Strengthening Family Planning
تعزيز تنظيم الأسرة
Project

Jordan Family Planning Users' Profiles and Market Segmentation Analysis:
A review of the literature and available data

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EXECUTIVE SUMMARY

The purpose of this review is to:

- Use existing data to determine the size and distribution of the Family Planning (FP) market in Jordan.
- Study profiles of users and non-users of FP methods and review factors - demographic, socioeconomic, cultural, and other - that affect FP method use.
- Review existing research on providers' profiles and supply side factors affecting FP in Jordan.
- Divide the Jordanian FP market into segments and estimate the size of potential demand by method and source.

The overall objective is to inform the development of marketing and strategic plans to increase demand of FP products and services in Jordan.

According to the 2009 Jordan Population and Family Health Survey (JPFHS), 62.6% of women reported using a FP method to space or limit pregnancy. Approximately 44% or an estimated 423,581 (DOS estimates) are using a modern method, more than half of which are IUD users. Less than 0.1% of women are using Norplant.

We study profiles of various types of users and non-users and find interesting disparities by age, Socio Economic Status (SES), method sources, and barriers against use. In what follows are some key findings:

- Approximately 39.6% of IUD users belong to the upper SES group, compared with 32.8% for pill users and 19.4% for injection users.
- JAFPP has 12.4% market share for IUDs, compared with 7% for injections and merely 2% for pills. Similarly, private providers (excluding pharmacies) have a high market share in IUDs, but very low shares in pills and injections (2.9% and 3.4%, respectively).
- More than half of modern method users seek advice on FP from their health providers, unlike the majority of traditional users who rely on themselves or their husbands for advice.
- About 72.6% of current pills users discontinued using a method in the past 5 years. In fact, fear of side effects and health repercussions are found to be major reasons behind objections about and discontinuation of oral contraceptive pills.

Existing supply-side barriers to prescribing a modern FP method include a continued bias towards 'checking for fertility' especially among newly married women, knowledge deficit and misconceptions among health providers, particularly with implants and injectables, as well as a lack of proper FP counseling.

Using the 2009 JPFHS, we divide the Jordan FP market into the following segments: Newly married (10.7%), Active child-bearing (30.1%), Limiting (52.6%), and Infecund (6.6%). We use the Department of Statistics (DOS) population figures to estimate the size of each segment. We define 'potential users' and estimate their number in each segment. In total, an estimated 246,970 potential users constitute an approximate 58% increase in the total number of modern method users. We provide an estimation of potential demand by source and method.

INTRODUCTION

The purpose of this review is to inform the development of marketing plans for general demand creation for Family Planning (FP) products and services in Jordan, as well as strategic plans for partnerships with private sector pharmaceutical companies and FP service providers. This analysis provides an understanding of the market size for FP methods in Jordan, the way the market is divided along demographic, socioeconomic, cultural, and other factors, and the role that

the public, private, and NGO providers play in meeting current and potential demand for FP in Jordan.

Specifically, the objectives are to:
- Use existing data to determine the size and distribution of the FP market in Jordan.
- Study profiles of users and non-users of FP methods and review factors - demographic, socioeconomic, cultural, and other - that may affect FP method use in Jordan.
- Review existing research on providers' profiles and supply side factors affecting FP in Jordan.
- Divide the Jordanian FP market into segments, estimate the number of current and potential users in each segment, and estimate the size of potential demand by method and source.

METHODOLOGY

We use a combination of methods to complete this review. This includes a review of recent documents and reports on the FP market in Jordan (see Annex IV for a complete list). We also analyze secondary data drawn from the 2007 and 2009 Jordan Population and Family Health Surveys (JPFHS). Specifically, the 'Individuals-Female' datasets provided by ORC Macro (Calverton, MD) contain information on FP, fertility preferences and attitudes, and other relevant socioeconomic and demographic indicators. Note that the 2009 survey was a significantly shorter survey than the one in 2007. Specifically, variables such as preferred source for FP information, media exposure to FP, FP counseling, attitude towards domestic violence and participation in household decision making are not included in the survey. We instead use the 2007 data to describe these variables. We use STATA (statistical software) to perform the quantitative analysis.

FINDINGS

A. Size and distribution of the FP market in Jordan: FP method use in Jordan

The 2009 JPFHS sample contains information on 10,109 ever married and 9,639 currently married women of reproductive age (MWRA). We define the FP market to include currently MWRA and exclude infecund or menopausal women. Table 1 shows the distribution of FP method use by type of method as well as the approximate size of each group. The latter is estimated using Department of Statistics (DOS) data on the estimated number of MWRA in 2009.

Table 1: Use of FP methods in Jordan, 2009

Use of FP methods	Market size	
	in Percent*	**Estimated numbers****
Any modern method	44.3	423,581
IUD	24.1	230,731
Pills	8.7	83,511
Condoms	6.7	63,996
Sterilization	2.5	23,991
LAM	1.5	14,732
Injections	0.6	6,103
Norplant	0.1	579
Traditional methods	18.3	175,057
Not currently using	37.4	357,958

Source: JPFHS 2009
* Percent of currently MWRA and excluding infecund or menopausal women; weighted analysis
**Using a DOS estimate of 1,024,302 MWRA in 2009, and excluding infecund or menopausal women (6.6%).

Approximately 62.6% of women reported using some FP method to space or limit pregnancy. About 44% or an estimated 423,581 are currently using a modern method, with more than half of them using IUDs. Pills and condoms are the second and third most common methods, respectively. The least common is the Norplant: less than half a percent of women reported using Norplant in 2009. Approximately 18% of women are using traditional methods.

B. Profiles of users and non-users of FP methods in Jordan

This section discusses profiles of current users and non-users of FP methods. Variables analyzed are age, Socio-Economic Status (SES), educational attainment, number of children, sources of FP methods, motivation to use a method, barriers against use or discontinuation, influencers, and decision-makers. When appropriate, a comparison is made between the various groups of users. Annex I provides a summary of these profiles by group.

1. **Modern method users:**

This group constitutes about 44% of the FP market.

