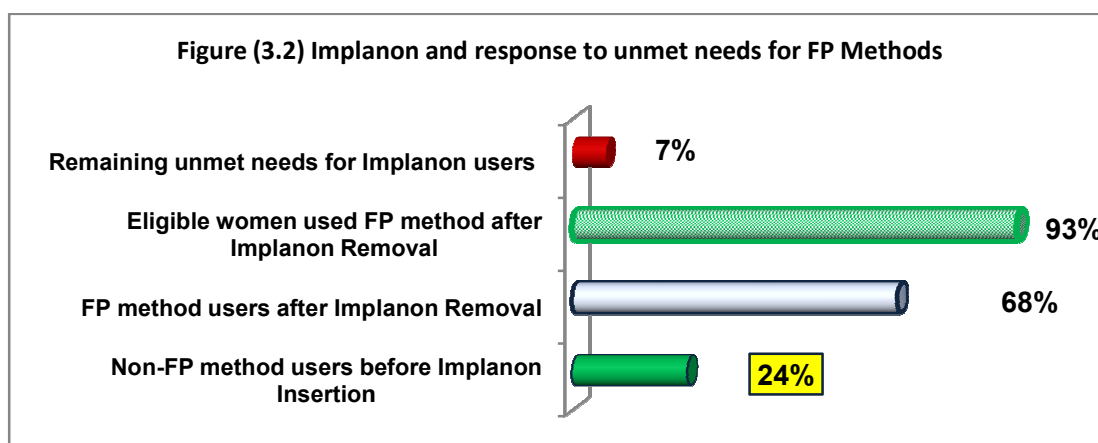


Figure (3.2) FP method use dynamics in relation to Implanon use

Table (3.1) illustrates important issues about FP method mix dynamics regarding method shift and continuity of using Implanon. The table shows that of the total women who used FP method **before Implanon** in 2008, 89% had shifted from other modern FP methods to Implanon. Only 11% of those used FP method before 2008 had used Implanon i.e. continuing using the Implanon method. The majority of those shifting to Implanon use were IUD users (41%) and OCs users (25%). The profile of method shift showed variation by type of Implanon users. For ID who was FP users before Implanon 39% were OCs users versus 20% of IC. For IC who was FP users before Implanon 44% were IUD users versus 32% of ID. Continuation rate for Implanon among IC was 13% versus 5% among ID.

After using Implanon in 2008 and completing three years or less the method mix profile had showed changes where continuers of Implanon use had increased to be 35% (42% among IC and 10% among ID). The shift towards Implanon was marked among IUD ex-users (41% before Implanon and 21% after Implanon), with 20 percent points shift from IUD. The Increase in the percent points of Implanon continuers for the reference period was 24%.

Table (3.1) Percent distribution of Implanon Users by FP method used before and after Implanon use in 2008

FP method used	Continuers		Discontinuers		Total	
	Before	After	Before	After	Before	After
OCs	20%	17%	39%	31%	25%	20%
IUD	44%	18%	32%	32%	41%	21%
Injectables	21%	19%	24%	23%	21%	19%
Condom	3%	5%	1%	5%	2%	5%
Implanon	13%	42%	5%	10%	11%	35%
Total	239	227	85	62	324	289

Table (3.2) demonstrates access of IU to information about Implanon use. The prior knowledge about the method was reported by 57% of IUs. However, higher proportion of IC was more likely to be with previous knowledge about Implanon (60%) than ID (51%). Table (3.2) shows another approach to inform IU about the method through service providers especially the duration of action and time of removal. Almost of IU (98%) got such information whether IC (98%) and ID (98%).

Table (3.2) Percent distribution of Implanon Users by Knowledge, counseling and information about removal after 3 years

Implanon use	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Knowledge about the method before insertion	183	60%	61	51%	244	57%
The doctor/nurse explained Implanon Use to women	302	98%	118	98%	420	98%
The doctor/nurse advised women for Implanon removal after three years	302	98%	117	98%	419	98%
Total	307		120		427	

Table (3.3) affirms the concept that receiving follow up services reduces the discontinuation rate. Out of the total IU 55% had received follow up services. However, there was a tendency for IC to receive follow up services (58%) than ID (46%) with statistically significant difference ($p=0.01$). Consequently, those who received follow up services were 1.7 times more liable for continuing using Implanon than those who did not receive follow services **OR= 1.7 (95% CI (1.08 -2.53))**.

Table (3.3) Percent distribution of Implanon Users by Follow up medical services

Follow up services	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Yes	179	58%	55	46%	234	55%
No	128	42%	65	54%	193	45%
Total	307	100%	120	100%	427	100%

P= 0.01 OR= 1.7 (95% CI (1.08 -2.53))

Figure (3.3) illustrates the duration of Implanon use among discontinuers. Discontinuation of FP method within the first year of use was (27%) and such indicator reflects failure of the health service to provide good counseling and insertion services. Despite 98% of discontinuers received the information about the duration of use i.e. three years, the mean duration of IU was 2.5 years.

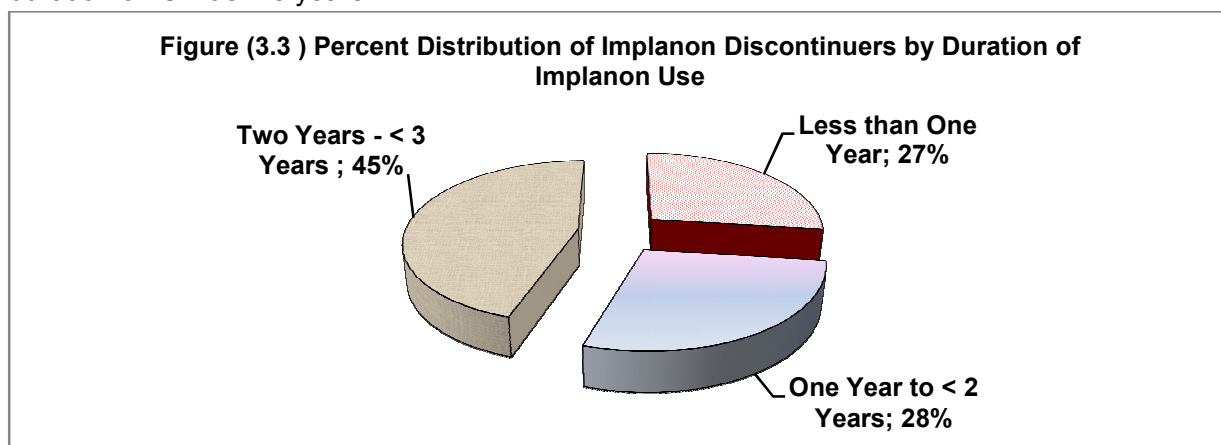


Figure (3.3) Percent Distribution of Implanon Discontinuers by Duration of Implanon Use

Implanon is available in MOHP facilities only. Therefore, women could get the Implanon insertion services either in PHC Centers and/or in MOHP hospitals. Table (3.4) illustrates the percent distribution of IU according to the health facilities in which they got the Implanon insertion services. The table demarcates that for each ten IU, 8 women got the Implanon insertion services in MOHP –PHC centers and 2 IU got the service in MOHP Hospitals. However, the situation was different for IC and ID ($p=0.001$). For each ten IC, seven women got Implanon insertion services in MOHP –PHC centers and 3 IU got the service in MOHP Hospitals. However, for each ten ID, nine women got Implanon insertion services in MOHP –PHC centers and one IU got the service in MOHP Hospitals.

