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تعزیز تنظیم الأسرة

Evaluation of the Reach and Effect of the IUD Social Marketing Campaign, Wave 2

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Executive summary

Introduction

The USAID Strengthening Family Planning (Ta’ziz) project aims to expand the availability, quality, and use of family planning (FP) services. One of the means of increasing demand is through multichannel method-specific campaigns. From June 2013, through June 2014, Ta’ziz implemented three waves of a multichannel campaign promoting the intrauterine device (IUD). The key promise of the IUD campaign is that the IUD is a safe, effective (close to 100 percent), reliable, and reversible contraceptive method for FP (spacing or limiting births). The first wave of the campaign was launched in June 2013 and lasted five weeks¹. A second wave of the campaign was launched in November, 2013, and was active through the end of February, 2014. This report presents findings from a survey that was conducted during March, 2014, after the second wave of the campaign. A third wave was launched in May 2014.

Methods

Ta’ziz conducted a cross-sectional post-campaign non-probabilistic survey of married women of reproductive age, in the governorates of Amman, Irbid, and Zarqa from March 11 to March 20, 2014. Nielsen Company collected the data. Out of 1,867 attempted interviews, a total of 800 successful interviews were conducted. The primary reasons for not completing the survey were: not receiving an answer at the door after three attempts (24 percent); ineligibility due to nationality (16 percent); ineligibility due to age (15 percent); and refusals (12 percent).

Data were collected and entered by the Nielsen Company and delivered to the Ta’ziz Project in SPSS format. The file was then converted to STATA format, and analysis was completed by Ta’ziz Project using STATA version 12. Statistical significance was determined through chi-squared tests, ANOVA, and Student’s t-test; multivariate logistic and linear regressions were used to control for potential confounders.

Ta’ziz also analyzed national service statistics from the Ministry of Health to examine trends over time in “couple years of protection” (CYP) attributed to the IUD.

Key findings

Campaign reach

- Recall of the campaign after the second wave was moderately high: 65 percent of married women of reproductive age recognized campaign materials after prompting with a visual aid.

¹ An omnibus survey was conducted in October 2013 to gain a preliminary estimate of the reach of effect of the campaign. Refer to the report, “Ta’ziz Project’s Evaluation of the Reach and Effect of the IUD Social Marketing Campaign, Wave 1,” dated February, 2014.

- Exposure to the campaign was not associated with socioeconomic status or educational attainment levels, indicating that the campaign was equally successful at reaching all strata of Jordan's society in the three examined governorates.
- Television was by far the most common source among those who recalled the campaign, followed by leaflets and brochures. Among those who recognized the campaign on television, most recognized it from Jordan TV, followed by Ro'ya TV. Materials distributed at clinics and pharmacies were also a significant source of exposure.

Message recall

- Nearly two-thirds of respondents who recognized the campaign recalled messages relating to the IUD without any prompting. The most recognized messages were that the IUD is safe and comfortable (44 percent), it is a long term method (24 percent), and that women should consult a doctor about the IUD (21 percent). These were among the key messages of the campaign, which demonstrates that the campaign was effective in delivering a clear and cohesive message.
- When prompted with the key messages of the campaign, most respondents recalled hearing that the IUD is a long term method (86 percent) and more than 65 percent recognized four other key messages of the campaign. Less than 1 percent of respondents did not recall any of the mentioned campaign messages, suggesting that the campaign messages were conveyed in a memorable fashion.
- Nearly all (93 percent) respondents who recalled the campaign found the campaign likeable, and 81 percent reported that they were interested to keep watching or listening to the campaign when they first encountered it. No significant differences were noted when stratifying by socioeconomic status. This indicates that the campaign was appealing to married women of reproductive age across all demographic groups of Jordanian society in the three governorates.
- Respondents provided unprompted explanations for why the campaign appealed or did not appeal to them. The most mentioned reason that the campaign appealed to respondents was that the campaign was about FP methods and birth spacing (37 percent). This implies that married Jordanian women of reproductive age appreciate campaigns about this topic, which is often characterized as a stigmatized or sensitive topic.
- When asked about what they understood from the campaign, respondents mostly mentioned benefits of birth spacing (42 percent) and that the IUD is safe and effective (40 percent).

Associations between the campaign and attitudes, knowledge, and use of IUDs

National service statistics demonstrated an increase in CYP from IUDs immediately after the first wave of the campaign, and this increase continued through the second wave of the campaign. The campaign may be one factor associated with this increase in CYPs; however, additional research would be required to identify other factors that may have been associated with this trend, to establish a causal link between exposure to the campaign and the outcomes of interest, and to quantify the amount of the increase that might be attributed to the campaign.

In addition, the survey results demonstrated several positive associations between recall of the campaign and the knowledge, attitudes, and intentions of respondents.

- Without prompting, 56 percent of respondents who recalled the campaign reported that their knowledge was impacted by the campaign, 53 percent reported that their attitudes were impacted, and 40 percent reported that their intentions or behaviors were impacted.
- The most mentioned change of attitude was a more positive feeling about the IUD (44 percent). As for intentions or behaviors, among all viewers, 12 percent reported that they had discussed the IUD with their spouses and 24 percent had discussed the IUD with others. Eight percent had consulted a provider about the IUD, 3 percent had decided to use the IUD and 1 percent had had an IUD placed. This suggests that the campaign may have been linked to getting women to talk about the IUD and to discuss it with a provider, but there is still a gap between that outcome and actually deciding to use the IUD.
- As compared to respondents who did not recall the campaign, those who recalled it were more likely to:
 - have accurate knowledge and positive attitudes about the IUD;
 - be current users of FP methods, especially of the IUD; and
 - express an intention to use the IUD in the future, if they were not using any FP method at the time of the survey.
- A dose effect was observed, when considering the number of recognized campaign materials and respondents' knowledge and FP practices.
 - The greater the dose of exposure, the greater the respondents' agreement to positive statements about the IUD.
 - The likelihood of being a current IUD user was 1.4 times greater with each increasing increment of exposure to the campaign.
 - The likelihood of intending to use the IUD was 3.1 times greater with each increasing increment of exposure to the campaign.

Having received a visit by a community health worker did not confound the observed positive association between recall of the IUD campaign and increased knowledge about the IUD, among respondents who recalled the campaign.

Recommendations

The findings from this research revealed several positive associations between recall of the campaign and women's attitudes towards and knowledge and use of IUDs. These findings are promising and suggest that the IUD campaign may have had a positive effect and thus should be continued. However, additional evaluation of the campaign would be warranted to better understand which elements are most successful for changing attitudes and ultimately behavior, to provide an evidence base for further tailoring the campaign to improve its reach and effectiveness, and to establish and quantify a causal link between exposure to the campaign and improved attitudes and knowledge, as well as increased IUD use. Specific recommendations include:

- The IUD campaign should be continued until there is a plateau in the observed increase in national CYP due to IUD use. National service statistics indicate that there might be an association between the campaign and an observed increase in CYP due to the IUD (and no other FP method). While it is not possible to determine causality from the available data, it is unlikely that other factors would have caused this increase in CYP only for the IUD within the time period when the campaign was active.
- Some campaign messages require further emphasis and dissemination, such as the messages that the IUD can be used for birth spacing and that the IUD does not impact a woman's fertility after it is removed. The campaign should be altered to bring more emphasis to these messages, prior to being launched again.

Introduction

The USAID Strengthening Family Planning (Ta’ziz) project aims to expand the availability, quality, and use of family planning (FP) services through partnership with the private, non-governmental sector in Jordan. The project, an associate award under the global USAID Strengthening Health Outcomes through the Private Sector (SHOPS) project managed by Abt Associates Inc., aims to increase use of FP services by generating demand through national social marketing campaigns focusing on the promotion of specific modern FP methods.

IUD campaign

From June 2013, through June 2014, the Ta’ziz Project implemented three waves of a national multichannel campaign promoting IUDs. The campaign was designed to promote the use of IUDs by building on the fact that the IUD is the most preferred modern FP method among Jordanian women of reproductive age and has the lowest contraceptive discontinuation rate, in comparison to other modern methods.²

In order to increase interest in and use of the IUD, the campaign disseminated a key promise that the IUD is a safe, effective (close to 100 percent), reliable and reversible contraceptive method for family planning (spacing or limiting births). The key messages of the campaign relate to:

- Safety – The method is very safe when provided by a qualified doctor to well-informed women. Women should seek information from their providers about what to expect in the first weeks and months after receiving an IUD.
- Long-term effectiveness and reliability – The IUD can protect from pregnancy for up to 12 years; IUDs only require a check-up once per year.
- Reversibility – IUD users can return to fertility at any time. (The return to fertility is a feature in both spacing and limiting messages, although less prominent in the limiting messages. Women want to have the knowledge that they can control their return to fertility, even if they do not plan to have more children.)
- Availability – Qualified trained IUD providers are widely available at Jordanian Association of Family Planning and Protection (JAFPP) clinics, public health centers and private specialists, and GP clinics and hospitals throughout the kingdom.
- Convenience – Insertion and removal are easy processes, requiring only a conversation with your provider and a very short procedure.

The first wave of the campaign was launched in June 2013, and lasted five weeks.³ A second wave of the campaign was launched in November, 2013, and was active through the end of February, 2014. This

² Department of Statistics and ICF International. 2013. The Jordan Population and Family Health Survey, 2012. ICF International: Calverton, MD.