- **Age**: Most of the women in this group are between 25 and 44 years old, with the peak age between 32 and 35.
- **SES**: Unlike non-users who seem to be mostly coming from the lower third of the wealth distribution, modern method users have more women belonging to the upper SES group (36%).
- **Education**: About 93% have a secondary education or higher, but that does not differ from the trend in the overall MWRA population (92%).
- **Parity**: On average, women in this group have 4.5 children or 63% higher than those who do not use any method, but almost the same number of children as those using traditional methods.
- **Sources**: Sources of methods include the public sector (45.3%), the private sector and pharmacies (34.4%), and NGOs (20.2%). In particular, JAFPP has 12.4% market share.
- **Motivation**: About 60% of modern users are using methods to limit pregnancies and 40% are using them for spacing.
- **Barriers/Discontinuation**: About 62.5% of current modern method users discontinued using a method in the past 5 years, compared with 76.4% of current traditional users and 78.5% of non-users. Almost 34% of modern users who previously used the pill discontinued the method because of side effects and health concerns. This compares with 74.5% of current traditional users who discontinued the pill for the same reasons. Similarly, 30.7% of modern users who previously used the IUD discontinued because of side effects and health concerns, compared with 70.5% in the case of current traditional method users.
- **Influencers**: About 54.5% of modern method users seek advice on FP from their health providers, unlike the majority of traditional users (73%) who rely on themselves or their husbands for advice. Their preferred source for information on FP is the public sector (36%), the private sector (33.6%); JAFPP (16.5%), and the media (10%).
- **Decision-makers**: About 19% of women stated that the decision to use FP was their own and 77% stated that it was a joint decision with their husbands. Participation in household decision-making seems to make a difference: about 81% of modern users said that they participate in 3-4 household decisions[1], compared with 74% of non-users (2007 data). About 6% of this group stated that their husbands disapproved of FP methods, compared with 14% of non-users (2007 data).

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[1] These include decisions on (1) own health care, (2) large expenditures, (3) routine purchases, and (4) visits to relatives.

1a. IUD users: IUD is the most common modern method with more than half of modern method users currently using IUDs to space or limit pregnancy (24.2% of the total FP market). The majority of IUD users (about 67%) are between 30 and 44 years old. Expectedly, IUD users are slightly older than pill and injection users.

About 39.6% of this group belongs to the upper SES, compared with 32.8% for pill users and 19.4% for injection users (Figure 1).

Sources for modern methods differ by type of method (Figure 2). The main source for IUD users is the public sector (39%), followed by the private sector (33.5%), and JAFPP (20.5%). Of all 3 methods (IUDs, pills and injection), JAFPP has the largest market share in IUDs. Similarly, private providers (excluding pharmacies) have a high market share in IUDs, but very low shares in pills and injections (2.9% and 3.4%, respectively).

Figure 1: Modern method users and SES
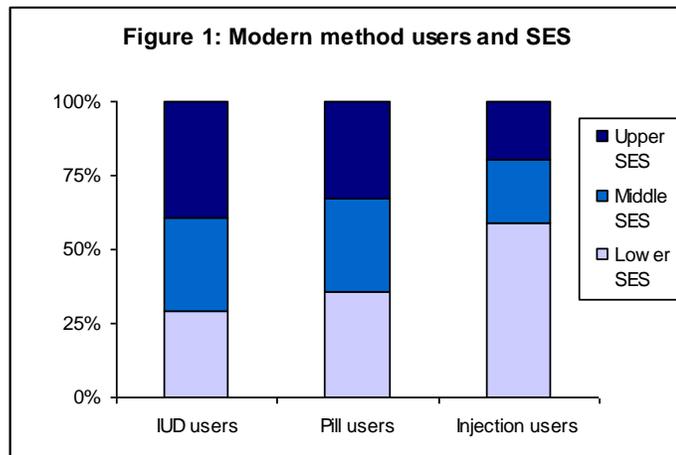
Approximately 58.6% of current IUD users have discontinued using a method in the past 5 years, the lowest discontinuation rate among the 3 types of users.

About 18.7% of women stated that the decision to use IUDs was their own. This seems to be higher when the method is hormonal: 23.2% and 30.1% of women using pills and injections, respectively, stated that the decision to use the method was their own.

Figure 2: Modern method users and sources
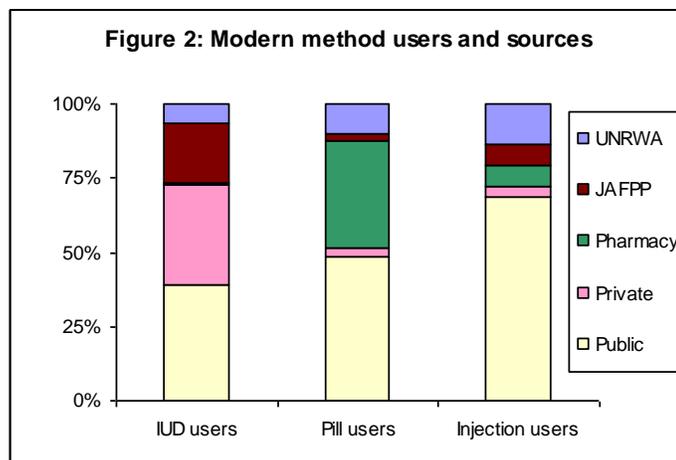
1b. Pill[2] users: Pill users are on average younger than IUD users. More than two-thirds (68%) are in the 25-39 range. The main source for the pill (Figure 2) is the public sector (48.7%) followed by pharmacies (36%). JAFPP only has 2% market share in pills, the lowest of the 3 methods discussed here.

About 72.6% of current pills users discontinued using a method in the past 5 years, a higher percentage than IUD users. In fact, fear of side effects and health repercussions are found to be major reasons behind objections about and discontinuation of FP methods in general, and oral contraceptive pills in particular. A 2009 research study (Nagy Research MEACRO, 2009) found that side effects of pills were the reasons that prevented almost half of non-users of pills from using them.

1c. Injection users: According to the 2009 JPFHS, more than half (about 59%) of injection users belongs to the lowest third of the wealth distribution (Figure 1). Please note that this may be

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[2] Note that the JPFHS does not differentiate between COC and POP.

due to the low sample size of injection users. The main source for injections is the public sector (68%) followed by UNRWA (13.7%). JAFPP has 7% market share (Figure 2).