Table (3.4) Percent distribution of Implanon Users by Place of Insertion

Place of Implanon Insertion	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
MOHP Health Center	220	72%	104	87%	324	76%
MOHP Hospital	81	26%	11	9%	92	21%
Private Clinic	6	2%	5	4%	11	3%
Total	307	100%	120	100%	427	100%

P= 0.001

Information about Implanon insertion and removal services by health facility is demonstrated in Figure (3.4). It is obvious that the role of MOHP-hospitals and private sector had increased by 31% points from 24% in Implanon insertion (21% for hospitals and 3% of private sector) to 55% in Implanon removal (42% for hospitals and 13% of private sector). On the other hand the role of MOHP-PHC centers had decreased by 31% points from 76% in Implanon insertion to 45% in Implanon removal. Such findings raise important issues related to the high quality

of performance of service providers in hospitals in both insertion and removal. Additionally, the role of the private clinics in Implanon removal could raise many questions as non-acceptability of the private sector to Implanon method, and attributing women's health problems to Implanon use.

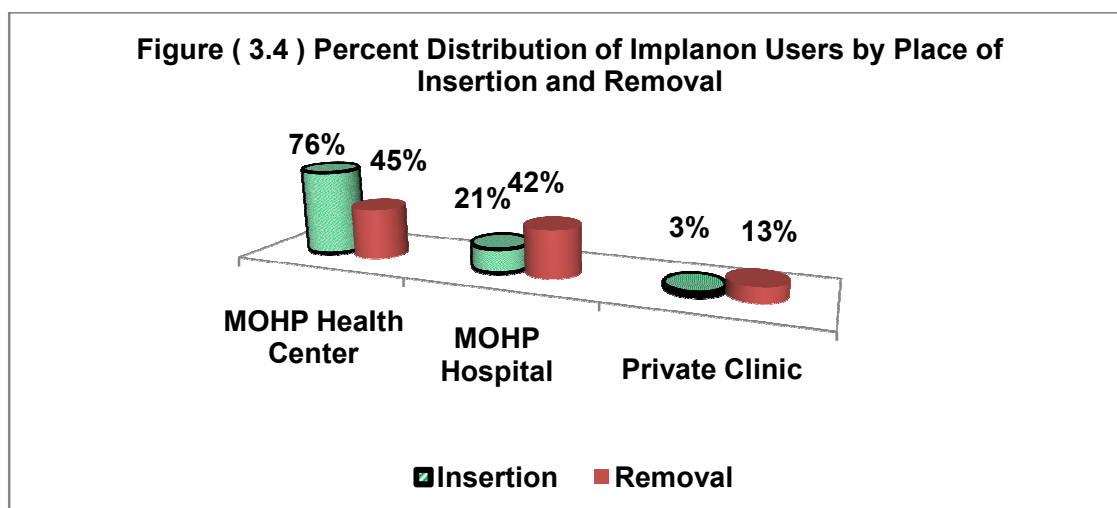


Figure (3.4) Percent Distribution of Implanon Users by Place of Insertion and Removal

Table (3.5) illustrates the percent distribution of IU according to the health facilities in which they got the Implanon removal services. The table demarcates that for each ten IU, 5 women got the Implanon removal services in MOHP –PHC centers and 4 IU got the service in MOHP hospitals one IU got the service in private clinic. However, the situation was different for IC and ID ($p=0.001$). For each ten IC, five women got Implanon removal services in MOHP –PHC centers and four IU got the service in Hospitals and one woman got the service in private clinic. However, for each ten ID, four women got Implanon removal services in MOHP –PHC centers and four IU got the service in hospitals and two women got the service in private clinics.

Table (3.5) Percent distribution of Implanon Users by Place of Implanon Removal

Contraceptive methods	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
MOHP Health Center	132	46%	52	43%	184	45%
Governmental Hospital	129	45%	43	36%	172	42%
Private Clinic	26	9%	25	21%	51	13%
Total	287	100%	120	100%	407	100%

P= 0.001

4- Pregnancy after Implanon use

Table (4.1) illustrates the percent distribution of Implanon Users who desired pregnancy after Implanon Removal. The information derived from the table shows a significantly ($p=0.000$)

high proportion of ID got pregnant after Implanon removal (36%) compared to IC (14%). However, the OR=0.3 and 95% CI 0.18- 0.49 indicates that Implanon continuation for three years does not reduce the opportunities for women to get pregnant after its use and removal after three years of use.

Table (4.1) Percent distribution of Implanon Users who got pregnant after Implanon removal and time of pregnancy after removal

Got pregnant	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Yes	41	14%	43	36%	84	21%
No	246	86%	77	64%	323	79%
Total	287	100%	120	100%	407	100%

$P= 0.000$ OR= 0.3 (95% CI = 0.18-0.49)

Figure (4.1) adds important information about contraceptive technology science. The figure shows the percent distribution of Implanon Users by time of occurrence of pregnancy after Implanon removal. It is obvious that 44% of IC got pregnant within three months of Implanon removal, versus 19% ID. Such findings was statistically significant ($p= 0.004$) OR = 4 (95% CI = 1.5-10.6). Such statistical findings could be interpreted that those who removed Implanon after completing the three years of use had four times more probability to get pregnant within three months of removal, than those removed the Implanon before three years of use. Medically, such finding could hypothesis that removal of Implanon before three years, is associated with left over progesterone that continue to work for some time and delay the occurrence of pregnancy. However, removal of Implanon after completing three years of use is associated with marked decline in progesterone level which is not enough to prevent pregnancy.