³ An omnibus survey was conducted in October, 2013, in order to gain a preliminary estimate of the reach of effect of the campaign. Refer to the report, “Evaluation of the Reach and Effect of the IUD Social Marketing Campaign, Wave 1,” dated February, 2014.

report presents findings from a survey that was conducted during March 2014, after the second wave of the campaign. The campaign resumed from May 2014, until June 26, 2014. All three waves of the campaign included the following integrated elements:

- broadcast media (TV and radio advertising)
- print media (newspaper advertising)
- point-of-service promotion (trifold brochures with standee unit, poster, backlist poster, rollup, leaflets in clinics)
- public relations (talk show formats on TV and radio, press advertorials)
- community outreach (educational/entertaining “edutaining” lectures) and social media (*Osritna* Facebook page)

The point-of-service promotion was especially important to highlight that the IUD is not only available through the Ministry of Health (MOH), but also at other, non-governmental facilities. Jordanian women prefer to have a female insert the IUD; however, the majority of MOH health centers do not have trained female physicians available to administer the IUD on a daily basis. Midwives, who are more readily available, are not allowed to insert the IUD without the supervision of a physician, most of whom are males. Therefore, it was important for the campaign to highlight the availability of different points of service, where female providers are available.

Community outreach “edutaining” lectures were attended by community health workers (CHWs) who were available to counsel women on FP. CHWs are trained by physicians on proper FP counseling and advising women on other reproductive health topics, such as breast cancer screening and antenatal care. These CHWs were part of the Ta’ziz Outreach Program, which was implemented through two partners whose CHWs work in all twelve governorates of the country. CHWs screen all households in the regions where they work in order to identify women with an unmet need for modern FP. They provide these women with up to eight household counseling visits, the number of which depends on the woman’s personal situation. The women are informed about all of the modern methods that are available to them during the first visit and are advised about a suitable method based on their reproductive history and health status. Women may choose to accept referrals to MOH health centers or other referral points for free services, or they may choose to accept a voucher for a free FP consultation, method provision, and follow-up at a private physician or non-governmental organization within the Ta’ziz project’s private network. According to the Outreach database, the IUD is the most accepted FP method among women who are visited by CHWs.

Methods

National service statistics from the public sector and the private sector

The MOH in Jordan provides modern FP methods free of charge to the United Nations Relief and Works Agency (UNRWA), the JAFPP, universities, and the Ta’ziz project (which supplies its network of private doctors with FP methods), as well as a number of other smaller nongovernmental organizations (NGOs) with capacities for FP service provision. The MOH collects distribution data from these private sector

institutions on a monthly basis and generates a report reflecting all MOH FP method distribution. The report is stratified by institution and indicates “couple years of protection” (CYP) by method.

The Ta’ziz project receives this data quarterly from the MOH in order to track national CYPs by method. The Ta’ziz project assessed the contribution of IUDs to the national CYP measure before, during, and briefly after the campaign. (The MOH calculates CYP from IUDs using a CYP factor of 4.6 per IUD inserted.)⁴

Cross-sectional household survey

The results reported herein were generated from a cross-sectional post-campaign non-probabilistic survey. The Ta’ziz Project subcontracted the Nielsen Company to conduct household interviews of married women of reproductive age (MWRA) residing in the governorates of Amman, Irbid, and Zarqa. Fieldwork for the study commenced on March 11, 2014 and ended on March 20, 2014.

Target Population

Married Jordanian women aged 18–49 years who were not working in a health-related field were eligible for this survey. Respondents who were interviewed for any survey during the previous 12 months were ineligible to partake in this survey.

Sample Size and Sampling Strategy

A non-probabilistic sampling strategy was used to attempt to interview 400 MWRA in the governorate of Amman and 200 in each of the governorates of Irbid and Zarqa. These three governorates are the most populated governorates in the country, representing nearly 71 percent of the population, and were selected purposively due to budget and time constraints.⁵ The sample sizes were determined to allow the project to generate a sample that could provide an approximation of the reach and effect of the campaign in a timely and affordable manner. The governorate of Amman was over-sampled because the campaign was designed to reach the most populated urban areas, most of which are located in Amman.

To generate the sample for each governorate, the sampling interval was calculated by dividing the population of the governorate by the target sample size. Using the Department of Statistics’ classification of cities or villages, Nielsen determined the required number of interviews at each city by dividing the population of the city by the sampling interval for that governorate. Samples were generated from 6 rural and 10 urban centers in Irbid, 5 rural and 11 urban centers in Zarqa, and 3 rural and 29 urban centers in Amman. Each urban center was then divided into blocks by using a grid. The blocks from which samples were to be generated were then selected randomly, using a sampling interval for each village or city depending on its population and the block as screened through a “random walk” methodology. Interviewers screened all houses or flats in a systematic manner in each block until an interview was successfully conducted, and then skipped the next three houses or flats before attempting more interviews. Interviewers inquired whether an MWRA resided within the

⁴ <http://www.usaid.gov/what-we-do/global-health/family-planning/couple-years-protection-cyp>

⁵ Department of Statistics (DOS). Jordan’s Population by Governorate and Sex. Available online: http://www.dos.gov.jo/dos_home_e/main/Demograghy/2012/2-2.pdf

household. The interviewer asked the woman directly or the person who answered the door about the potential respondent's nationality and profession before requesting an interview. The interviewer selected the respondent with the most recent birthdate when more than one person was eligible for the study within a household.

In order to reach the required 800 respondents, the research team approached 1,867 households in the three Governorates (43 percent completion rate). The primary reasons for not completing the survey were not receiving an answer at the door after three attempts (24 percent), ineligibility due to nationality (16 percent), ineligibility due to age (15 percent), and refusals (12 percent).

Socioeconomic Status (SES)

Socioeconomic Status (SES) was determined using Nielsen's customized instrument for assessing SES in Jordan. The set of questions ascertain the respondent's employment status, working field, occupation, level of education (for head of household and respondent), household composition and size, relationship to the head of household, income, durables owned, type of residence (modern flat, villa, modern villa, etc.), and place of living (owned, rented). Nielsen categorizes respondents into six SES categories: A, B, C1, C2, D, and E. Respondents placed in SES A are typically owners of large companies, merchants, businessmen, or government officials. Those in B are professionals, owners of medium-sized companies, senior managers in medium-sized companies, senior officers in the armed forces or police, or senior civil servants. SES C1 represents professionals of lower grade (technicians, junior scientists, etc.), middle-grade civil servants, junior officers in the armed forces or police, and shop owners. C2 represents employees in private offices, bank employees, cashiers, lower-grade civil servants, owners of groceries or kiosks or very small companies. D represents drivers, factory supervisors and foremen, shepherds, waiters, barbers, and shopkeepers. SES E represents watchmen, night guards, doorkeepers, messengers, unskilled workers, servants, and the unemployed.

For the purposes of this report, the top two tiers of SES were combined into one, as were the bottom two tiers, due to their small sample sizes. For convenience, respondents in tier AB will be referred to as upper class, in C1 as upper-middle class, in C2 as lower-middle class, and in DE as lowest class.

Questionnaire

The survey instrument consisted primarily of closed-ended questions, relating to: the respondents' demographic characteristics; their exposure to the IUD campaign; their interpretation and understanding of the relayed messages; and their attitudes, intentions, and behaviors relating to FP and the IUD specifically. Open-ended questions were also used, to ascertain the respondents' recall and understanding of the campaigns' messages without any prompting. The instrument also included questions about CHW visits relating to FP. Completion of the interview required 30–40 minutes.

Data entry and analysis

The Nielsen Company entered the data and delivered it to the Ta'ziz Project in SPSS format. The file was then converted to STATA format, and analysis was completed by Ta'ziz Project using STATA version 12.⁶ Statistical significance was determined through chi-square tests, analysis of variance (ANOVA), and

⁶ StataCorp. 2011. Stata Statistical Software: Release 12. College Station, TX: StataCorp LP.

Student's t-test, and multivariate logistic and linear regressions were used to test associations between key variables while controlling for potential confounders.

Ethical concerns

The Abt Associates Institutional Review Board (IRB) determined that the human subject research activity met the criteria for exemption under U.S. Federal Regulation 45 CFR 46.101(b), Category 2. Therefore, local IRB review was not required. Oral consent was obtained for each participant prior to initiating the interview. Participants were informed that their participation was voluntary, that their information would remain confidential, and that they had the right to refuse to respond to any question or end the interview at any time. For monitoring purposes, identifiers were collected by the Nielsen Company and kept in a separate log, so that questionnaires could not be linked to individual respondents.

Limitations

Several limitations should be noted when interpreting these results. First, the survey relied on a non-probabilistic sampling of only three governorates, which prevents generalizing its findings to the national level. However, the surveyed population of MWRA reported current FP use levels of 61 percent, which is the same as reported in the last national Jordan Population and Family Health Survey, indicating that the survey sample may reflect the general population of MWRA in Jordan at least with respect to FP use.⁷ Second, it is possible that survey respondents differed in some systematic way from those who did not respond (because they could not be located at home, or were the wrong nationality, for example). Third, the cross-sectional nature of this study does not allow for evaluation of causative associations (or their directionality) between the campaign and any improved knowledge, attitudes, or practices related to the IUD. The associations observed in this study should be further explored using research designs that could assess whether causal links exist between campaign exposure and improved knowledge and attitudes or increased use of the IUD. Fourth, there is likely some recall bias, especially when considering respondents' recall of CHW visits.