About 83% of current injection users have discontinued using a method in the past 5 years. A 2002 JAFPP client perceptions study (Mawajdeh, 2002) identified reasons for acceptance or discontinuation of Depo Provera (and Norplant) through a series of Focus Group Discussions (FGD) with JAFPP clients. The FGDs showed that while long term protection and effectiveness are seen as major advantages, *side effects* continue to be major disadvantages. The study also showed that *negative rumors* in the community play an important role in discouraging acceptance and continuation of the method. *Husbands* also seem to play an important factor in method continuation, especially when side effects interfere with the couple's sexual life.

1d. Implants: The 2009 JPFHS has only 6 women who reported using implants (or less than 0.1% of the FP market). Because of the negligible sample size, we do not analyze implant users here.

2. Traditional method users:

This group constitutes approximately 18% of the FP market.

- **Age**: The majority (about 61%) are between 30 and 44 years old.
- **SES**: There is no particular wealth pattern in this group. Women are evenly distributed between various SES groups.
- **Parity**: On average, women who are currently using a traditional method have 4 children, very close to the average number of children among modern method users.
- **Motivation**: Almost half of this group wants to limit pregnancy and the other half wants to space it.
- **Barriers/Discontinuation**: A large number (70%) used a modern method in the past. As previously mentioned, 76.4% of current traditional method users discontinued using a modern method in the past 5 years. Of those who used IUDs in the past 5 years, about 70% discontinued because of side effects and health concerns. Of those who used pills and injections in the past, 74.5% and 81% discontinued for the same reasons, respectively.
- **Influencers:** The majority of traditional users (73%) rely on themselves or their husbands for FP advice, and only 13% seek FP advice from a health provider. Their preferred source of information on FP is the private sector (35%), public (36%), JAFPP (14%), and the media (10%).
- **Decision-makers**: Unlike users of modern methods, only about 9% of women in this group stated that the decision to use a traditional method was their own. Similarly to modern method users, about 6% of this group stated that their husbands disapproved of FP methods (2007 data). Participation in household decision-making also seems at par with modern method users.

3. Non-users:

This group constitutes 37.4% of the FP market in Jordan.

- **Age**: About 44% are young between 25 and 34 years old.
- **SES**: About 37% of this group belongs to the poorest third of the wealth distribution, while only 29% belong to the upper third.
- **Parity**: On average, they have 2.7 children.
- **Intention to use**: About two thirds (66%) said that they intend to use a method in the future.
- **Barriers/ Discontinuation:** Among their main reasons for non-use is a low risk for pregnancy (27.6%), a desire for more kids (27%), and health concerns or fear of side effects (25%). Approximately half (55.4%) used a modern method in the past. 78% of non-users discontinued using a modern method in the past 5 years. Of those who used IUDs in the past 5 years, 24.3%

discontinued because of side effects and health concerns. Of those who used pills and injections in the past, 23.7% and 65.1% discontinued for the same reasons, respectively.

- **Influencers:** Their preferred source of information on FP is the public sector (37%), private (33%), and JAFPP (15%).

- **Decision-makers**: About 14% of this group stated that their husbands disapproved of FP, the largest percentage of all groups (2007 data). Participation in household decision-making is lower than what was reported by modern and traditional method users: about 74% participate in 3-4 decisions, as opposed to about 80% for users.

A few studies have tried to identify additional psychological, sociological, and cultural factors that influence Jordanian women's demand, use, and continued use of Family Planning (FP) methods. A 2005 study (Buchholz, 2005) found that while attitudes toward family planning have been positive, they have not produced real changes in practice because of a number of cultural barriers towards using modern contraceptives. These include (a) the shared perception within the Jordanian society - and the Arab world in general - of *women as child bearers* whose identity and value are often shaped by their ability to procreate, (b) the role of the *family and the community* in affecting decisions to have children at early age, soon after marriage, (c) the value given to male children and the role of *gender preferences* on birth spacing, and (d) constraints associated with the concept of *purity before marriage* and the ensuing lack of awareness and proper information on family planning in the early stages of marriage.

C. Providers' profiles and supply side factors affecting contraceptive use in Jordan

A few studies have researched providers' attitudes and practices with FP methods in Jordan. Important findings are summarized in this section.

1. <u>**Motivation to prescribe:**</u>

A 2002 physicians' knowledge, attitudes, and practices (KAP) study found that approximately 81% of surveyed providers reported having prescribed or provided at least one FP method in the year preceding the survey (Abdelnour, 2002). The Combined Oral Contraceptives (COC) was the most commonly prescribed method (96.3%), followed by the Progestin Only Pill (POP) (80.5%), condoms (78%), and then IUDs (67%). Depo Provera and Norplant were prescribed only 29.3% and 2.4% of the time, respectively.

- **Spacing**: Hormonal methods (including *COCs* and *Depo-Provera*) as well as the *IUD* were the most frequently recommended for spacing pregnancies.

- **Limiting:** The *IUD* was the most common method recommended for limiting pregnancies.

- **Delaying**: Condoms and traditional methods were the most frequently mentioned methods for recommending a delay in first pregnancy.

2. <u>**Barriers to prescribe:**</u>

- **Fertility bias**: The 2002 KAP study found that in general providers believe a woman has to have 1 or 2 children before she is referred to or prescribed an FP method. This continued bias towards 'checking for fertility' especially among newly married women has also been documented in other studies (Halassa, 2008). This same study highlighted a common tendency among providers to prescribe traditional methods to women who should be considered eligible for modern methods (e.g. those who wish to delay first pregnancy).