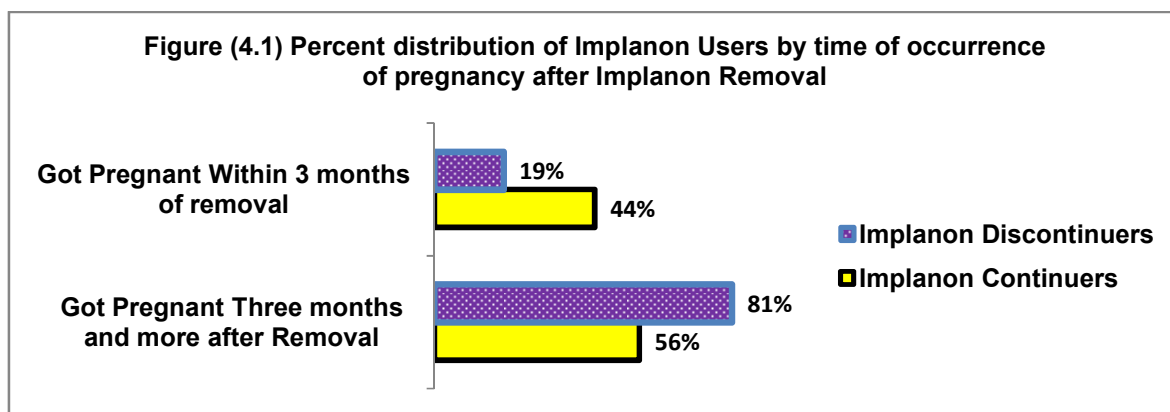


Figure (4.1) Percent distribution of Implanon Users by time of occurrence of pregnancy after Implanon Removal [$p= 0.004$] OR = 4 95% CI = 1.5-10.6

Table (4.2) affirms the information about time of occurrence of pregnancy and Implanon removal among IC and ID. The table highlights the information that, among IC who got pregnant after Implanon removal, 100% got pregnant within the first year of removal. Among

ID who got pregnant after Implanon removal, only 63% got pregnant within the first year of removal and 37% got pregnant one year and more after removal.

Table (4.2) Percent distribution of Implanon Users who got pregnant after Implanon removal Implanon by time elapsed between removal and occurrence of pregnancy

Implanon removal- Pregnancy	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
<3 months	18	44%	8	19%	26	31%
3 < 6	12	29%	10	23%	22	26%
6-<12	11	27%	9	21%	20	24%
12 and more	0	0%	16	37%	16	19%
Total	41	100%	43	100%	84	100%

5- Side effects of Implanon

Information pertaining to the reported side effects associated with Implanon use is crucial to contraceptive technology science. Figure (5.1) points to that about one third of IU (37%) reported complaint from side effects of Implanon. A significantly high proportion of ID (67%) reported the complaints from side effects than IC (25%) ($p=0.000$). The OR of 0.17 raises the question of, is continuation of Implanon use gradually reduces the feeling towards side effects?, that is continuing use is protective against the development of side effects?. Or is the selection of suitable clients and counseling process were better for both continuation and adaptation to side effects?, Are the side effects were the driving force for discontinuers to stop use before completing three years of use? Or they justify the reason of Implanon removal to the development of side effects?

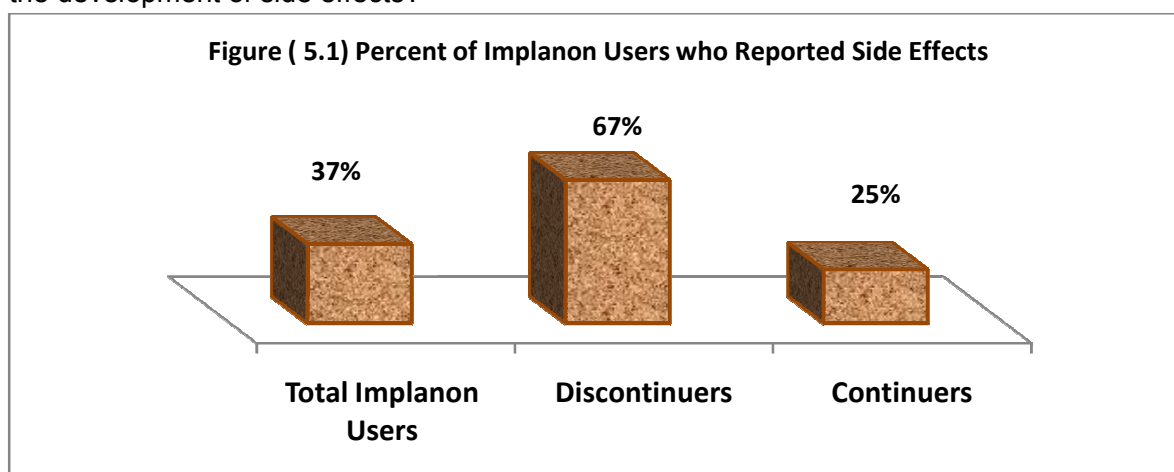


Figure (5.1) Percent of Implanon Users who Reported Side Effects
 $P= 0.000$ $OR= 0.17$ ($95\% CI = 0.11 -0.26$)

Figure (5.2) shows information about one third (37%) of total IU (427 women) who complained from Implanon side effects by type of side effects. There were nine types of side effects. It is

obvious from the figure that spotting ranked the first complaint (61%) of IU followed by increase in body weight (25%) and back pain (23%).

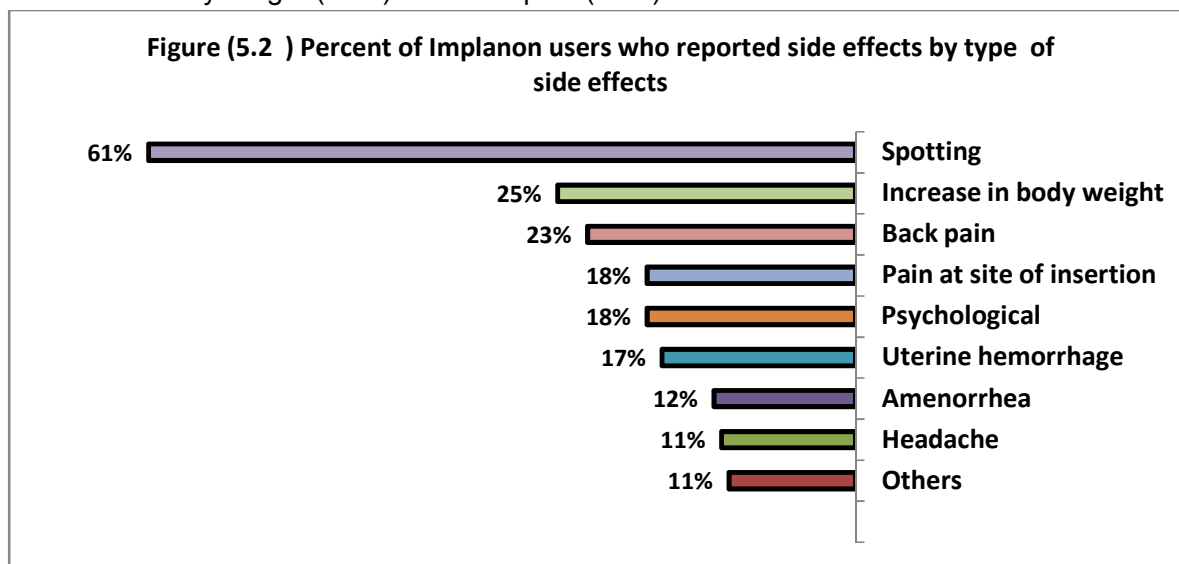


Figure (5.2) Percent of Implanon users who reported side effects by type of side effects

The rank ordering of reported side effects varied between IC and ID. Table (5.1) shows that among IC, spotting ranked the first complaint (81%) followed by increase in body weight (27%) and amenorrhea (25%). Among ID, uterine hemorrhage was reported by 33% of IU and back pain was reported by 28% of IU.