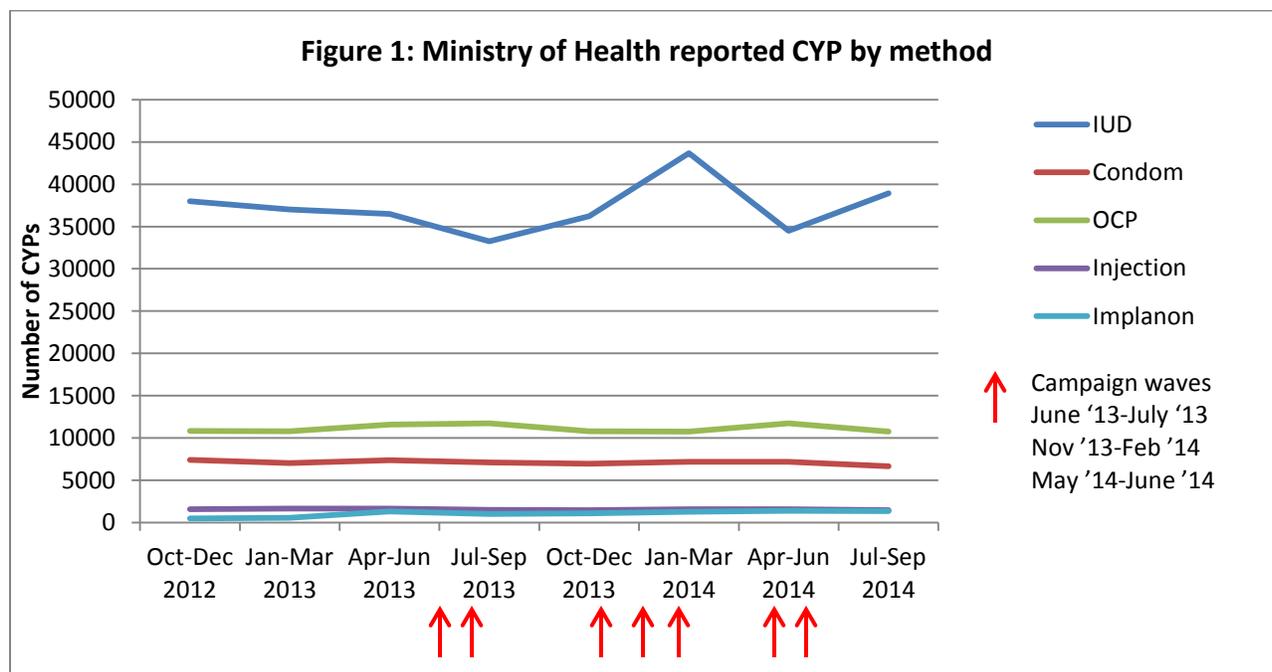
Findings: National CYP service statistics

As shown in Figure 1, from October, 2012, until March, 2014, CYP remained stagnant for all contraceptive methods except the IUD. CYP from the IUD appeared to be declining slightly, although not statistically significantly, from October 2012, until June 2013. The first wave of the IUD campaign began in May 2013. Subsequently, during July–September, 2013, CYP from the IUD began to increase. The second wave of the IUD campaign commenced during November 2013, and the increase in CYPs for IUDs continued, peaking during January–March, 2014.

Unsurprisingly, there was a decline in CYP attributed to IUD use during the summer of 2014, when the month of Ramadan occurred (a pattern noted also in 2013). Jordanian women, the majority of whom are Muslim and observe the month of fasting, prefer not to have the IUD inserted before or during the

⁷ Department of Statistics and ICF International. 2013. The Jordan Population and Family Health Survey, 2012. ICF International: Calverton, MD.

month of Ramadan due to the increased likelihood of bleeding, which prohibits a woman from fasting. Instead, some women take oral contraceptive pills, which can delay or shorten the bleeding interval during the woman’s cycle. As such, there was a slight increase in pill-attributed CYP during that same time. Interestingly, the IUD-attributed CYP continued to increase even after the summer of 2014. The CYP attributed to the IUD during July, August, and September 2014, was 17 percent higher than in the equivalent months of 2013, even though these two quarters both included the occurrence of the holy month of Ramadan.



These service statistics are cross-sectional in nature and do not take into account other factors that may have also contributed to the observed trend in increasing IUD CYP during July, 2013, through March, 2014. However, the Ta’ziz IUD campaigns were the only large-scale IUD promotion efforts taking place during this time period, and may thus have been a key driver of this observed increase. The findings from the household survey, discussed below, provide additional insight into associations between the campaign and improved knowledge of, attitudes toward, and use of the IUD.

Findings: Survey results

Respondent characteristics

A total of 800 surveys were completed: 396 in Amman, 199 in Irbid, and 205 in Zarqa. As shown in Table 1, nearly one-third of the respondents were aged 18–24 years, one-third were aged 25–34 years and the remaining were 35–49 years of age. No significant differences were noted when comparing governorates.

Table 1: Respondent characteristics				
	Total (%) n=800	Amman (%) n=396	Irbid (%) n=199	Zarqa (%) n=205
Age				
18-24	32.9	32.3	34.2	32.7
25-34	34.5	33.8	35.7	34.6
35-44	22.9	22.7	22.1	23.9
45-49	9.8	11.1	8.0	8.8
Education*				
Illiterate	0.3	0.3	0.0	0.5
Some/finished elementary	3.8	3.3	5.5	2.9
Some/finished intermediate	20.9	21.7	19.1	21.0
Some secondary	18.5	12.9	18.1	29.8
Finished secondary	30.1	32.1	26.1	30.2
Some/finished university	11.8	13.1	11.1	9.8
Completed university	14.6	16.7	20.1	5.4
Post graduate degree	0.1	0.0	0.0	0.5
Socio economic status (SES)*				
Upper	9.2	15.6	3.0	3.0
Upper middle	19.3	19.2	27.6	11.2
Lower middle	29.0	26.8	32.2	30.2
Lowest	42.5	38.9	37.2	55.6
* Statistically significant differences noted (p<0.05) when using chi-squared test				

Nearly one-fourth of the respondents had an intermediate education or lower, 19 percent had some secondary education, and 30 percent completed secondary education. Nearly one-fourth attended some university or more. Respondents from Amman and Irbid were generally more educated than those in Zarqa. As for SES, 43 percent of respondents were categorized in the lowest SES group, 29 percent and 19 percent were categorized into lower-middle and upper-middle SES groups, respectively, and only 9 percent were categorized into upper class. Those from Amman and Irbid were generally of higher SES than those in Zarqa.

Recall of the IUD campaign

Respondents were first asked whether they recalled viewing or hearing anything about the IUD in the previous six months. As shown in Table 2, about half of the respondents recalled some advertising about the IUD without any prompting. Recognition increased when respondents were prompted with printed snapshots of the three TV spots, brochures, and newspaper clippings; 65 percent of the respondents recognized the campaign when prompted. Unprompted and prompted recognition did not vary significantly when stratifying by region, education, or socioeconomic status. However, unprompted and prompted recall was higher among the older age groups as compared to the younger age groups.

Table 2: Unprompted and prompted recall of the IUD campaign among all respondents			
Recall of IUD campaigns		Unprompted recall of any advertising about the IUD in the previous 6 months (%)	Prompted recall of TV spots or printed materials (%)
Total	n=800	49.8	64.5
Region			
Amman	n=396	46.0	63.6
Irbid	n=199	51.8	64.8
Zarqa	n=205	55.1	65.9
Age*			
18-24	n=263	41.1	57.4
25-34	n=276	53.3	68.5
35-44	n=183	54.1	65.6
45-49	n=78	56.7	71.8
Education			
Intermediate or lower	n=199	44.2	57.8
Some secondary	n=148	47.3	65.5
Completed secondary	n=335	55.2	69.0
Completed university or higher	n=117	46.2	61.5
Socioeconomic status (SES)			
Upper	n=74	54.1	66.2
Upper middle	n=154	57.1	59.7
Lower middle	n=232	49.1	68.5
Lowest	n=340	47.1	63.5
* Statistically significant differences noted (p<0.05) when using chi-squared test			

As shown in Table 3, over three-fourths of respondents who recognized the ads (when prompted) reported exposure through the television, followed by 37 percent who referred to leaflets and brochures. Only 3 percent recognized the campaign through the radio, but this might be an underestimate, since respondents were not prompted with the audio recording of the campaign's radio spots. Only 2 percent recognized the campaign from newspapers and less than 1 percent from community lectures. Those with higher educational attainment were more likely to report having recognized the campaign in newspapers or magazines. No other differences in the sources of exposure were noted when considering age and socioeconomic status.