- **Knowledge deficit and misconceptions***:* According to the 2002 KAP study, there is a clear knowledge deficit in various contraindications for *COCs* and *POPs*. A 2009 study by the High

Population Council (HPC) found that 28% of private GPs and family doctors do not know the hormonal formula of COCs (High Population Council, 2009). A 2008 study of MOH providers' knowledge showed that knowledge of methods and side effects was lower than expected given the providers' previous experience and training in FP services and counseling (Bitar, 2008). Halassa (2008) found a reluctance to prescribe hormonal methods, as well as a tendency to switch away from hormonal methods or to recommend a 'rest period' when side effects are experienced, as opposed to trying other combinations. On the other hand, The Evidence Based Medicine (EBM) program established by PSP-Jordan in partnership with clinics, pharmacies and local NGOs has proven to be an effective method for improving private sector provider knowledge, attitudes, and practices on FP. An evaluation of the program (Al-Alawi, 2010) showed improved FP discussion practices, improved reported COC prescription practices, and increased knowledge of COC pills including dispelling of myths and correctly identifying specific risks and benefits of the COC pills.

The 2002 KAP study showed a lack of sufficient knowledge among providers of *Norplant* and *Depo Provera*. Lack of training on insertion and removal of Norplant were also identified as the most important barriers to prescribing the method. About 41.6% of providers agreed with the statement that *Depo Provera* can lead to infertility.

▪ **Lack of proper counseling:** The 2009 HPC study showed that 28% of OB/GYN doctors and more than two thirds of midwives do not provide counseling on FP on a regular basis and do not leverage opportunities for FP counseling. The 2002 JAFPP *Norplant* and *Depo Provera* study shows that information and counseling for both methods, especially during follow-up visits, are not always complete or comprehensive enough at the clinics and often do not address women's fears or concerns (Mawajdeh, 2002). The MOH provider knowledge study (Bitar, 2008) showed that between 35% and 40% of surveyed clients reported not having been informed or counseled about the method side effect by their provider at the time of receiving a method.

D. Segmentation analysis

1. **Estimating the number of potential users for modern FP in Jordan:**

Market segmentation is the process of dividing a product's current (and potential) users into sub-groups in order to better understand users' choices and develop appropriate and targeted marketing strategies. Previous FP segmentation analyses done in Jordan divided the market into segments mostly along factors such as ability to pay and location e.g. urban poor, wealthy rural, wealthy urban, etc. (Sharma et. al, 2004). In what follows, we divide the Jordanian FP market into segments based on the premise that a woman has different FP needs at different times of her reproductive life. This follows an analysis undertaken by the POLICY project in 2002 for the Egyptian FP market.

Specifically, we define the following segments: *(1) Newly Married*, *(2) Active Childbearing*, *(3) Limiting*, and *(4) Infecund*. According to the 2009 JPFHS, half of women in Jordan are married by age 22.4 and half have their first child by age 24. The "Newly Married" segment is thus defined to include women of ages 15-23. According to the same dataset, fertility preferences (whether she wants more children or not) change around ages 32-33. We thus define the "Limiting" segment to include women ages 33-49. Figure 3 shows the size and relative distribution of segments, using the 2009 JPFHS sample of MWRA. We use the DOS population estimates of the total number of MWRA in 2009 to estimate the number of women in each segment (these are shown in the small colored boxes, in thousands).

Figure 3: Family Planning Market Segments, Jordan JPFHS 2009
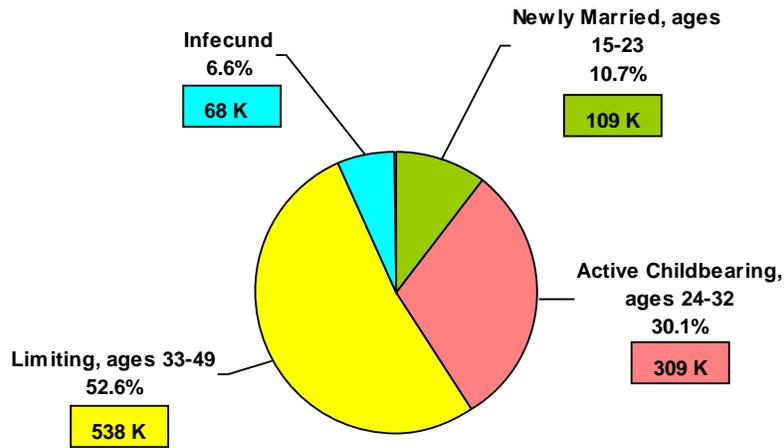
Using the same dataset, Figure 4 shows current use (modern and traditional) and intention to use by segment. Approximately 52% and 36% of Newly Married women and women in Active Childbearing, respectively, say that they intend to use FP at some point in their lives.