Table (5.1) Percent of Implanon users by type of reported side effects

Side Effects	Continuers		Discontinuers		Total	
	No	%	No	%	No	%
Spotting	62	81%	33	41%	95	61%
Psychological	12	16%	16	20%	28	18%
Uterine hemorrhage	0	0%	26	33%	26	17%
Headache	0	0%	18	23%	18	11%
Amenorrhea	19	25%	0	0%	19	12%
Pain at site of insertion	10	13%	18	23%	28	18%
Increase in body weight	21	27%	19	24%	40	25%
Back pain	14	18%	22	28%	36	23%
Others	9	12%	8	10%	17	11%
Total	77		80		157	

6- Causes of Implanon removal before 3 years of insertion

The causes of Implanon discontinuation are of the important programmatic and technical and service issues. Removal due to side effects is related to contraceptive technology, removal

due to desire for pregnancy could be attributed to improper counseling. Discontinuation in general for expensive contraceptive method indicates high cost in relation to the benefit and effectiveness. Figure (6.1) illustrates the percent distribution of Implanon Users who removed the method before 3 years by cause. Almost of the causes of discontinuation 80% are related to unsatisfactory quality of counseling (side effects, desire for pregnancy, desire to use another method and physicians' advice against Implanon use). Improper insertion of Implanon/failure to put the capsule in place resulted in occurrence of pregnancy among 2% of ID.

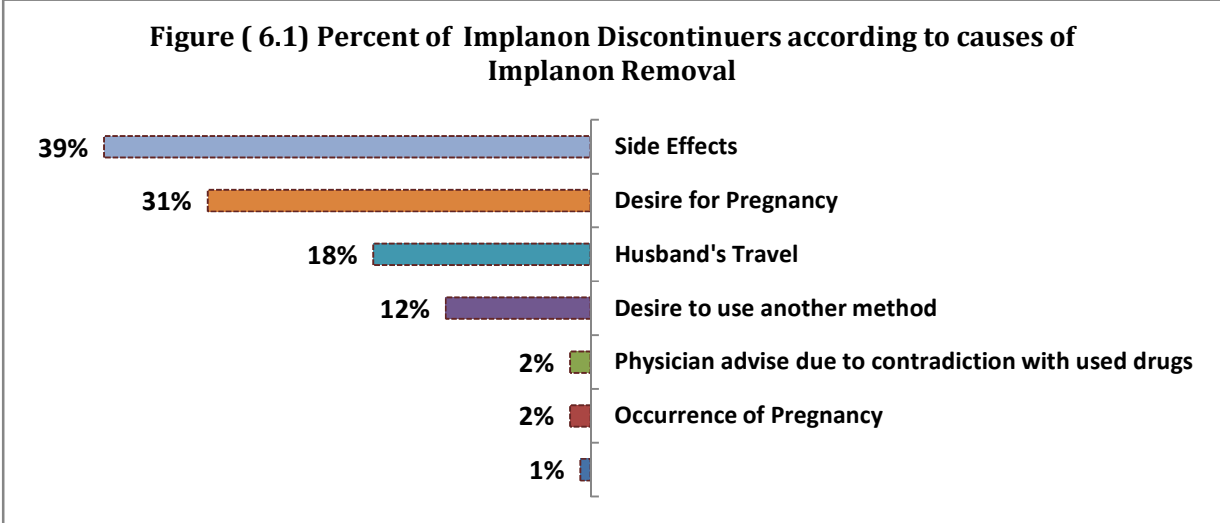


Figure (6.1) Percent of Implanon Discontinuers according to causes of Implanon Removal

7- Advantages of Implanon

Decisions for promoting and increasing the amount of Implanon in Egypt FP Method Mix as well as marketing for Implanon use depends on the advantages of Implanon raised by IU. Figure (7.1) highlighted 5 important advantages about Implanon use: no daily use (74%), no gynecological procedures (57%), reasonable cost (42%), no need for frequent follow up (40%) and could be used by lactating women (37%).

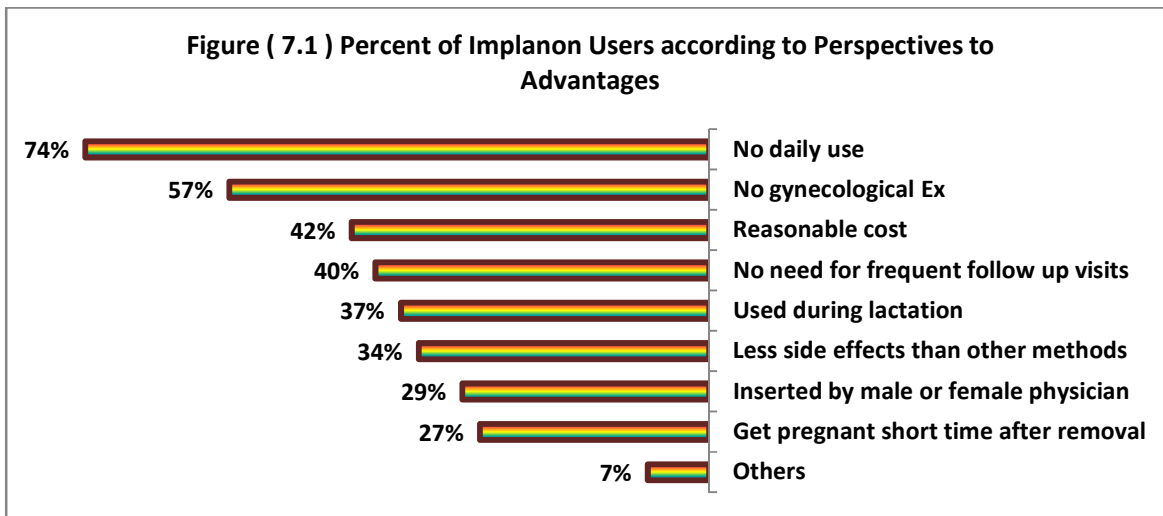


Figure (7.1) Percent of Implanon Users according to Perspectives to Advantages

Figure (7.2) displays the views of IC regarding the important advantages about Implanon use and presented in ranking order: no daily use (75%), no gynecological procedures (58%), reasonable cost (42%), no need for frequent follow up (41%), less side effects than other methods (37%) and could be used by lactating women (35%).

