



USAID
FROM THE AMERICAN PEOPLE

Private Sector Project for Women's Health

Trip Report: *Technical Assistance in Research, Monitoring and Evaluation*

January 2009

Submitted to:
Dr. Basma Khraisat
Cognizant Technical Officer
USAID/Jordan

Submitted by:
Dr. Rita Leavell
Project Director
PSP for Women's Health – Jordan

Prepared by:
Karen Finnegan
Senior Analyst
Abt Associates, Inc.

Private Sector Project for Women's Health-Jordan
PSP Task number 802
Contract number: GPO-I-802-04-00007-00

The information contained in this document is considered CONFIDENTIAL and is intended for the recipient and their authorized representatives only. Any unauthorized distribution is strictly prohibited without the prior written consent of submitter.

ACRONYMS

CCA	Circassian Charity Association
CHW	Community Health Worker
CBE	Clinical Breast Exam
COC	Combined Oral Contraceptive
DOS	Department of Statistics
FP	Family Planning
GUVS	General Union of Voluntary Societies
IUD	Intra-Uterine Device
JAFPP	Jordan Association of Family Planning and Protection
JPFHS	Jordan Population and Family Health Survey
MOH	Ministry of Health
MWRA	Married Women of Reproductive Age
NGO	Non-Government Organization
OC	Oral Contraceptive
PDA	Personal Digital Assistant
POP	Progestin Only Pill
PSP	Private Sector Project for Women's Health
PMP	Project Monitoring Plan
QA	Quality Assurance
RH	Reproductive Health
SBE	Self Breast Examination
STI	Sexually Transmitted Infection
TL	Tubal Ligation
UNRWA	United Nations Relief and Works Agency
USAID	United States Agency for International Development
VAW	Violence Against Women

EXECUTIVE SUMMARY

The Private Sector Project for Women's Health (PSP-Jordan) is a five-year project funded by the United States Agency for International Development (USAID) with a mandate to improve the health of Jordanian women and families. Through a program of outreach visits, conducted by community health workers (CHWs), the project addresses contraceptive demand, knowledge of women's health issues, and awareness of violence against women. The visits are orchestrated through a partnership with the Circassian Charity Association (CCA) and the General Union of Voluntary Societies (GUVS).

Karen Finnegan traveled to Amman Jordan from January 24 to February 6 2009 under a scope of work with the following objectives:

1. Discuss findings of analysis of outreach data with PSP staff and partnering organizations to determine client profile for future visits;
2. Develop visitation guidelines for FP outreach visits;
3. Provide recommendations for upgrading the outreach program's data collection, recording, and reporting system;
4. Work with local PSP staff to determine the feasibility of the suggested technical upgrade;
5. Review PSP's existing Monitoring and Evaluation system, identifying further needs for data analysis and documentation of PSP outcomes and potential impact.

During the trip, in-country activities consisted of participation in meetings with CCA and GUVS to discuss existing data collection processes and systems, convening meetings with programming staff who oversee database design for the outreach program, and participating in the PSP workshop to discuss future project goals and monitoring and evaluation needs. In addition, activities included the drafting of an outreach visit protocol informed by analysis of programmatic data, and the synthesis of existing data with possible research projects.

KEY FINDINGS

Prior to arriving in Jordan, Karen Finnegan analyzed a sample of data collected by CCA and GUVS through the outreach visits conducted in 2007 and 2008. The analysis focused on FP trends and outcomes in visits one through four. Upon arrival in Jordan, CCA and GUVS provided data collected for visits five through eight. Under the current visit protocol,

approximately 10% of women receive these additional visits; women began receiving more than four visits in February 2007. The analysis of additional visit data supplements the analysis of visits one through four which was completed in December 2008. These analyses shape the following findings.