Figure 4: Use and intention to use, by segment
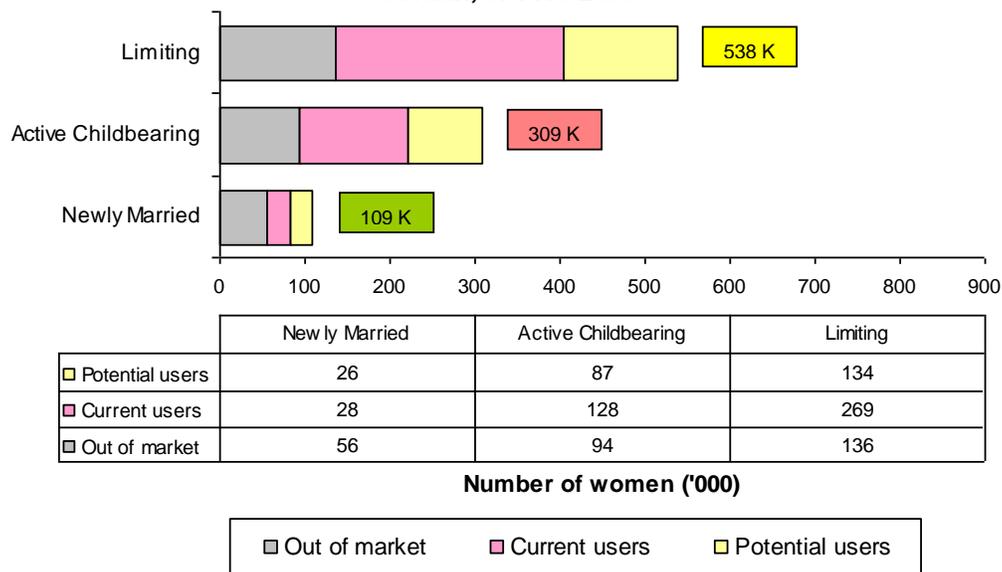**Jordan JPFHS 2009**
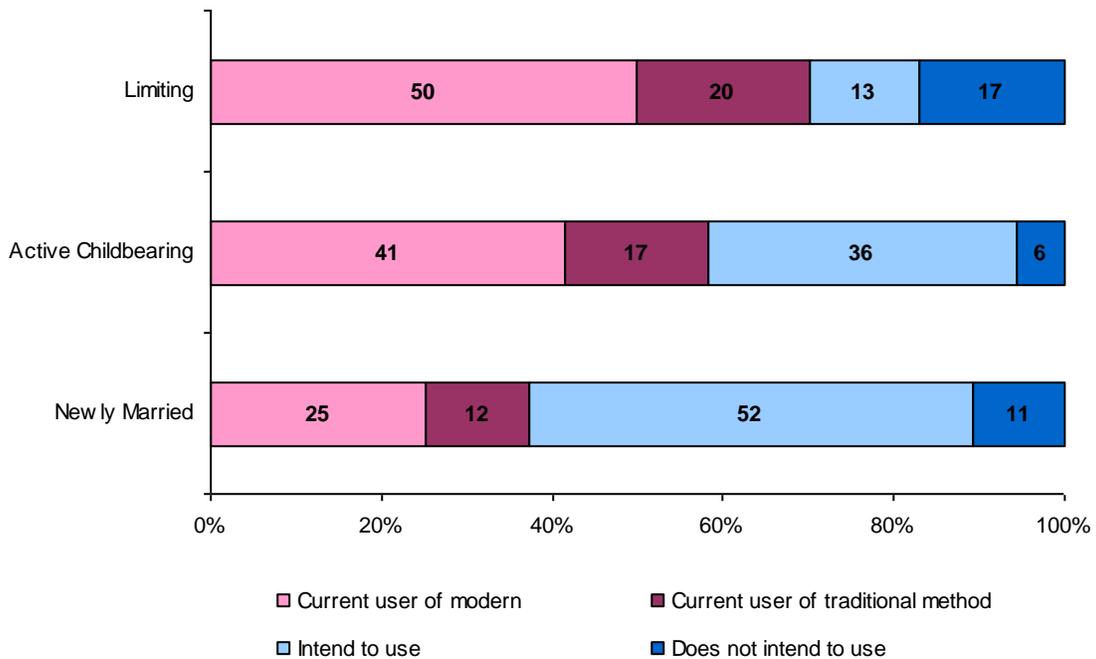
We define *potential users* as current MWRA who:
- Are not pregnant but able to get pregnant (fecund)
- Want to delay pregnancy or want no more children
- Are not currently using modern contraception but intend to use a method.

Figure 5 shows the distribution of current and potential users (as per the definition above) by segment. Women are considered to be 'out of the market' when they are either pregnant or trying to get pregnant (want a child within 12 months).

Figure 5: Current and potential FP users, by segment
Jordan, JPFHS 2009

	Newly Married	Active Childbearing	Limiting
□ Potential users	26	87	134
■ Current users	28	128	269
■ Out of market	56	94	136

Number of women ('000)

■ Out of market   ■ Current users   □ Potential users

Using the shares calculated in the JPFHS and 2009 population sizes from the DOS, we estimate the size of total potential demand (Table 2). The addition of potential users implies an approximate 58% increase in the total number of modern method users. Annex X provides details on the profiles of current and potential users in each segment.

Table 2: Total Estimated Potential Demand, JPFHS 2009 and DOS

Market segments	MWRA	Current users*	Potential users	Total Potential demand	% change
Newly Married	109,395	27,600	25,960	53,560	94%
Active Childbearing	308,725	127,812	87,307	215,119	68%
Limiting	538,476	268,592	133,703	402,295	50%
Infecund	67,604	NA	NA	NA	NA
TOTAL	**1,024,200**	**424,004**	**246,970**	**670,974**	**58%**

Discrepancies with total estimates of current users in Table 1 are due to rounding.

2. Estimating total potential demand by method and source (sector)

We project total potential demand by method and by source assuming all potential users (estimated above) will become actual users. We determine the method mix according to stated preferences and according to current method mix for those who did not state any preference. In addition, we assume that the source mix remains the same. Table 3 shows results of these estimations.

Table 3: Estimated potential demand by method and source

Source/Method	Current users	Potential users	Total
Public			
Pill	42,143	23,264	65,407
IUD	93,441	38,256	131,696
Injection	4,316	3,383	7,699
Condom	32,257	12,084	44,341
Sterilization	19,578	6,157	25,734
Implant	298	816	1,113
Overall Public	*192,031*	*83,959*	*275,990*
Private			
Pill	2,545	1,405	3,950
IUD	80,116	32,800	112,916
Injection	214	168	382
Condom	537	201	739
Sterilization	5,256	1,653	6,909
Implant	334	914	1,248
Overall Private	*89,003*	*37,141*	*126,144*
Pharmacy			
Pill	31,315	17,287	48,601
IUD	1,179	483	1,662
Injection	464	364	829
Condom	23,997	8,990	32,986
Sterilization	-	-	-
Implant	-	-	-
Overall Pharmacy	*56,955*	*27,123*	*84,078*
JAFPP			
Pill	1,779	982	2,761
IUD	49,136	20,117	69,253
Injection	439	344	783
Condom	1,263	473	1,736
Sterilization	-	-	-
Implant	-	-	-
Overall JAFPP	*52,617*	*21,916*	*74,534*
UNRWA			
Pill	8,792	4,854	13,646
IUD	15,152	6,204	21,356
Injections	863	677	1,540
Condoms	8,340	3,124	11,464
Sterilization	-	-	-
Implant	-	-	-
Overall UNRWA	*33,148*	*14,858*	*48,006*

Source/Method	Current users	Potential users	Total
TOTAL*	**424,047**	**185,121****	**609,168****

*Includes 'Other' sources
**Note: These exclude potential users who stated that they would prefer to use a traditional method. Also excluded are LAM users.