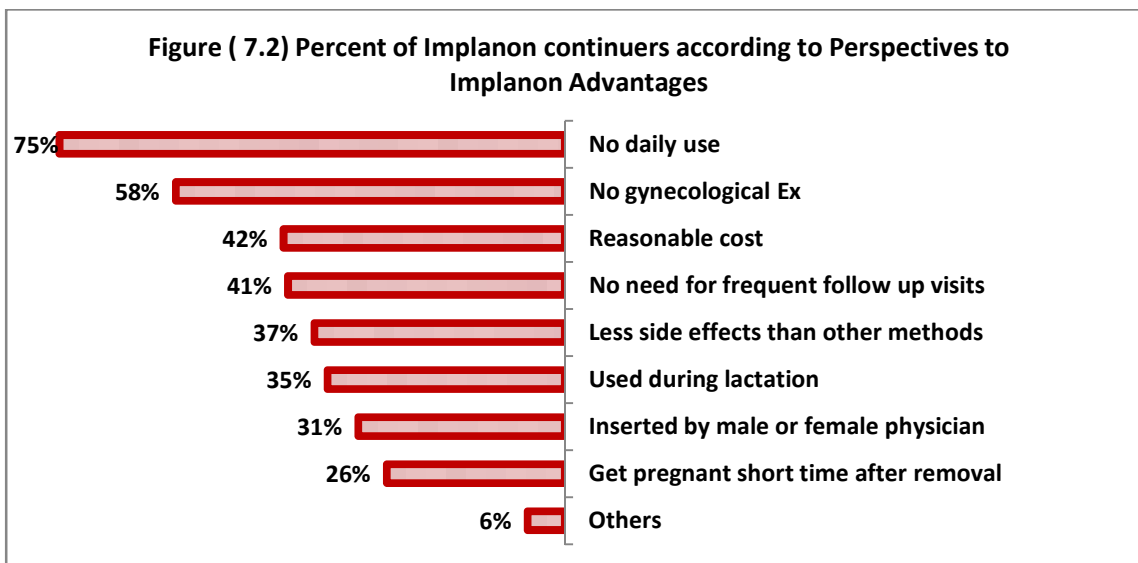


Figure (7.2) Percent of Implanon continuers according to Perspectives to Implanon Advantages

Figure (7.3) demonstrates the views of ID regarding the important advantages about Implanon use and presented in ranking order: no daily use (72%), no gynecological procedures (55%), reasonable cost (44%), could be used by lactating women (40%) and no need for frequent follow up (36%).

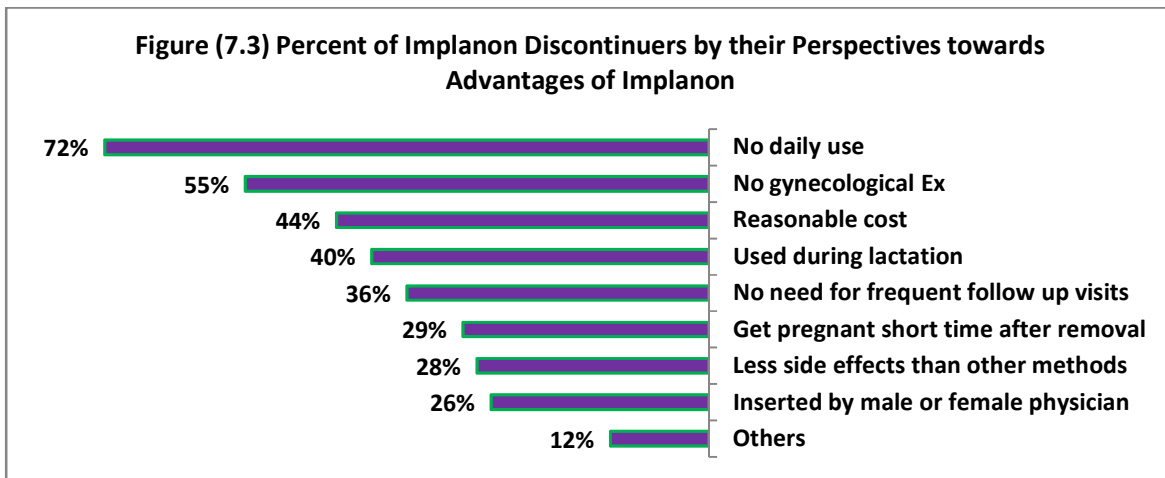


Figure (7.3) Percent of Implanon Discontinuers by their Perspectives towards Advantages of Implanon

Figure (7.4) spots light on the disadvantages of Implanon use that could reduce the role of Implanon in reducing the unmet needs and introduction of new FP users and continuation of use for the second and more times after removal. There was a consensus among IC and ID that Implanon insertion (about 70%) and removal (about 45%) were not satisfactory/painful/distressing.

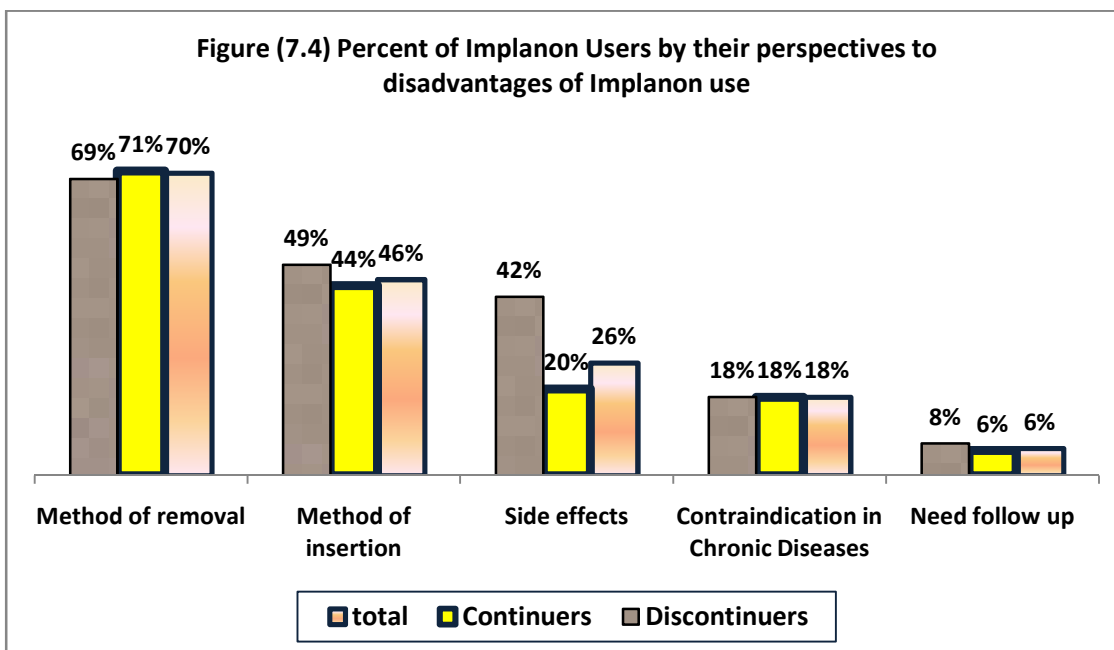


Figure (7.4) Percent of Implanon Users by their perspectives to disadvantages of Implanon use

Qualitative data

FGDs with FP Directors (FPD) and District Nurse Supervisors (DNS) working in Cairo and Alexandria governorates had raised important information about the demand of women to Implanon.