1. Outreach program

- During a visit with GUVS outreach workers, they detailed the visit protocol. Women aged 15-60 receive an initial assessment visit; during the encounter, the CHW discusses family planning, breast health, cervical cancer screening, and other women's health issues. All women receive a minimum of two visits. Women who are using a contraceptive method and have no desire to change are not followed for more than two visits. Follow-up visits, up to visit number four, continue for women who are not using a modern method of contraception, are pregnant, or who require follow-up after a referral for FP or cancer services. Approximately 10% of these women continue to receive visits after visit number four is completed. Each CHW visits approximately 20 women per day. A supervisor is responsible for checking the quality and validity of the CHWs' work; each supervisor oversees 10 CHWs.
- At GUVS, data entry of the information written on the visit cards occurs after each visit by one of four staff members. Each data entry staffer is assigned a region; one woman enters information from the South, one from the North, and two enter data from Amman. Data is entered into an Access database. Summary reports are generated on a daily, weekly, monthly, and quarterly basis. Upon entry, Access runs validity checks to ensure that the data is plausible.
- At CCA, data entry occurs in a similar fashion as that found at GUVS. Data entry staff are assigned to a region and enter information on all visits from that area. Data validity checks are not yet in place at CCA.
- An assessment of why women receive additional visits reveals that the majority of women are followed for an extended period of time as a result of non-method use.

Table 1. Reason for additional visits (5-8), CCA.

Reason for additional visits	N	%
Continue to use traditional or no method*	9190	86.5
LAM practitioner (date of birth more than 2 months ago)	1037	9.8
Recently gave birth	205	1.9
Currently pregnant	69	0.7
Other	121	1.1

Women included in the other category are being followed as new adopters or have been referred for a breast or cervical cancer screening and require continued support.

- Women visited by community health workers adopt modern methods at visits three, four, seven, and eight. The largest percentage of women adopts a modern method at visits four and eight.

Table 2. Percentage of women who report using a traditional method or no contraceptive method who adopt a modern method in the subsequent visit, CCA.

	Percentage of eligible women who adopt a modern method
Visit 1	-
Visit 2	
Visit 3	16.36
Visit 4	20.54
Visit 5	-
Visit 6	
Visit 7	7.2
Visit 8	18.8

- Women who are non-method users adopt modern methods at rates higher than women who use traditional methods (safe period, withdrawal, other method). Women who report no method at visit one, are 2.51 times more likely to adopt a modern method by visit four than are women who report using safe period or withdrawal. Women, who report no method at visit five, are 1.52 times more likely to adopt a modern method. These analyses control for number of visits.
- Few women visited report that cultural or religious beliefs prevent them from adopting a family planning method. Among women visited by CCA outreach workers, 0.01% of women report that religious opposition to FP is the reason why they have not adopted a contraceptive method; 0.30% of women cite cultural reasons— the desire for a male child— as their motivation for eschewing contraceptive methods.
- In the first visit, women who indicate that they do not use a family planning method because they wish to become pregnant are unlikely to adopt a FP method. 26.34% of women who do not adopt a contraceptive method after additional visits (five through eight) indicated at the first visit that their reason for not using a method was a desire to become pregnant.
- The percentage of women who perform a self-breast exam increases sharply between visits one and two. At the first visit, 22.72% of women report that they regularly perform self-breast exams; at the second visit, 47.68% of women report the completion of a self-breast exam.
- CHWs refer women to providers for family planning services, antenatal care, breast cancer screening, and cervical cancer screening. The tables below contain information on referral source and outcome.

The majority of women are referred to MOH clinics with private providers as the second most common place of referral. 63.5% of referrals are to MOH clinics; 15.4% are to private providers. Women are most often referred to MOH clinics for IUD insertion, supplements, or condoms; women are most frequently sent to MOH hospitals for tubal ligation or antenatal care. The majority, 82.9%, of referrals to private providers are for the insertion of an IUD. 74.9% of the referrals to JAFPP are also for IUD insertion. Women are referred to the pharmacy for supplements, condoms, and suppositories.

Table 3. Place of referral by reason for referral, all visits, CCA.