ANNEX I - Profiles of users and non-users of FP methods, Jordan 2009

User/non-user, by method	Market share	Socio-economic characteristics	Contraception, fertility preferences, and other factors
ANY MODERN METHOD	44.3%	▪ **Age**: Majority (81%) in 25-44 range ▪ **SES**: skewed towards upper SES (36%) ▪ **Education**: 93% secondary or higher ▪ **Average number of living children**: 4.5	▪ **Source of FP:** public (45.3%), private (21%), pharmacy (13.4%), JAFPP (12.4%), UNRWA (7.8%) ▪ **Motivation to use**: limiting (59.8%), spacing (40.2%) ▪ **Preferred wait time**: 1 yr or less (24.8%); 2-3 yrs (47.2%); 4+ yrs (28%) ▪ **Discontinuation in past 5 years**: 62.5% ▪ **Discontinuation by method**: IUD (29%); pill (24.4%), traditional (19.6%), condom (12.2%) ▪ **Health concerns/side effects cited as reason for discontinuation**: among former IUD users (30.7%); former pill users (34%); former injection users (68.6%) ▪ **Advice for method (07 data)**: providers (54.4%); self (29.6%) ▪ **Preferred source for info on FP (07 data)**: public (36%); private (33.6%); JAFPP (16.5%); media (10%) ▪ **Decision to use FP (07 data):** own (19%), joint (77%) ▪ **Husband's views on FP (07 data)**: only 6% said husband disapproves.
IUD	24.1%	▪ **Age**: Majority (67%) in 30-44 range ▪ **SES**: skewed towards upper SES (39.6%) ▪ **Education**: 93.7% secondary or higher ▪ **Average number of living children**: 4.6	▪ **Source of FP:** public (39%), private (33.5%), JAFPP (20.5%), UNRWA (6.3%) ▪ **Motivation to use**: limiting (63%), spacing (37%) ▪ **Preferred wait time**: 1 yr or less (28%); 2-3 yrs (44%); 4+ yrs (28%) ▪ **Discontinuation in past 5 years**: 58.6% ▪ **Discontinuation by method**: IUD (37%); pill (21%), condom (8%) ▪ **Health concerns/side effects cited as reason for discontinuation**: among former IUD users (17%); former pill users (46%); former injection users (88%) ▪ **Advice for method (07 data)**: providers (53%); self (29%) ▪ **Preferred source for info on FP (07 data)**: public (33%); private (35%); JAFPP (19%); media (10%) ▪ **Decision to use FP (07 data):** own (18.7%), joint (77%) ▪ **Husband's views on FP (07 data)**: only 5% said husband disapproves.
PILLS	8.7%	▪ **Age**: Majority (68%) in 25-39 range ▪ **SES:** No particular pattern; a bit more	▪ **Source of FP:** public (48.7%), pharmacy (36%), UNRWA (10%), private (3%), JAFPP (2%) ▪ **Motivation to use**: limiting (50%),

User/non-user, by method	Market share	Socio-economic characteristics	Contraception, fertility preferences, and other factors
		skewed to lower SES (35%) ▪ **Education**: 95% secondary or higher ▪ **Average number of living children**: 3.9	spacing (50%) ▪ **Preferred wait time**: 1 yr or less (23.6%); 2-3 yrs (50.7%); 4+ yrs (25.7%) ▪ **Discontinuation in past 5 years**: 72.6% ▪ **Discontinuation by method**: IUD (21.6%); pill (40.4%), condom (7%) ▪ **Health concerns/side effects cited as reason for discontinuation**: among former IUD users (59.4%); former pill users (14%); former injection users (88%) ▪ **Advice for method (07 data)**: providers (73%); self (19%) ▪ **Preferred source for info on FP (07 data)**: public (34%); private (35%); JAFPP (15%); media (10%) ▪ **Decision to use FP (07 data):** own (23.2%), joint (75.3%) ▪ **Husband's views on FP (07 data)**: 7% said husband disapproves.
INJECTIONS	0.6%	▪ **Age**: Majority (74%) in 25-39 range ▪ **SES**: 59% belong to lower SES (note: this may be due to low sample size) ▪ **Education**: 82.8% secondary or higher ▪ **Average number of living children**: 4.6	▪ **Source of FP**: public (68%), UNRWA (13.7%), private (7%), JAFPP (7%) ▪ **Motivation to use**: limiting (60%), spacing (40%) ▪ **Preferred wait time**: 1 yr or less (19%); 2-3 yrs (48.5%); 4+ yrs (32.6%) ▪ **Discontinuation in past 5 years**: 83% ▪ **Advice for method (07 data)**: providers (62%); self (32%) ▪ **Preferred source for info on FP (07 data)**: public (58%); private (21%); JAFPP (20%); media (1%) ▪ **Decision to use FP (07 data):** own (30%), joint (65.2%) ▪ **Husband's views on FP (07 data)**: 17% said husband disapproves (note: this may be due to low sample size)
TRADITIONAL METHOD	18.3%	▪ **Age**: Majority (61%) in 30-44 range ▪ **SES:** No particular pattern ▪ **Education**: 92.2% secondary or higher ▪ **Average number of living children**: 4	▪ **Motivation to use**: limiting (53%), spacing (47%) ▪ **Preferred wait time**: 1 yr or less (31%); 2-3 yrs (44%); 4+ yrs (25%) ▪ **Ever use:** 70% used a modern method in the past ▪ **Discontinuation in past 5 years**: 76.4% ▪ **Discontinuation by method:** pill (26%), IUD (18%), condom (6.6%) ▪ **Health concerns/side effects cited as reason for discontinuation**: among former IUD users (70.5%); former pill users (74.5%); former injection users (81%) ▪ **Advice for method (07 data)**: providers (13%); self (54%) ▪ **Preferred source for info on FP (07 data)**: public (36%); private (35%); JAFPP