Implanon Responds to unmet needs for FP methods:

Implanon responds to unmet needs for FP. From the clients' point of view it satisfies privacy and autonomy in contraceptive choice due to the wide spectrum of criteria of its use. Those criteria of use makes Implanon the method of choice due to advantages compared to other methods.

- * It is the method that service providers resort to in case of failure of other FP methods not medically suitable or acceptable by the client,
- * The duration of action of Implanon is three years which is suitable for spacing and/or limiting fertility,
- * Implanon is suitable for lactating women
- * The price in MOHP facilities at LE 5 makes the method financially accessible especially if matched with protection from unwanted pregnancy for three years,
- * Compared to OCs; it does not need daily use,
- * If amenorrhea occurs as side effect; it keeps the woman has satisfactory life for praying,
- * It is safe and effective method,
- * Compared to OCs, Implanon could be used at any age
- * Compared to Depo-provera it has less side effects related osteoporosis
- * Compared to IUD, Implanon neither need vaginal procedures nor increase the risk of reproductive tract infections,
- * It does not interfere with sexual relations as condom
- * Immediately effective, after 24 hours of insertion
- * Protective against cancer endometrium
- * Less side effects compared with other methods,

Availability of Implanon in MOHP FP Facilities

FGDs with FP Directors (FPD) and District Nurse Supervisors (DNS) working in Cairo and Alexandria governorates had raised important information about the availability of Implanon. They mentioned that the demand for Implanon exceeds the supply. Consequently, the service providers are always in critical position in providing the Implanon insertion services: either to new users or to continuers to whom Implanon was removed after completing three years.

The restriction of availability of Implanon in MOHP-Governmental facilities without its supply to the private sector has many demerits: limiting Implanon use to special strata of the population who use the governmental sectors. Moreover, when the amounts available in the MOHP clinics are not enough to respond to demands, the private sector cannot contribute to

unmet needs for Implanon. Additionally, excluding private sector from Implanon program could develop opposition to its use, and sometimes attributing patients' complaints to Implanon use.

The MOHP policy of subsidizing Implanon to make clients pay nominal amount of money coupled with the policy of restriction of supply the method to be available only in MOHP facilities could be unsatisfactory policy. Physicians who work in governmental sector work as well in the public sector. Therefore, leakage of the method from public to gynecological private clinics could not be prevented.

Training in Implanon Insertion

The current training program in Implanon insertion is satisfactory. However, practical training is not enough to allow developing skills and competency in Implanon insertion

Training courses in Implanon Insertion are not enough to cover all FP physicians especially with high turnover and lack on-job training,

Training in FP counseling is continuously decline in quality. Consequently, clients who started use FP method will be susceptible to external pressure and respond to rumors and stress of relatives and mother in-law to discontinue using the method,

Untrained or improperly trained physicians could demonstrate failure of Implanon insertion as mentioned by participants in the following two examples:

- A doctor after introducing the capsule, and while pulling out the syringe, had pulled the capsule out which fall on the ground. The woman left the clinic without having inserted capsule,
- During providing Implanon removal in in the hospital a doctor discovered that no capsule had been inserted.

Training in Implanon removal

Due to inability of training to build the capacity of service providers skills in Implanon removal there are different problems that could happen in FP clinics:

- * Implanon removal services are usually lacking in the MOHP health units. Therefore, the women has to keep the lost-effectiveness method for more than three years,
- * Lack of continuity of care as the service provider who inserted the capsule is not the same person who remove the capsule
- * Many women, who insert the capsule in the health center, seek the Implanon removal services in hospitals. However, gynecologists in MOHP facilities are not trained in Implanon removal. Consequently women have to seek the service of tertiary level hospitals (educational hospitals) to remove Implanon and pay LE 25 for the removal services.

Limitations for using Implanon in FP Program

Participants in the FGDs affirmed that Implanon is highly acceptable from the contraceptive technology point of view. Participants affirmed that Implanon is highly acceptable to both the woman and her husband. However, it is the process of service delivery that reduces the advantage of Implanon use; for example:

- The restrictions concerned with adjusting the use of the method for those accepting its continuous use for three years. Clients could feel that they are under-pressure to continue use this new method for three continuous years, without changing her mind to stop using before three years.
- According to the standard of practice, the Implanon users should be less than 75 kg in weight. However, with high prevalence of obesity in Egypt, Implanon is inserted to obese women to whom Implanon removal makes a major challenge,
- Being continuously unavailable in reasonable amounts, method shift is common among those who like to continue use Implanon, and sometimes women stop using any FP method due to shortage in Implanon supply,
- The availability of Implanon capsules without accessibility to the necessary supplies for insertion as local anesthesia and the syringes adds a responsibility on women to buy such things. Such situation make women deviate to other easier use method,
- After insertion of Implanon, inflammation and edema at the site of insertion could occur and the woman has to use antibiotics which add another burden on Implanon users.

CHAPTER:5 CONCLUSION AND RECOMMENDATIONS

Conclusion:

The study concluded that Implanon use is highly effective and acceptable method by women especially lactating women and those need birth spacing for three years. However, there are three limitations that restrict its wide use: limited amounts of Implanon available in MOHP facilities, improper training in counseling, insertion and removal, and lack of follow up system for Implanon users.

Recommendations

■ Increase the availability of Implanon in Health Facilities:

- Increase in the amount of Implanon capsules available in MOHP canthers especially MOHP Hospitals
- The amount of available Implanon should be enough to cover the needs who clients who want to continue after three years of use as well as the new users
- Feasibility studies for making Implanon available in the private sector, as the private physicians could play a role in Implanon insertion and removal.

■ Training in FP Counseling for Implanon use

- Proper training of physicians and nurses in counseling for Implanon use with focusing on the most suitable situations for use with more priority to lactating mothers who want birth spacing for three years,
- Proper training of physicians in Implanon insertion. Each physician trained in Implanon insertion should provide the service to 5 clients under clinical supervision of the trainer,
- Proper training in Implanon removal. Each physician trained in Implanon removal should provide the service to 5 clients under clinical supervision of the trainer,
- Physicians of different specialties should have enough information about contraceptive technology especially indications and contraindication to reduce discontinuation of use by referring to unscientific medical evidence

■ Follow up services for Implanon users:

- Follow up of Implanon users should be an integral part of the community workers,
- Implanon users attending FP clinics for Implanon removal before three years of use should be submitted to investigations to identify causes to be categorized as: improper counseling, side effects or social reasons
- MOHP/PS MIS data should include information about discontinuation and shift across contraceptive methods and periodically report about the dynamics of use.