Table 3: Sources of prompted recall of campaign						
		TV	Radio	Newspaper	Leaflets and Brochures	Community lectures
Total (%)	n=516	77.5	3.3	1.9	36.6	0.2
Age						
18-24 (%)	n=151	74.2	4.0	2.0	35.8	0.7
25-34 (%)	n=189	77.8	3.2	2.1	40.2	0.0
35-44 (%)	n=120	77.5	1.7	1.7	36.7	0.0
45-49 (%)	n=56	85.7	5.4	1.8	26.8	0.0
Education*						
Intermediate or lower (%)	n=115	77.4	1.7	0.9	35.7	0.9
Some secondary (%)	n=97	76.3	4.1	1.0	30.9	0.0
Completed secondary (%)	n=231	78.8	3.0	0.9	40.3	0.0
Completed university or higher (%)	n=72	75.0	5.6	8.3	34.7	0.0
Socioeconomic status (SES)						
Upper (%)	n=49	73.5	2.0	6.1	28.6	0.0
Upper middle (%)	n=92	78.3	3.3	1.1	38.0	0.0
Lower middle (%)	n=159	79.3	5.0	1.9	34.6	0.0
Lowest (%)	n=216	76.9	2.3	1.4	39.4	0.5
* Statistically significant differences noted (p<0.05) when using chi-squared test						

Table 4 shows the specific sources of exposure to the campaign among those who recalled it when prompted. Most (79 percent) of those who recalled watching the campaign's ads on television recalled viewing it on Jordan TV, and 38 percent on Ro'ya TV. Only 17 respondents recalled hearing about the campaign through the radio. Among those 17, the campaign was most recognized from Hala FM (71 percent) and Hayat FM (65 percent). Only 10 recalled the campaign from newspapers (Al Rai Newspaper and Ad Dustour Newspaper). Many respondents (37 percent) reported having heard or seen the campaign at other locations or through other sources. Of those, one-fifth recognized the campaign at clinics, and 10 percent recognized the campaign at pharmacies.

Exposure through various television, radio and newspaper sources did not vary significantly when comparing respondents across SES categories. Significance was only noted among those who recognized the campaign at pharmacies: those of higher SES were more likely to recall viewing campaign materials at pharmacies than those of lower SES. The small sample sizes of those who recognized the campaign on the radio or in newspapers did not allow for significance testing across SES categories.

Table 4: Specific sources of prompted recall of campaign					
Sources of prompted recall	Socio-economic status				
	Total (%)	Upper (%)	Upper middle (%)	Lower middle (%)	Lowest (%)
Television	n=400	n=36	n=72	n=126	n=166
Jordan TV	79.3	77.8	81.9	73.8	82.5
Ro'ya TV	38.0	44.4	34.7	42.9	34.4
Radio	n=17	n=1	n=3	n=8	n=5
Hayat FM	64.7	0.0	66.7	75.0	60.0
Rotana	23.5	100.0	33.3	12.5	20.0
Amman FM	23.5	0.0	33.3	25.0	20.0
Hala FM	70.6	0.0	66.7	87.5	60.0
Mazaj FM	0.0	0.0	0.0	0.0	0.0
Newspapers	n=10	n=3	n=1	n=3	n=3
Al Rai Newspaper	60.0	66.7	100.0	33.3	66.7
Ad Dustour Newspaper	50.0	66.7	0.0	66.7	33.3
Other	n=189	n=14	n=35	n=55	n=85
Clinics	20.6	14.3	25.7	23.6	17.7
Pharmacy*	10.1	28.6	17.1	10.9	3.5
Mall	0.5	0.0	2.9	0.0	0.0

* Statistically significant differences noted ($p < 0.05$) when using chi-squared test

Recalled messages of the IUD campaign

Respondents who recognized the campaign were asked to recount the key messages they had heard or read without any prompting. As displayed in Table 5, 14 percent recalled general images or the story line of the campaign, related to providing a better life for children or a happy family.

Nearly 39 percent recalled that the campaign was about modern FP methods in general, and 11 percent mentioned that it included messages on the benefits of birth spacing. About two-thirds of respondents mentioned the IUD as they recounted the messages they recalled. The most recalled IUD-related messages were that the IUD is safe and comfortable to use (44 percent), that the IUD is a long-term method (24 percent), and that women should consult their doctors about the IUD (21 percent). Another 6 percent mentioned that the IUD is appropriate for birth spacing, and 6 percent linked the IUD to return to fertility. In general, the messages recalled were similar across all SES groups. Only the recall that the campaign was related to FP and birth spacing in general was significantly different across SES: the highest recall was noted among those in the highest and lowest SES groups.

Incorrectly linking the campaign to unrelated messages was very uncommon. Two individuals mentioned that the campaign was related to both the IUD and breast cancer prevention, and one mentioned that the campaign was about the IUD and child vaccines (data not shown). It appears that these three individuals (incorrectly) linked the IUD campaign to other health-related campaigns.

Table 5: Spontaneous (unprompted) recall of campaign messages and/or images					
Unprompted message recall	Total (%)	Upper (%)	Upper middle (%)	Lower middle (%)	Lowest (%)
	n=516	n=49	n=92	m=159	n=216
Recall of the story/scenes of providing a better life for children/ happy family	14.3	4.1	18.5	17.6	12.5
Any mention of the IUD	66.9	73.5	64.1	71.1	63.4
The IUD's safety and comfort	44.2	44.9	38.0	46.5	44.9
IUD long term method	23.5	34.7	19.6	23.9	22.2
Consulting a doctor about the IUD	20.7	24.5	26.1	20.1	18.1
IUD return to fertility	6.0	0.0	2.2	8.2	7.4
IUD for birth spacing	5.6	6.1	3.3	8.2	4.6
IUD is available at health centers and discounted	2.7	0.0	3.3	4.4	1.9
IUD is the best FP method	1.9	6.1	2.2	2.5	0.5
Brochures about FP/ IUD	1.7	0.0	0.0	1.3	3.2
About the IUD in general	0.8	0.0	0.0	0.6	1.4
Modern FP methods in general	39.0	41.9	42.9	33.2	40.6
Benefit of birth spacing	10.9	12.2	12.0	7.6	12.5
FP/ birth spacing general*	2.3	4.1	1.1	0.0	4.2
Modern methods are better than traditional methods	1.2	0.0	2.2	0.6	1.4
* Statistically significant differences noted (p<0.05) when using chi-squared test					

After recording respondents' unprompted recall of campaign messages, interviewers asked those who recognized the campaign whether the statements listed in Table 6 were related to the campaign. Less than 1 percent of all respondents who recalled the campaign said that they did not recognize any of the listed messages. The most recognized message was that the IUD can protect a woman from pregnancy for up to 12 years (86 percent). Roughly two-thirds of the respondents recalled key messages that the IUD is effective (a woman should not get pregnant with the IUD), does not harm fertility (a woman can get pregnant again after removing the IUD), can be used for birth spacing, and that a woman should consult a doctor regarding a FP method. Nearly 69 percent mentioned that trained service providers who can insert the IUD are available at the Ministry of Health, while 56 percent and 50 percent recalled that trained providers are available at JAFPP and private clinics, respectively. No significant differences were noted when comparing socioeconomic groups.

Table 6: Key messages recalled by those who recalled the campaign when prompted					
Prompted message recall	Total (%)	Upper (%)	Upper middle (%)	Lower middle (%)	Lowest (%)
	n=516	n=49	n=92	n=159	n=216
The IUD can protect a woman from pregnancy for up to 12 years	86.1	81.6	82.6	87.4	87.5
Trained service providers who insert the IUD with skill and high quality are available at the Ministry of Health	68.8	61.2	64.1	71.7	70.4
Use the IUD to space your children	66.7	59.2	62.0	67.9	69.4
A woman should not get pregnant with the IUD	66.5	63.3	59.8	73.0	65.3
Consult your doctor regarding a FP method	66.1	67.4	59.8	62.3	71.3
A woman can get pregnant again after stopping use of the IUD	65.9	59.2	63.0	68.6	66.7
Trained service providers who insert the IUD with skill and high quality are available at the JAFPP	56.2	44.9	47.8	57.9	61.1
Trained service providers who insert the IUD with skill and high quality are available at private clinics	50.4	42.9	46.7	54.1	50.9
None	0.2	0.0	0.0	0.0	0.5

Likeability of the IUD campaign

As shown in Table 7, most (93 percent) of the respondents who recognized the campaign liked it a little or liked it very much. No statistically significant differences were noted between different SES groups. The campaign was also attractive: 81 percent reported that they were interested to continue watching or listening when they first encountered it.

Table 7: Campaign likeability and attractiveness					
	Total (%)	Upper (%)	Upper middle (%)	Lower middle (%)	Lowest (%)
	n=516	n=49	n=92	n=159	n=216
Likeability					
Like it very much	54.8	55.1	55.4	52.2	56.5
Like it a little	38.4	42.9	40.2	40.9	34.7
Neither like nor dislike it	5.0	2.0	3.3	5.0	6.5
Don't like it at all	1.7	0.0	1.1	1.9	2.3
Attractiveness					
Was interested to continue watching or listening to the campaign when first seen/heard	80.6	91.8	77.2	78.6	81.0

Respondents were asked why they liked or disliked the campaign without any prompting (Table 8). Among respondents who said they liked the campaign either very much or a little, the most mentioned

reasons for liking the campaign were the following: that it related to FP methods and birth spacing in a positive manner (40 percent); its ads were clear and easy to understand (25 percent); it raised awareness about the IUD and its safety or effectiveness for birth spacing (17 percent); and it provided women with comfort by linking birth spacing to their health and well-being (16 percent) (Table 8). Others appreciated the happy images of families and the link to spacing and a small family (9 percent), that the campaign promoted the joint decision of couples about FP (5 percent), and the images of happy daughters who are treated well (5 percent).