User/non-user, by method	Market share	Socio-economic characteristics	Contraception, fertility preferences, and other factors
			(14%); media (10%) ▪ **Decision to use FP (07 data):** own (8.8%), joint (82.2%) ▪ **Husband's views on FP (07 data)**: 6% said husband disapproves.
NONE	37.4%	▪ **Age**: 43.6% in 25-34 range ▪ **SES:** 37% belong to lower SES and 29% to upper ▪ **Education**: 89.3% secondary or higher ▪ **Average number of living children**: 2.7	▪ **Intenders**: 66% intend to use ▪ **Ever use:** 55.4% used a modern method in the past ▪ **Reasons for non-use:** Low risk for pregnancy (27.6%); health concerns or fear of side effects (25%); want more kids (27%); opposed (9.4%) ▪ **Preferred wait time**: 1 yr or less (49%); 2-3 yrs (31.6%); 4+ yrs (19.4%) ▪ **Unmet need:** 34% ▪ **Discontinuation in past 5 yrs by type:** IUD (27.5%); pill (27%), condom (14.4%) ▪ **Health concerns/side effects cited as reason for discontinuation**: among former IUD users (24.3%); former pill users (23.7%); former injection users (65%) ▪ **Preferred source for info on FP (07 data)**: public (37.4%); private (33%); JAFPP (15%); media (8%) ▪ **Husband's views on FP (07 data)**: 14% said husband disapproves.

Population: MWRA (Includes 8,968 currently married women and able to get pregnant); Source of data: JPFHS 2007 and 2009; Weighted analysis.

ANNEX II – Profiles of current and potential users of FP methods by FP segment
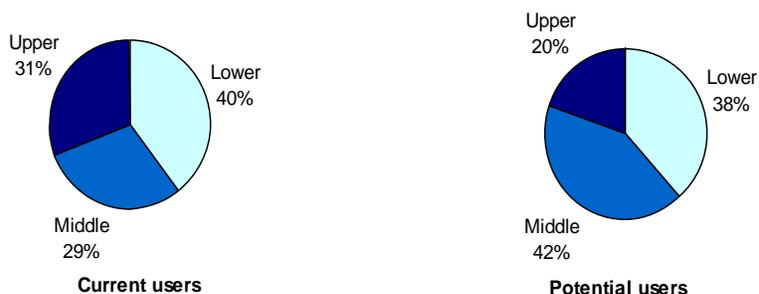
1. 'Newly Married' Segment

Size ~ 53,560 women
      27,600 current users (51.5%)
      25,960 potential users (48.5%)
Age: Women aged 15-23
Parity: Most have 0-1 child
SES: New demand will largely come from the middle SES group of the newly-married segment:

Upper 31% Lower 40% Middle 29% — **Current users**

Upper 20% Lower 38% Middle 42% — **Potential users**

Ever use: 64% of potential users have never used a modern method

Method mix:

Table 4: Method use among current users and preference among potential users

(In %)	Current users	Potential users
IUD	39.6	17.5
Pills	31.9	12.2
Condoms	19.9	4.6
LAM	5.9	1.3
Injections	2.7	6.3
Traditional	--	7.0
No Preference*	--	51.0

62% of those who did not express preference have never used a modern method before.

2. 'Active Childbearing' segment:
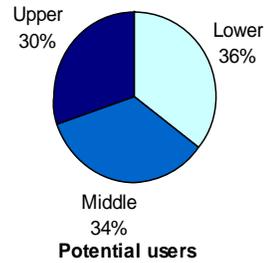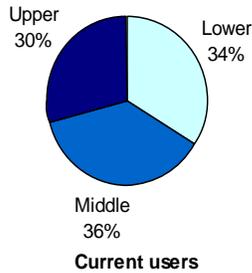
Size ~ 215,119 women
      127,812 current users (59.4%)
      87,307 potential users (40.6%)
Age: Women aged 24-32
Parity: Most have 2-3 children
SES: Potential and new users in this segment have a similar distribution of SES

Current users

Potential users

Ever use: 40% of potential users have never used a modern method

Method mix:

Table 5: Method use among current users and preference among potential users

(In %)	Current users	Potential users
IUD	48.3	17.1
Pills	25.8	15.1
Condoms	18.3	2.0
LAM	5.5	0.0
Injections	1.7	1.1
Traditional	--	5.5
No Preference	--	58.2

*40% of those who did not express preference have never used a modern method before

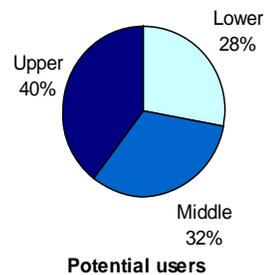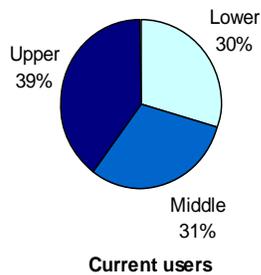### 3. 'Limiting' segment:

Size ~ 402,295 women
      268,592 current users (66.7%)
      133,703 potential users (33.3%)
Age: Women aged 33-49
Parity: Most have 5-6 children
SES: Potential and new users in this segment have a similar distribution of SES

Current users

Potential users

Ever use: 20% of potential users have never used a modern method

Method mix:

Table 6: Method use among current users and preference among potential users

(In %)	Current users	Potential users
IUD	58.9	7.5
Pills	15.6	5.0
Condoms	13.1	2.2
Sterilization	8.9	0.3
LAM	2.3	0.0
Injections	1.2	0.4
Traditional	--	3.5
No Preference	--	80.3

*21% of those who did not express preference have never used a modern method before

Method use and preference across segments:

Table 7: Distribution of current users by method and non-users across segments

(In %)	Pill	IUD	Injections	Condom	Sterilization	Traditional	non-user
Newly Married	10.6	4.7	12.2	8.6	0.0	7.5	19.2
Active Childbearing	39.3	26.7	36.2	36.3	0.2	29.9	36.0
Limiting	50.2	68.6	51.6	55.1	99.8	62.5	44.8
Total	*100*	*100*	*100*	*100*	*100*	*100*	*100*

Table 8: Distribution of potential users by preferred method across segments

(In %)	Pill	IUD	Injections	Condom	Sterilization	Traditional	No preference
Newly Married	13.6	15.3	51.6	20.0	0.0	16.1	7.7
Active Childbearing	57.2	50.6	30.4	30.2	52.2	42.6	29.7
Limiting	29.2	34.1	18.0	49.9	47.8	41.3	62.7
Total	*100*	*100*	*100*	*100*	*100*	*100*	*100*

ANNEX III- Additional Analysis: Determinants of modern FP method use in Jordan using regression analysis, 2007 JPFHS

Following health service utilization models commonly found in the literature, this analysis assumes that women's use of family planning services may be explained in terms of:

1) *Predisposing factors* – these refer to personal characteristics that act as deterrents or catalysts for the use of FP methods (e.g. age, education, number of children, preferred wait time).
2) *Enabling factors* – these refer to conditions that permit an individual to satisfy health needs, including family planning services (e.g. wealth status of the household, employment status, decision-making in household).
3) *Community-level factors* – these are considered to influence the likelihood that women use family planning (e.g. geographical location and type of residence, exposure to FP messages, husband's views on FP, preferred source for info on FP).