 **Further studies on Implanon use in Egypt:**

- Assess the impact of increasing availability of Implanon capsules in MOHP hospital on contraceptive use and continuation rates,
- Measure the role of private sector in Implanon insertion and removal
- Assess the role follow up of Implanon users by community workers and impact on continuation rate
- Examine the association between Implanon use and un-met needs for FP methods
- Identify the non-contraceptive health benefits of Implanon use among Egyptians
- Cost-benefit, cost effectiveness and cost efficiency studies for Implanon use in Egypt.

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ANNEX:

The Questionnaire Form to Implanon Users in 2008 and Interviewed in 2012



وزارة الصحة والسكان / قطاع السكان

متابعة مستخدمي الإمبلانون من خلال عيادات
وزارة الصحة والسكان ٢٠٠٨-٢٠١٢

استمارة استبيان المستخدمين
للإمبلانون عام ٢٠٠٨

يونيو ٢٠١٢

بيانات هذه الاستمارة سرية ولن
تستخدم في غير أغراض البحث العلمي

متابعة مستخدمي خدمات الإمبلاون من خلال عيادات وزارة الصحة والسكان ٢٠٠٨-٢٠١٢

١- المحافظة:	٢- الاداره:	٣- الوحدة:	٤- رقم استمارة:
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أولاً- البيانات المسجله في استمارة المنتفعات بالمركز الصحي

١-١ الاسم:	٢-١ السن:	٣-١ عدد الأبناء:
٤-١ تاريخ تركيب الإمبلاون:	اليوم:	الشهر:
٥-١ رقم التليفون:		

ثانياً - البيانات التعريفية عند المقابله الحاليه

أنا إسمي وبأشغل ممرضه في الوحدة الصحيه وإحنا حالياً بنتابع السيدات اللي ركبوا الكبسولات بتاعة تنظيم الأسرة ، وعاوزين نسأللك شوية أسئله علشان نظمئن عليكى ونشوف رأيك فى وسيلة الكبسولات علشان نقدر نفيد أكبر عدد من المنتفعات بالوسيله دى. (١) موافقة

(٢) غير موافقة

١-٢ السن الحالى:	٢-٢ عدد سنوات التعليم:	٣-٢ العمل بأجر: (١) نعم (٢) لا
٤-٢ السن عند الزواج:	٥-٢ عدد مرات الحمل:	٦-٢ عدد مرات الإجهاض
٧-٢ عدد مرات ولادة طفلमित	٨-٢ عدد الأبناء المولودين أحياء	٩-٢ عدد الأبناء اللي معاكى حالياً
١٠-٢ عمر آخر طفل: شهر	١١-٢ ياترى إنتى حامل حالياً:	(١) نعم (٢) لا
١٢-٢ ياترى بترضعى حالياً	(١) نعم (٢) لا	

ثالثاً -بيانات عن استخدام الكبسولات

#	الأسئلة ومحدداتها	الكود الخاص بالإجابة	الانتقالات
١-٣	ياترى استعملتى وسيله لمنع الحمل قبل تركيب الكبسولات ؟	(١) نعم (٢) لا	في حالة لا انتقل الى ٣-٣
٢-٣	في حالة نعم ماهى هذه الوسيله: (١) الحبوب الفميه (٢) - اللولب (٣) الحقن (٤) الواقى الذكري (٥) رضاعه طبيعيه (٦) الكبسولات		
٣-٣	إحنا مسجلين إنك ركبتي الكبسولات في شهر سنة ممكن تكلمينا عن اللي حصل في الفتره دى: هل انتى كنتى عارفه عن الكبسولات اللي تحت الجلد لتنظيم الأسرة قبل كده ؟ (١) نعم (٢) لا		
٤-٣	يا ترى ركبتي الكبسولة فين : (١) المركز الصحي (٢) طبيب خاص (٣) مستشفى حكومى (٤) أخرى تذكر		
٥-٣	هل الطبيب أو الممرضه شرحت لك معلومات عن الكبسولات قبل التركيب؟ (١) نعم (٢) لا		
٦-٣	هل الطبيب أو الممرضه قالوا لك إن الكبسولات لازم نطلعها بعد ٣ سنوات لأن مفعولها بيروح ؟ (١) نعم (٢) لا		
٧-٣	الكبسولات دى [] مركبها كام شهر [] سنه []		
٨-٣	ياترى شلتى الكبسولات إمتى ؟ (١) بعد ٣ سنوات من التركيب (٢) قبل ٣ سنوات من التركيب (٣) لم أشيلهم و بقى لهم أكثر من ٣ سنوات		
			انتقل الى مربع (رابعاً)
			انتقل الى مربع (خامساً)
			انتقل الى مربع (سادساً)

رابعاً - استخراج الكبسولة بعد ٣ سنوات تماماً

#	الأسئلة ومحدداتها	الكود الخاص بالإجابة	الانتقالات
١-٤	ياترى شلتي الكبسولة فين ؟	(١) المركز الصحى (٢) طبيب خاص	(٣) مستشفى حكومى (٤) أخرى تذكر
#	الأسئلة ومحدداتها	الكود الخاص بالإجابة	الانتقالات
2-4	ياترى استعملتى وسيله ثانيه بعد ما شلتي الكبسولة ؟	(١) لم استخدم	انتقلى الى ٣-٤
		(٢) استخدمت وسيله	انتقلى الى ٥-٤
٣-٤	ياترى حملتى بعد ما شلتي الكبسولة ؟	(١) نعم	
		(٢) لا	انتقلى الى ٦-٤
٤-٤	ياترى حملتى بعد كام شهر ؟		
٥-٤	فى حالة نعم ماهى هذه الوسيله: (٤) الواقى الذكرى (٥) رضاعه طبيعيه (١) الحبوب الفميه (٢) اللولب (٣) الحقن	(٦) كبسولات	
٦-٤	ياترى أثناء ما كنت مركبه الكبسولة كنت بتروحي تظمنى على صحتك فى المركز الصحى أو عند الطبيب ؟	(١) نعم	
		(٢) لا	
٧-٤	ياترى وانتي مركبه الكبسولة كان بيحصل حاجات تتعبك؟	(١) نعم	
		(٢) لا	انتقلى الى مربع (سابعاً)
٨-٤	ياترى إيه الحاجات اللى كانت بتتعبك ؟ (ممكن أكثر من إجابة)	(٢) التهابات مهبلية/ إفرازات	(٣) تغير فى الحاله النفسيه (٤) تغير فى الحاله الزوجية
		(٦) حبوب بالوجه	(٧) صداع
		(١٠) آلام بالثدى	(١١) آلام بالبطن
		(١٤) آلام بالظهر	(١٥) أخرى تذكر:
		(١) نزول دم فى غير مواعيد الدوره	(٨) غممان نفس
		(٥) نزيف	(١٢) آلام مكان الكبسولات
		(٩) انقطاع الدوره	
		(١٣) زياده فى الوزن	