Table 8: Unprompted explanation of why respondents liked or disliked the campaign					
	Total (%)	Upper (%)	Upper middle (%)	Lower middle (%)	Lowest (%)
Reasons for liking the campaign					
	n=481	n=48	n=88	n=148	n=197
Raising awareness about FP methods and birth spacing seen positively	39.9	47.9	42.1	33.8	41.6
The ads were clear and easy to understand	24.7	37.5	20.5	26.4	22.3
Raising awareness about the IUD and its safety or effectiveness for birth spacing seen positively	17.1	8.3	15.9	18.9	18.3
Provides comfort to women/linked spacing to mother's well being	16.2	10.4	15.9	19.6	15.2
Happiness linked to spacing and a small family*	9.4	6.3	18.2	8.1	7.1
Joint decision of the couple to agree on FP / the comfort from the decision	5.2	8.3	4.6	6.1	4.1
Positive images of a happy daughter who is cared for	5.0	4.2	6.8	6.1	3.6
Liked that a doctor was presented in the ads / consult the doctor	2.3	0.0	2.3	2.7	2.5
A mother making clothes for her daughter	1.3	0.0	2.3	0.7	1.5
Liked the display of a mother securing the future of her children/ that women can work	1.0	0.0	1.1	0.7	1.5
Saw the shape of the IUD*	1.0	4.2	2.3	0.0	0.5
Represents the social reality of modern families	0.4	0.0	0.0	0.7	0.5
Liked that the government sponsored the ads and gave the topic importance	0.6	0.0	2.3	0.0	0.5
Note: analysis limited to n=481 respondents who said they liked the campaign very much or a little.					
*Statistically significant differences noted (p<0.05) when using chi-squared test					

As shown in Table 7, very few respondents disliked the campaign or felt neutral towards it. Among the nine respondents who disliked the campaign, the primary reasons for disliking the campaign were the following: the campaign contradicted women's negative experiences with the IUD; it made young

individuals aware of things they should not know about; it did not explain the appropriate length of time between pregnancies; and the topic was too embarrassing to be displayed on TV.

No statistically significant differences were noted when comparing respondents by SES, except among those who mentioned that they liked either seeing the shape of the IUD in the ads or that happiness was linked to spacing and a small family size. Those of higher SES were more likely to mention these two attributes than those of lower SES.

Respondents' understanding of campaign messages

Respondents who recognized the campaign were asked to expand upon the messages they recalled by telling the interviewer what they understood without any prompting. As shown in Table 9, 42 percent mentioned at least one of the benefits of birth spacing in general, and 40 percent specifically mentioned that they understood that the IUD is safe and effective. Understanding did not differ across the SES groups.

Only one respondent understood (incorrectly) that the campaign was about birth limiting, not spacing, with which the respondent did not agree (data not shown).

Table 9: Unprompted understanding of respondents of campaign messages					
	Total (%) n=516	Upper (%) n=49	Upper middle (%) n=92	Lower middle (%) m=159	Lowest (%) n=216
Benefits of birth spacing in general	42.4	28.6	41.3	48.4	41.7
IUD is safe and effective	40.3	49.0	48.9	37.1	37.0
IUD for birth spacing	8.5	4.1	9.8	7.6	9.7
IUD is better than other methods	6.8	4.1	8.7	8.8	5.1
IUD is a long term method – up to 12 years	5.2	6.1	3.3	2.5	7.9
IUD is easy to use	5.0	4.1	4.4	6.9	4.2
IUD is available at all health centers	5.0	4.1	4.4	6.9	4.2
Promotion of FP and birth spacing	4.5	2.0	2.2	5.7	5.1
IUD does not harm fertility	3.3	4.1	2.2	3.1	3.7
Awareness about FP methods in general	2.7	8.2	1.1	1.9	2.8
Consult a doctor about choosing a method	1.9	4.1	0.0	1.3	2.7
Promoting the use of the IUD	1.6	0.0	1.1	2.5	1.4
Modern FP methods in for spacing in general	1.2	2.0	1.1	1.3	0.9
Modern FP methods are better than traditional methods	1.2	0.0	2.2	0.6	1.4
Parents wish the best for their children	1.0	0.0	0.0	1.9	0.9

Associations between the IUD campaign and benefits, attitudes, knowledge, and use of FP

Self-reported benefits among those who recalled the campaign

Respondents who reported that they had recognized the campaign were asked whether their exposure resulted in any changes in their knowledge, attitudes, intentions, and behaviors. Overall, 56 percent reported that their knowledge was impacted, 53 percent reported that their attitudes were impacted and 40 percent reported that their intentions or behaviors were impacted (Table 10).

As for knowledge, 47 percent learned that the IUD is safe, one-third learned that the IUD is effective, and one-third learned that it is long lasting. Only 16 percent mentioned that the IUD does not harm fertility. The most mentioned change in attitude was a more positive feeling about the IUD (44 percent). As for intentions or behaviors, among all viewers, 12 percent reported that they had discussed the IUD with their spouses and 24 percent had discussed the IUD with others. Eight percent consulted a provider about the IUD, 3 percent decided to use the IUD, and 1 percent had an IUD placed.

Exposed respondents' self-reported benefits due to their exposure to the campaign	Total n=516
Impacted respondents' knowledge (overall)	56.4
Learned that the IUD is safe	46.7
Learned that the IUD is effective/prevents pregnancy	32.2
Learned that the IUD is long lasting	32.0
Learned that the IUD does not harm fertility- easy to return to fertility	16.3
Learned about where I can get an IUD	9.3
Impacted respondents' attitudes (overall)	52.9
Felt more positive about the IUD	44.4
Corrected my misconceptions about the IUD	8.5
Made me think about getting an IUD	7.0
Removed negative opinions about the IUD	3.7
Impacted respondents' intentions or behaviors (overall)	40.3
Discussed the IUD with others	23.8
Discussed the IUD with my spouse	12.4
Consulted a health provider about the IUD	8.0
Decided to use the IUD	2.5
I got an IUD placed	1.2
Convinced my spouse to use/ for us to use the IUD	0.6

Comparison of respondents who did and did not recall the campaign

All respondents were asked about what they knew or felt about the IUD, irrespective of whether they recalled the campaign. In general, a higher proportion of those who recalled the campaign held positive attitudes towards the IUD as compared to those who did not recall the campaign (Table 11). A

significantly higher proportion of respondents who recalled the campaign reported, without prompting, that the IUD is safe, that it can be used for up to 12 years, that it does not harm fertility, that qualified providers are widely available, and that insertion and removal are easy, among other things.

As for negative attitudes, significantly fewer respondents who recalled the campaign reported that the IUD causes infections (17 percent) as compared to those who did not recall the campaign (22 percent). Similarly, significantly fewer of those who recalled the campaign believed that the IUD causes infertility or reported that they did not know anything about the IUD.

Table 11: Unprompted attitudes and knowledge about IUD				
	Did not recall campaign	Recalled campaign	Total	OR [CI]
	n=284	n=516	n=800	
The method is very safe*	70.1	83.0	78.4	2.0 [1.4-2.8]
The IUD can protect you from pregnancy up to 12 years*	61.6	71.9	68.3	1.6 [1.2-2.2]
Qualified trained IUD providers are widely available (in public health centers, or JAFPP, or UNRWA, or private clinics) *	54.6	74.0	67.1	2.4 [1.8-3.3]
You can return to fertility at any time after removing it*	34.2	45.7	41.6	1.6 [1.2-2.2]
There is a copper IUD*	31.7	43.6	39.4	1.6 [1.2-2.2]
Insertion and removal of the IUD is an easy process*	21.8	34.5	30.0	1.9 [1.3-2.6]
The IUD causes increased bleeding during menstruation	28.2	23.8	25.4	0.7 [0.5-1.0]
There is a hormonal IUD*	16.6	25.8	22.5	1.7 [1.2-2.5]
The IUD causes infections*	22.2	16.5	18.5	0.7 [0.5-1.0]
It is painful the insert and/or remove the IUD	6.3	3.7	4.6	0.6 [0.3-1.1]
It is hard to find a female doctor who can insert the IUD	1.8	0.8	1.1	0.4 [0.1-1.5]
I do not know anything about the IUD*	2.5	0.2	1.0	0.1 [0.0-0.8]
The IUD causes infertility*	2.1	0.2	0.9	0.1 [0.0-0.8]
*Statistically significant differences noted (p<0.05) using chi-squared test and confirmed through multiple logistic regression with the attitude/knowledge as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES. OR [CI]: Odds ratio [95% confidence interval]				

All respondents who reported any knowledge or recognition about the IUD were read a series of statements (listed in Table 12) and were asked to specify whether they strongly agreed, agreed, disagreed or strongly disagreed with each. These positive statements reflect the key messages of the campaign; therefore, someone who was positively affected by the campaign would likely agree to all statements. Respondents who recalled the campaign reported significantly higher levels of agreement than those who did not recall the campaign. Overall, unexposed respondents agreed or strongly agreed

with a mean number of 10.1 out of 13 statements. This was significantly fewer than those who were exposed, who agreed with a mean number of 11.2 out of 13 statements.