Logistics regression analysis is used to study and understand the determinants of modern contraceptive use when all these factors are taken into account. The logistic model allows the estimation of the odds or the likelihood for modern FP use. Results (Table 1) indicate that the use of modern contraceptives is significantly influenced by age, number of children, fertility preference, wealth status, decision-making in the household, region, husband's views on FP, and a woman's preferred source of info on FP. Specifically:

- **Age**: Age has a concave relationship with the likelihood of using a modern method. This means that the higher a woman's age, the more likely she is to use a modern contraceptive, until a certain maximum age when the relationship is reversed – the higher the age, the less likely she is to use a method. In this case, the peak age seems to lie between 26-27 years. As an example, a 24 year old is 2.2% *more* likely to use a modern contraceptive than a 23 year old; however a 32 year old is 4.1% *less* likely to use a modern contraceptive method than a 31 year old. A 36 year old is 7.2% *less* likely to use a modern contraceptive method than a 35 year old.
- **Children**: Higher parity women are more likely to use contraceptives. With each additional child, the likelihood that women will use a modern method increases by 28.5%.
- **Education**: For each single year increase in educational attainment, the likelihood of women using a modern method of contraception rises by 1.6%, although the odds are not significant (the lack of significance is possibly due to small variation in educational attainment in sample).
- **Fertility preference**: Compared to women who do not desire to have any more children, those who desire another child within one year or less are 58.9% less likely to use modern methods.
- **Wealth status**: Women who belong to the middle and rich tertiles of the wealth distribution are more likely to use contraceptive methods than those who belong to the poorest tertile. The rich are 66.1% more likely to use modern methods than the poor. The increased likelihood for the middle tertile is 22%.
- **Household decision-making**: The higher the number of household decisions that a woman participates in, the more likely she is to use a modern contraceptive method. With each additional decision, the odds increase by about 8.1%. Thus, a woman who participates in all 4 decisions researched in the survey is 32.4% more likely to use a method compared to a woman who does not participate in any decision making in the household.

- **Region**: The type of community in which women live also influences the use of family planning. Those who live in the South and in the North are 19.7% and 27.3% less likely to use modern contraceptives, respectively, than those who live in Central Jordan.
- **Area**: Those who live in urban areas are 23.8% more likely to use contraception than those who live in rural areas.
- **Exposure to FP**: Those who reported hearing/seeing FP messages on radio, TV, or newspapers in the last months are 21.3% less likely to use a modern contraceptive. This may seem counterintuitive at first, however, a closer look at exposure by type of method shows that users of traditional methods (counted in the regression analysis as non-users) have the highest share of exposure to FP methods. This may be due to the fact that traditional users are more sensitive to FP messages than those who do not use or those who are currently using modern methods. This may be an opportunity for targeting. On the other hand, those who reported having been counseled about FP in the last 12 months (either having been visited by a FP worker or having told of FP in facility) are 6.2% more likely to use modern methods; however the odds are not significant.
- **Husband's views on FP**: Women whose husbands approve of FP methods are 137% more likely (more than twice as likely) to use a modern method than those whose husbands disapprove.
- **Preferred source for info on FP:** Those who cited husbands/friends/relatives as their preferred source for FP info are 35.9% less likely to use modern methods. These are the women are less likely to frequent health facilities for RH or FP issues.

To summarize, a woman in Jordan in 2007 is <u>less</u> likely to use a modern FP method if she:

- ✓ Is at either end of the reproductive cycle - the younger she is before 27 (e.g. newly weds) and the older she is after 27 → *target newlyweds and older women who may wish to limit*
- ✓ Has less children and desires a child in near future → *emphasize spacing benefits*
- ✓ Has low education attainment → *increase awareness of FP benefits*
- ✓ Belongs to low wealth tertile → *improve access to facilities and methods among poor*
- ✓ Lives in South and North, and in rural areas → *improve geographical targeting*
- ✓ Participates less in household decision making → *empower women*
- ✓ Have a husband who disapproves of FP → *target partners*
- ✓ Prefers to get her FP info from friends and relatives → *target community*

Table 1: Odds ratio for determinants of modern contraceptive use, JPFHS 2007	
Independent variable	Modern methods
PREDISPOSING FACTORS	
Age category	
Age	1.244***
Age (squared)	0.996***
Number of living children	1.285***
Education in single years	1.016
Fertility Preference	
No more children	Reference
Another child in 1 year or less	0.411***
Another child in 2-3 years	0.957
Another child in 4 years or more	1.093
ENABLING FACTORS	
Wealth tertiles	
Poor	Reference
Middle	1.220**
Rich	1.661***
Number of household decisions in which women participate	1.081**
COMMUNITY-LEVEL FACTORS	
Region	
Central	Reference
North	0.727***
South	0.803***
Area	
Urban	1.238***
Rural	Reference
Media exposure to FP in last months	0.787***
Counseled about FP in last year	1.062
Husband's views on FP	
Approves	2.371***
Disapproves	Reference
Preferred source for info on FP	
Public sector provider	Reference
Private sector provider	0.949
JAFPP staff	1.119
Husbands/relatives/friends	0.641**
Media	1.048
	N = 8,514

* Significant at the .05 level, ** Significant at the .025 level, *** Significant at the .01 level

Excludes infecund and menopausal women (n=688)

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