خامساً - استخراج الكبسولة قبل ٣ سنوات من التركيب

#	الأسئلة ومحدداتها	الكود الخاص بالإجابة	الانتقالات
١-٥	ياترى شلتي الكبسولة فين ؟	(١) المركز الصحى (٢) طبيب خاص	(٣) مستشفى حكومى (٤) أخرى تذكر
٢-٥	ياترى ليه شلتي الكبسولة قبل ميعادها ؟	١- حدوث حمل ٢- الرغبه فى الحمل ٣- حدوث أعراض جانبيه ٤- سفر / غياب الزوج ٥- الرغبه فى التحول لوسيله أخرى ٦- الطبيب قال إنها تتعارض مع حالتك الصحيه ٧- الطبيب قال إنها تتعارض مع الأدوية اللى بتأخذها ٨- أخرى تذكر	
٣-٥	فى حالة حدوث حمل قبل شيل الكبسولة ياترى كان أمتى ؟	١- خلال السنه الأولى ٢- خلال السنه الثانيه ٣- خلال السنه الثالثه	
٤-٥	ياترى حصل حمل بعد ما شلتي الكبسولة ؟	(١) نعم	انتقلى الى ٥-٥
		(٢) لا	انتقلى الى ٦-٥
٥-٥	ياترى حصل حمل بعد كام شهر من شيل الكبسولة ؟		انتقلى الى ٨-٥
٦-٥	هل استعملتى وسيله تنظيم أسره أخرى ؟	(١) نعم	
		(٢) لا	

٧-٥	في حالة نعم ماهي هذه الوسيلة؟			(١) الحبوب الفموية	(٢) اللولب	(٣) الحقن
				(٤) الواقي الذكري	(٥) رضاعه طبيعته	(٦) كبسولات
٨-٥	ياترى أثناء ما كنت مركبه الكبسوله كنت بتروحي تطمنى على صحتك في المركز الصحى أو عند الطبيب ؟			(١) نعم	(٢) لا	
٩-٥	ياترى وانتي مركبه الكبسوله كان بيحصل حاجات تتعبك؟			(١) نعم	(٢) لا	انتقلى الى مربع (سابعاً)
١٠-٥	ياترى إيه الحاجات اللي كانت بتتعبك ؟ (ممكن أكثر من إجابة)			(١) نزول دم في غير مواعيد الدورة	(٢) التهابات مهبلية/ إفرازات	(٣) تغير في الحالة النفسيه
				(٤) تغير في الحالة الزوجية	(٥) نزيف	(٦) حبوب بالوجه
				(٧) صداع	(٨) غممان نفس	(٩) انقطاع الدورة
				(١٠) آلام بالثدى	(١١) آلام بالبطن	(١٢) آلام مكان الكبسولات
				(١٣) زياده في الوزن	(١٤) آلام بالظهر	(١٥) أخرى تذكر:

سادسا - عدم استخراج الكبسولات وبقائها لأكثر من ثلاث سنوات

#	الأسئلة ومحدداتها	الكود الخاص بالإجابة	الانتقالات
١-٦	لماذا استميتي ولم تذهبي الى المركز الصحى / المستشفى لاستخراج الكبسوله ؟	(١) لم أعرف انه المفروض تتنشال (٢) لم يقولى الطبيب أو الممرضه (٣) مفيش مشاكل لو سبتتها (٤) سادفع فلوس لو شلتها (٥) مفيش مشاكل لو سبتتها (٦) أخرى تذكر	
٢-٦	ياترى حصل حمل وانتي مركبه الكبسوله ؟	(١) نعم (٢) لا	انتقلى الى ٥-٦
٣-٦	في حالة حدوث حمل قبل شيل الكبسوله ياترى كان أمتى ؟	١- خلال السنه الأولى ٢- خلال السنه الثانيه ٣- خلال السنه الثالثه ٤- بعد السنه الثالثه	
٤-٦	ياترى حصل حمل بعد كام شهر من إنتهاء مفعول الكبسوله بعد ثلاث سنوات ؟		انتقلى الى ٥-٦
٥-٦	ياترى أثناء ما كنت مركبه الكبسوله كنت بتروحي تطمنى على صحتك في المركز الصحى أو عند الطبيب ؟	(١) نعم (٢) لا	
٦-٦	ياترى وانتي مركبه الكبسوله كان بيحصل حاجات تتعبك؟	(١) نعم (٢) لا	انتقلى الى مربع (سابعاً)
٧-٦	ياترى إيه الحاجات اللي كانت بتتعبك ؟ (ممكن أكثر من إجابة)	(١) نزول دم في غير مواعيد الدورة (٢) التهابات مهبلية/ إفرازات (٣) تغير في الحالة النفسيه (٤) تغير في الحالة الزوجية (٥) نزيف (٦) حبوب بالوجه (٧) صداع (٨) غممان نفس (٩) انقطاع الدورة (١٠) آلام بالثدى (١١) آلام بالبطن (١٢) آلام مكان الكبسولات (١٣) زياده في الوزن (١٤) آلام بالظهر (١٥) أخرى تذكر: (١٦) (١٧) (١٨)	

سابعا - رؤية السيدة تجاه استخدام كبسوله الإمبرانون كوسيله لتنظيم
الأسره

١-٧ ياترى فى رأيك ايه مميزات كبسولات تنظيم الأسره ؟

- (١) تستخدم أثناء الرضاعه
- (٢) لا تحتاج تذكر الاستخدام اليومى
- (٣) لا تحتاج كشف أمراض نسا
- (٤) يمكن تلقى الخدمه من طبيب أو طبيبه
- (٥) أقل فى المضاعفات عن الوسائل الأخرى
- (٦) يحدث الحمل بسرعه بعد استخراج الكبسوله
- (٧) سعرها مناسب
- (٨) لا تحتاج متابعه مستمره
- (٩) أخرى تذكر

٢-٧ ياترى فى رأيك ليه الستات لا تستخدم الكبسولات ؟

- ١- لها آثار جانبيه
- ٢- تحتاج جراحه فى الذراع أثناء التركيب
- ٣- تحتاج جراحه فى الذراع أثناء الاستخراج
- ٤- تحتاج الى متابعه
- ٥- لا يمكن استخدامها فى حالات - السكر - الضغط - أمراض الكلى - ارتفاع نسبة دهون الدم
- ٦- مش كل الناس تعرف عنها
- ٧- أخرى

شكرا