Table 12: Prompted attitudes and knowledge about IUD				
	Did not recall campaign	Recalled campaign	Total	OR/mean [CI]
Agreed or strongly agreed with the following statements:	n=277	n=515	n=792	n=792
The IUD is very safe*	72.2	81.4	78.2	1.7 [1.2-2.4]
The IUD is a long term method / can protect a woman from pregnancy for up to 12 years*	75.1	85.1	81.6	1.9 [1.3-2.8]
It is NOT ¹ difficult to return to fertility after having the IUD*	59.6	70.5	66.7	1.6 [1.2-2.2]
Qualified trained IUD providers are NOT hard to find*	72.6	83.5	79.7	1.9 [1.4-2.8]
The IUD is effective / a woman should not get pregnant with the IUD*	66.4	74.6	71.7	1.5 [1.1-2.0]
It is convenient to use / insertion and removal is an easy process, requiring only a medical check and a very short procedure*	62.1	77.3	72.0	2.0 [1.5-2.8]
The IUD can be used to space between pregnancies*	89.2	95.5	93.3	2.5 [1.4-4.4]
The IUD does not affect the fertility of women*	74.0	87.8	83.0	2.5 [1.7-3.7]
The IUD is always available at Ministry of Health centers*	90.3	95.5	93.7	2.2 [1.3-4.0]
The IUD is always available at Jordan Association of Family Planning and Protection health centers *	87.7	93.6	91.5	2.1 [1.2-3.4]
The IUD is always available at the UNRWA	86.6	91.1	89.5	1.5 [1.0-2.4]
The IUD is always available at private clinics	93.1	95.9	95.0	1.6 [0.8-3.1]
The IUD is more effective than traditional methods*	85.9	92.8	90.4	2.1 [1.3-3.4]
Mean number of agreements (out of 13)*	10.1	11.2	10.9	1.1 [0.7-1.4]
<p>*Significant differences noted (p<0.05) using chi-squared test for proportions and Student's t-test for means. Confirmed using multiple logistic regression for proportions and multiple linear regression for means with the attitude/knowledge as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES.</p> <p>OR/mean [CI]: Odds ratio or mean [95% confidence interval]</p> <p>¹Note: Statements with bolded "NOT" were asked affirmatively during the interview. Responses were reversed for the purpose of analysis.</p>				

Current use of FP methods

All respondents were asked whether they were currently using any FP method. Significantly, more respondents who recalled the campaign (63 percent) as compared to those who did not recall the campaign (53 percent) reported that they were currently using a FP method (Table 13). Also, significantly fewer respondents who recalled the campaign (18 percent) reported that they did not intend to use a method in the future, compared to respondents who did not recall the campaign (27

percent). These associations persisted after conducting multiple logistic regressions while controlling for potential confounders (educational attainment, age, and SES).

Table 13: FP method use, by campaign recall				
Use of FP methods	Did not recall campaign	Recalled campaign	Total	OR [CI]
	n=284	n=516	n=800	n=800
Currently using*	53.5	63.2	59.8	1.4 [1.1-1.9]
Used to use, but not currently	6.3	8.5	7.8	1.3 [0.8-2.4]
Not using, but planning to	13.0	10.5	11.4	0.9 [0.6-1.4]
No, and not planning to in the near future*	27.1	17.8	21.1	0.6 [0.4-0.8]
*Statistically significant differences noted (p<0.05) using chi-squared test and confirmed through multiple logistic regression with FP method use as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES. OR [CI]: Odds ratio [95% confidence interval]				

Respondents who reported current use of a FP method were asked to specify which method they were using. Significantly more respondents who recalled the campaign (41 percent) reported current use of the IUD, compared to those who did not recall the campaign (24 percent) (Table 14). Respondents who did not recall the campaign were more likely to report use of other modern methods such as vaginal barriers or sterilization. Significant differences persisted after conducting multiple logistic regression while controlling for educational attainment, age and SES. No differences were noted in other methods such as contraceptives pills, male condoms, injectables, or traditional methods.

Table 14: Current FP method use by campaign recall				
FP method	Did not recall campaign	Recalled campaign	Total	OR [CI]
	n=152	n=326	n=478	n=478
Contraceptive pills	31.6	24.9	27.0	0.7 [0.5-1.1]
IUD*	24.3	41.4	36.0	2.3 [1.5-3.6]
Male condom	13.8	11.4	12.1	0.8 [0.4-1.4]
Injectables	1.3	1.2	1.3	1.0 [0.2-5.4]
Other modern methods ^{1*}	5.9	1.8	3.1	0.4 [0.1-1.0]
Traditional methods ²	23.0	19.3	20.5	0.7 [0.5-1.2]
*Statistically significant differences noted (p<0.05) using chi-squared test and confirmed through multiple logistic regression with current FP method as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES. OR [CI]: Odds ratio [95% confidence interval]				
¹ Other modern methods: Vaginal barriers or sterilization				
² Traditional methods: Withdrawal, periodic abstinence, lactational amenorrhea				

Intended use of FP methods among non-users

Non-users of FP methods were asked which FP methods they intended to use in the future. A significantly higher proportion of respondents who recalled the campaign (72 percent) as compared to respondents who did not recall the campaign (30 percent) reported that they would use the IUD (Table 15). Significantly fewer respondents who recalled the campaign reported that they would use contraceptive pills. Those who recalled the campaign were significantly less likely to report that they did not know what methods they would use in the future, compared to those who did not recall the campaign.

Table 15: Non users' intentions to use FP methods in the future, by campaign recall				
Methods those who do not currently use FP methods intend to use in the future	Did not recall campaign	Recalled campaign	Total	OR [CI]
	n=37	n=54	n=91	n=91
Contraceptive pills*	56.8	20.4	35.2	0.2 [0.1-0.6]
IUD*	29.7	72.2	55.0	6.4 [2.4-17.1]
Male condom	0	0	0	n/a
Injections	0.0	1.9	1.1	n/a
Traditional methods ¹	2.7	3.7	3.3	n/a
Does not know*	8.1	0.0	3.3	n/a

***Statistically significant differences noted (p<0.05) using chi-squared test and confirmed through multiple logistic regression with intended future FP method as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES.**
OR [CI]: Odds ratio [95% confidence interval]
n/a: Not applicable due to small sample size
¹Traditional methods: Withdrawal, periodic abstinence, lactational amenorrhea

Table 16: Current use of IUD in association with the effect of the campaign on exposed respondents			
	Did not learn anything	Learned something	OR [CI]
	n=141	n=185	
Using the IUD*	34.8	46.5	1.8 [1.1-2.8]
	Attitude did not change	Attitude changed	OR [CI]
	n=145	n=181	
Using the IUD*	35.2	46.4	1.8 [1.1-2.8]
	Intentions did not change/ no action	Intentions changed / took action	OR [CI]
	n=177	n=149	
Using the IUD	38.4	45.0	1.3 [0.9-2.1]

***Statistically significant differences noted (p<0.05) using chi-squared test and confirmed through multiple logistic regression with current IUD use as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES.**
OR [CI]: Odds ratio [95% confidence interval]

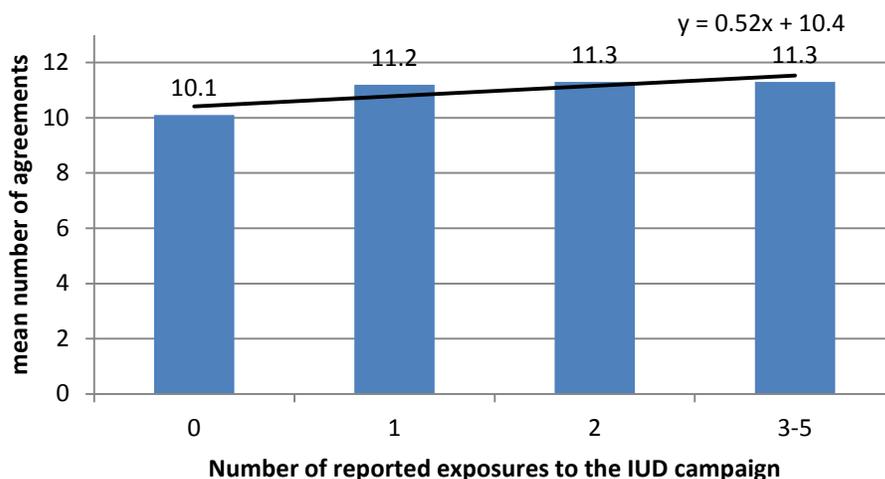
Current IUD use and self-reported benefits among those who recalled the campaign

Current IUD use among those who recalled the campaign was significantly associated with having learned something from the campaign and having an attitude change as a result of the campaign (Table 16). Current IUD use was higher among respondents who recalled the campaign and said they that they learned something new about the IUD from it, compared to those who did not learn anything new from the campaign (at 46 and 35 percent, respectively). A similar trend was noted with those who reported a change in attitude as compared to those without any changes in attitude.

Dose effect

The IUD campaign material consisted of three different TV ads, as well as newspaper advertising, and leaflets or brochures. Among all 800 respondents, 284 did not recall any campaign elements, 367 recognized one element, 102 recognized two elements, 29 recognized three elements, 17 recognized four elements, and one respondent recognized five elements. Respondents were categorized as having recognized none, one, two, or three to five of these elements. Those recognizing three or more were grouped together for the purpose of this dose-effect analysis, due to their small sample size. Multiple variable linear regression, where the dependent variable was the number of reported materials recognized, was used to identify an association between amount of exposure and respondents' agreement to positive statements about the IUD. As shown in Figure 2, the mean number of agreements with positive statements about the IUD (given in Table 12) increased significantly by a mean of 0.5 statements with each increasing number of exposures to the campaign ($\beta=0.52$, $p<0.0001$). This association was maintained after controlling for age, SES, and educational attainment ($\beta=0.51$, $p<0.0001$).

Figure 2: Dose effect of campaign messages on positive attitudes about the IUD



The amount of exposure to the campaign was also associated with respondents' current use of the IUD (Table 17). Less than one-fourth of those with no reported exposure to the campaign reported current IUD use, as compared to 40 percent and 50 percent of those with one or two reported exposures, respectively. One-third of those with 3–5 reported exposures reported current IUD use. Among non-

users of FP, the intention to use the IUD was significantly higher among those with one or more exposure (>60 percent) as compared to those with no exposure (30 percent).

Table 17: Current use of IUD and intention to use the IUD, by number of reported exposures to the IUD campaign					
	Number of reported exposures to the IUD campaign				OR [CI]
	0	1	2	3-5	
	n=152	n=231	n=62	n=33	n=478
Current use of the IUD*	24.3	40.3	50.0	33.3	1.4 [1.1-1.7]
	n=37	n=41	n=10	n=3	n=91
Intention to use the IUD among non-FP users*	29.7	73.2	60.0	100.0	3.1 [1.5-6.3]
*Statistically significant differences noted (p<0.05) using chi-squared test and confirmed through multiple logistic regression with the current IUD use or intention to use as the dependent variable and recall as the independent variable while controlling for educational attainment, age and SES. OR [CI]: Odds ratio [95% confidence interval]					

Logistic regression confirmed this finding, with current use of the IUD as the dependent variable and number of reported exposures as the independent variable (controlling for age, SES, and educational attainment). The association remained significant (OR=1.4, p=0.004). That is, respondents were 1.4 times more likely to be a current IUD user with each additional increment of exposure to the campaign.

Similarly, among non-FP users, the dose received from the campaign was positively and significantly associated with intention to use the IUD. This association remained significant using logistic regression that controlled for age, SES, and educational attainment (OR=3.1, p=0.002). That is, respondents were 3.1 times more likely to intend to use the IUD with each additional increment of exposure to the campaign.

Community health workers

The IUD campaign was augmented by door-to-door visits conducted by community health workers (CHWs) throughout the country. CHWs screen all homes in a designated region in order to identify women and their reproductive health needs. During the IUD campaign, CHWs paid special attention to the IUD as a FP method during their visits.

Characteristics of those visited by CHWs

Nearly 40 percent of all respondents recalled that they had ever been visited by a CHW in their home. These respondents were asked whether the visit influenced their knowledge or opinions or prompted them to take any actions. Being visited by a CHW was found to be significantly and negatively associated with a woman's educational attainment and SES. That is, the higher the SES, the lower the likelihood of having received a visit from a CHW (Table 18). This is unsurprising, because CHWs target poverty pockets and regions of lower SES. Women in Zarqa were more likely to report having received visits as

compared to those in Amman and Irbid. Also, the youngest age group, aged 18–24 years, was less likely to report receiving a visit as compared to the older age groups.

It is interesting to note that a significantly higher proportion of those who recognized the IUD campaign were visited by a CHW, as compared to those who did not recognize the campaign (43 percent and 35 percent, respectively).

Table 18: Unprompted and prompted recall of the OCP campaign among all respondents		
		Visited by a CHW
Total	n=800	39.8
Region*		
Amman	n=396	29.8
Irbid	n=199	38.7
Zarqa	n=205	60.0
Age*		
18-24	n=263	30.0
25-34	n=276	42.8
35-44	n=183	44.8
45-49	n=78	50.0
Education*		
Intermediate or lower	n=199	51.8
Some secondary	n=148	45.3
Completed secondary	n=335	37.9
Completed university or higher	n=117	18.0
Socio economic status (SES)*		
Upper	n=74	23.0
Upper middle	n=154	26.0
Lower middle	n=232	39.2
Lowest	n=340	50.0
Prompted recall of the IUD campaign*		
Recalled the campaign	n=516	42.6
Did not recall the campaign	n=284	34.5
* Statistically significant differences noted (p<0.05) when using chi-squared test		

Self-reported benefits from the CHW visit

Those visited by CHW reported positive experiences without prompting. As shown in Table 19, 43 percent reported that the CHW was good at her job, 36 percent enjoyed the visit, and 35 percent found the visit helpful. Nearly 46 percent reported that the visit was informative in terms of the IUD, 40 percent noted that the visit corrected their misunderstandings about the IUD, and 17 percent learned something new about the IUD.

CHWs also focus on FP in general, as can be seen in the respondents' reports that the CHW convinced her that modern FP methods are better than traditional ones (24 percent) and that the CHW made her reconsider her FP habits (22 percent). No significant differences were noted across socioeconomic groups.

Table 19: Unprompted benefits from the CHW visit, by SES					
	Total (%) n=318	Upper (%) n=17	Upper middle (%) n=40	Lower middle (%) m=91	Lowest (%) n=170
Informative in terms of the IUD	46.4	52.9	45.0	51.7	43.5
The CHW was good at her job	42.5	58.8	30.0	44.0	43.9
The visit corrected my misunderstanding of the IUD	39.6	47.1	40.0	39.6	38.8
Enjoyed the CHW's visit	36.2	52.9	25.0	39.6	35.3
The visit was very helpful	34.9	23.5	42.5	31.9	35.9
Convinced her that modern FP methods are better than traditional methods	24.2	11.8	35.0	24.2	22.9
Made her reconsider her habits related to FP	21.7	11.8	17.5	18.7	25.3
Told me something new about the IUD	16.7	17.7	15.0	14.3	18.2
Helped her decide to start using a modern FP method	14.2	11.8	12.5	14.3	14.7
The visit did not make me change my habits regarding FP	5.0	7.9	7.5	7.7	2.9

CHW visits in association with the IUD campaign

It is possible that the observed effect of the campaign on those who recalled it as compared to those who did not recall it might have been affected by the fact that those who recognized the campaign reported a higher proportion of CHW visits. This confounding effect might result in an overestimate of the effect of the campaign on those who recalled it, since CHWs work to increase knowledge, improve attitudes, and gain support for modern FP.

However, the effect of the campaign on the knowledge and attitudes of women towards the IUD persisted when stratifying respondents according to whether they were visited by a CHW or not (Table 20). That is, the observed positive association between recall of the IUD campaign and increased knowledge about the IUD was not confounded by whether the women received a visit from the CHW.

Significant differences regarding agreement with the statements emerged, as between those who did not and those who did recall the campaign, when stratified by having received a CHW visit. The mean number of agreements among those not visited by CHWs was significantly higher among those who recalled the campaign as compared to those who did not recall it (11.2 and 10.1, respectively). Similarly, the mean number of agreements among those visited by CHWs was significantly higher among those who recalled the campaign as compared to those who did not (11.3 and 10.2, respectively). There was

no significant difference in the mean number of agreements overall when stratifying the comparison by whether women were or were not visited by CHWs.

Table 20: Association between IUD knowledge/attitudes and the campaign with relation to CHW visits						
Agreed or strongly agreed with the following statements:	Not visited by CHW			Visited by CHW		
	Did not recall campaign n=179	Recalled campaign n=295	Total n=474	Did not recall campaign n=98	Recalled campaign n=220	Total n=318
The IUD is very safe	69.3*	79.7*	75.7^	77.6	83.6	81.8^
The IUD is a long term method / can protect a woman from pregnancy for up to 12 years	74.3*	84.8*	80.8	76.5	85.5	82.7
It is NOT difficult to return to fertility after having the IUD	64.8†	71.2	68.8	50.0*†	69.6*	63.5
Qualified trained IUD providers are NOT hard to find	74.9*	86.1*	81.9	68.4*	80.0*	76.4
The IUD is effective / a woman should not get pregnant with the IUD	64.8	73.2	70.0	69.4	76.4	74.2
It is convenient to use / insertion and removal is an easy process, requiring only a medical check and a very short procedure.	60.3*	73.9*†	68.8^	65.3*	81.8*†	76.7^
The IUD can be used to space between pregnancies	88.8*	95.3*	92.8	89.8*	95.9*	94.0
The IUD does not affect the fertility of women	71.5*	87.1*	81.2	78.6*	88.6*	85.5
The IUD is always available at Ministry of Health centers	89.8*	95.6*	93.5	90.8	95.5	94.0
The IUD is always available at Jordan Association of Family Planning and Protection health centers	88.3*	93.6*	91.6	86.7*	93.6*	91.5
The IUD is always available at the UNRWA	84.9*	90.9*	88.6	89.8	91.4	90.9
The IUD is always available at private clinics	91.6	95.6	94.1	95.9	96.4	96.2
The IUD is more effective than traditional methods	84.9*	92.2*	89.5	87.8	93.6	91.8
Mean number of agreements (out of 13)	10.1*	11.2*	10.7	10.2*	11.3*	11.0
<p>* Statistically significant difference ($p < 0.05$) in proportions or means using chi-squared test or Student's t-test, respectively, when comparing respondents who did and did not recall the campaign as stratified by having received a CHW visit</p> <p>† Statistically significant difference ($p < 0.05$) in proportions or means using chi-squared test or Student's t-test, respectively, when comparing respondents visited and not visited by a CHW as stratified by recall of the IUD campaign</p> <p>^ Statistically significant difference ($p < 0.05$) in proportions or means using chi-squared test or Student's t-test, respectively, when comparing respondents visited and not visited by a CHW</p>						

As for current use of the IUD, the association between being a current user of the IUD and recall of the campaign was not confounded by CHW visits. Among those who were not visited by a CHW, a significantly higher proportion of respondents who recalled the campaign reported current use of the IUD than did those who did not recall the campaign (40 percent and 22 percent, respectively) (Table 21).

Findings were similar when examining those who did receive a CHW visit (43 percent and 28 percent, respectively).

The intention to use the IUD for FP in association with the campaign was, similarly, not confounded by CHW visits. Among those who did not receive a CHW visit, a significantly higher proportion of respondents who recalled the campaign reported intention to use the IUD in the future (62 percent) than did those who did not recall the campaign (31 percent). Similar results were found among those who did receive a CHW visit (90 percent and 25 percent, respectively). It is interesting to note that among those who recalled the campaign, intention to use the IUD was higher among those who were visited by a CHW (90 percent) than among those who were not visited by a CHW (62 percent). This suggests that the combination of CHW visit and campaign may have a greater effect on non-users' intention to use than either element may have independently.

Table 21: Association between current use and intention to use the IUD and the campaign with relation CHW visits						
	Not visited by CHW			Visited by CHW		
	Did not recall campaign	Recalled campaign	Total	Did not recall campaign	Recalled campaign	Total
	n=88	n=176	n=264	n=64	n=150	n=38.3
Current use of the IUD	21.6*	40.3*	34.1	28.1*	42.7*	38.3
	n=29	n=34	n=63	n=8	n=20	n=28
Intention to use the IUD among non-FP users	31.0*	61.8*†	47.6^	25.0*	90.0*†	71.4^

* Statistically significant difference (p<0.05) in proportions when comparing respondents who did and did not recall the campaign, as stratified by having receiving a CHW visit
† Statistically significant difference (p<0.05) in proportions when comparing respondents visited and not visited by a CHW as stratified by recall of the IUD campaign
^ Statistically significant difference (p<0.05) in proportions when comparing respondents visited and not visited by a CHW

Conclusions

Campaign reach

- Recall of the campaign after the second wave was moderately high, with 65 percent of MWRA recognizing campaign materials after prompting with a visual aid.
- Recall of the campaign was not associated with SES or educational attainment levels, indicating that the campaign was successful at equally reaching all strata of Jordanian's society in the three examined governorates.
- Television was by far the most common source among those who recalled the campaign, followed by leaflets and brochures. Among those who recognized the campaign on television,

most recognized it from Jordan TV, followed by Ro'ya TV. Materials distributed at clinics and pharmacies were also a significant source of exposure.

Message recall

- Nearly two-thirds of respondents who recognized the campaign recalled messages relating to the IUD without any prompting. The most recognized messages were that the IUD is safe and comfortable, it is a long term method, and that women should consult a doctor about the IUD. These were among the key messages of the campaign, which demonstrates that the campaign was effective in delivering a clear, cohesive message.
- When prompted, most (86 percent) respondents who recalled the campaign remembered hearing that the IUD is a long term method, and more than 65 percent recognized four other key messages of the campaign. Less than 1 percent of respondents did not recall any of the mentioned campaign messages, indicating that the campaign was reasonably effective at conveying information in a memorable fashion.
- Nearly all respondents (93 percent) who recalled the campaign found the campaign likeable, and 81 percent reported that they were interested to keep watching or listening to the campaign when they first encountered it. No significant differences were noted when stratifying by socioeconomic status. This indicates that the campaign was appealing to MWRA across the demographics of Jordanian society in the three governorates.
- Respondents provided unprompted explanations for why the campaign appealed or did not appeal to them. The most mentioned reasons for its appeal related to the fact that the campaign was about FP methods and birth spacing. This implies that Jordanian MWRA appreciate campaigns about this topic, which is often characterized as a stigmatized or sensitive topic.
- When asked about what they understood from the campaign, respondents primarily mentioned benefits of birth spacing and that the IUD is safe and effective.

Associations between the campaign and attitudes, knowledge, and use of IUDs

National service statistics demonstrate an increase in CYP from IUDs immediately after the first wave of the campaign, and this increase continued through the second wave of the campaign. The campaign may be one factor associated with this increase in CYPs; however, additional research would be required to identify other factors that may have been associated with this trend and to quantify the amount of the increase that might be attributed to the campaign.

In addition, the survey results demonstrated several positive associations between recall of the campaign and the knowledge, attitudes, and intentions of respondents.

- Without prompting, slightly more than half of respondents who recalled the campaign reported that their knowledge was impacted by the campaign and/or reported that their attitudes were impacted, and two-fifths reported that their intentions or behaviors were impacted.

- The most mentioned change of attitude was a more positive feeling about the IUD. As for intentions or behaviors, among all viewers, 12 percent reported that they discussed the IUD with their spouses and 24 percent discussed the IUD with others. Eight percent consulted a provider about the IUD, 3 percent decided to use the IUD, and 1 percent had an IUD placed. This suggests that the campaign was reasonably good at getting women to talk about the IUD and to discuss it with a provider, but there is still a gap between that impact and actually deciding to use the IUD. It is important to note that the survey instrument did not attempt to assess the respondents' unmet need for modern FP methods; it is possible that the low proportion of uptake may be related to a low proportion of women with an unmet need.
- Respondents who recalled the campaign were more likely than those who did not recall it to:
 - have accurate knowledge and positive attitudes about the IUD;
 - be current users of FP methods, especially of the IUD; and
 - intend to use the IUD in the future, if they were not using any FP method at the time of the survey.
- A dose effect was observed when considering the number of campaign materials recognized by respondents and the respondents' knowledge and FP practices.
 - The greater the dose of exposure, the greater the respondents' agreement to positive statements about the IUD.
 - The likelihood of being a current IUD user was 1.4 times greater with each additional increment of exposure to the campaign.
 - The likelihood of intending to use the IUD was 3.1 times higher with each additional increment of exposure to the campaign.

Note that, while these associations are relevant, the cross-sectional nature of these data do not allow an assessment of causation between exposure to the campaign and increased knowledge, improved attitudes, IUD use, or intention to use the IUD. A longitudinal probabilistic sampling design is required to provide such causal conclusions.

- Having received a visit by a community health worker did not confound the observed positive association between recall of the IUD campaign and increased knowledge about the IUD, among respondents who recalled the campaign.

Discussion and Recommendations

The results indicate that the campaign equally reached MWRA from all SES, in a manner that was likable and comprehensible. The findings of this study suggest that interviewed MRWA are well aware of the IUD and its benefits, irrespective of exposure to the campaign or CHWs. However, these messages require more emphasis:

- The IUD can be used for birth spacing
- The IUD does not impact a woman's fertility after it is removed

Those who reported that the IUD campaign impacted their knowledge or attitudes towards the IUD were more likely to be current users of the IUD than were those who did not report changes in

knowledge and attitude as a result of the campaign. It is possible that IUD users were more likely to give the campaign attention than were non-users, when the campaign was presented to them.

The observed dose effect shows that an intention to use the IUD, and actual use of the IUD, increased with the number of recognized campaign materials. This suggests that continuing the campaign—and finding ways to make the materials and messages memorable, while increasing opportunities for exposure—may help to increase MWRA intention to use IUDs and ultimately their actual use of IUDs. This finding supports the multichannel approach utilized by this campaign and should encourage future campaigns to be conducted in a similar manner.

The data suggest that the campaign may contribute to shifting women from less effective to more effective FP methods, since respondents who recalled the campaign were significantly less likely to express an intention to use oral contraceptives in the future than those who did not recall the campaign, and were significantly more likely to intend to use IUDs. The discontinuation rate for oral contraceptives is 46 percent, nearly triple the IUD's discontinuation rate of 14 percent (JPFHS 2012). Thus, shifting use from oral contraceptives to IUDs may increase the national contraceptive prevalence rate. Additional research would be required to formally evaluate the effect of the campaign on intention to use and actual use of IUDs as compared to other FP methods. Qualitative research could be used to collect information on how non-users of FP perceive the IUD after hearing the campaign, what concerns they still have about using the IUD, and what would persuade them to choose the IUD over oral contraceptives or other methods. This research would provide an evidence base from which to determine whether these campaigns should be continued as an effective means of promoting the IUD in order to increase the contraceptive prevalence rate nationally.

Finally, the national service statistics revealed a promising increasing trend in CYPs for IUDs only, and not for any other modern FP methods, from October, 2012, through March, 2014. While it is not possible to determine whether and how much the campaign contributed to this trend, there were no other relevant public influences. No other social campaigns were on air about the IUD during the previous two years, no major changes in service provision were noted in health facilities (such as public health centers and UNRWA clinics), and the constraints of midwives' insertion of the IUD were not resolved during this time period. It is thus reasonable to assume that the campaign had at least some positive influence on CYPs during this time frame, although additional study would be required to quantify the impact of the campaign on CYPs and to identify opportunities to modify the campaign approaches and materials to increase that impact in the future.

In view of these findings, the IUD campaign should be continued until there is a plateau in the observed increase in national CYP due to IUD use. While it is not possible to determine causality from the national CYP statistics, it is unlikely that other factors would have caused this increase in CYP only for the IUD, within the time period when the campaign was active.

Some campaign messages require further emphasis and dissemination, such as the messages that the IUD can be used for birth spacing and that the IUD does not impact a woman's fertility after it is

removed. The campaign should be altered to bring more emphasis to these messages prior to being launched again.

In conclusion, the campaign, if aired again, may contribute to better knowledge and attitudes about the IUD. It may also aid in increasing the use of the IUD among those who are exposed to the campaign, although the campaign appears to be most effective in the earlier phases of the behavior-change continuum.