	MOH Hospital	JAFPP	MOH Clinic	Private Provider	UN Pal. Refugees	Military Hospital	Pharmacy	Total
IUD Insertion	150	1045	3897	2249	462	75	2	7880
IUD Follow-up	12	125	244	49	14	1	0	445
Supplements	36	102	3389	166	432	31	80	4236
Injection	8	18	208	9	31	6	0	280
Condom	28	34	2249	7	291	23	82	2714
Suppository	1	4	62	1	13	0	25	106
Tubal Ligation	145	1	29	7	1	8	0	191
Counseling	36	50	656	174	72	8	1	997
Implanon	4	9	33	6	1	0	0	53
Antenatal Care	213	1	298	5	3	1	0	521
Other	23	6	144	40	15	1	0	229
<i>Total</i>	<i>656</i>	<i>1395</i>	<i>11209</i>	<i>2713</i>	<i>1335</i>	<i>154</i>	<i>190</i>	<i>17652</i>

Table 4 tabulates referral reason by referral outcome for visits one through eight. The table highlights the successes of the referral system (26.3% of women who were referred for an IUD insertion received the service from a provider) and the areas for improvement. It is important to note that this information comes from a small sample of women who were enrolled during one quarter. There are many more referrals given and completed each year.

Table 4. Reason for referral by referral outcome, all visits, CCA.

Referral Reason	Referral Outcome											
	IUD Insertion	IUD Follow-up	Pill supply given	Injection given	Condoms given	Suppository given	Tubal Ligation performed	Counseling only	Implanon given	Antenatal Care	Other	Did not go for care
IUD Insertion	1540	0	336	22	246	4	2	1	38	2	13	3657
IUD Follow-up	1	73	0	0	1	0	0	0	1	0	0	158
Suppository	89	0	781	17	197	3	1	1	14	2	3	2061
Injection	6	0	16	35	17	1	0	0	1	0	0	134
Condom	31	0	54	3	646	0	0	0	11	0	2	1318
Suppository	1	0	4	0	1	11	0	0	0	0	0	60
Tubal Ligation	7	0	7	2	5	1	19	0	4	0	0	90
Counseling	30	0	54	3	54	1	1	20	4	0	22	565
Implanon	2	0	1	0	1	0	0	0	6	0	0	16
Antenatal Care	13	0	38	12	27	0	0	0	7	28	0	291
Other	5	0	5	1	6	0	0	0	3	0	56	92
<i>Total</i>	<i>1725</i>	<i>73</i>	<i>1296</i>	<i>95</i>	<i>1201</i>	<i>21</i>	<i>23</i>	<i>22</i>	<i>89</i>	<i>32</i>	<i>96</i>	<i>8442</i>

- Rate of referral completion varies slightly between the three governorates in which CCA conducts outreach visits.

Table 5. Referral completion by governorate, all visits, CCA.

Referral Reason	Amman		Irbid		Zarqa	
	<i>Referral Completed</i>		<i>Referral Completed</i>		<i>Referral Completed</i>	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
IUD Insertion	938	979	982	1356	1015	1115
IUD Follow-up	32	56	80	127	40	90
Suppository	438	458	457	599	727	715
Injection	25	32	30	34	54	65
Condom	242	207	309	435	565	545
Suppository	15	11	11	15	21	14
Tubal Ligation	21	23	41	46	13	17
Counseling	93	52	85	89	284	218
Implanon	4	7	8	19	2	3
Antenatal Care	59	47	74	85	127	78
Other	46	72	23	30	9	28
Overall percent of referrals completed	50.40		57.45		50.27	

- These findings are reflected in the outreach protocol detailed in recommendations.
- A codebook has been developed to aid future analysis of the outreach data (Annex B).

2. Technological updates to the outreach program

- The NGO staff, contracted programmers, and PSP staff recognize the limitations of the existing outreach database and welcome modifications. Currently it is impossible to link visits one through four with visits five through eight. The information is stored on separate computers and a unique identifier is not available to link records. Additionally, on April 1st of each year, GUVS archives data. This archival process forces data entry staff to enter information for women who are receiving a follow-up visit as if it were the first visit. This system makes it nearly impossible to determine the longitudinal impact of outreach visits by GUVS staff. The large quantity of data collected and the existing system make report generation a cumbersome process.
- Community health workers and managerial staff at GUVS are enthusiastic about the possibility of piloting PDAs for data collection by community health workers. The CHWs did express some concerns regarding the small screen, extended visit time as they learn to use the technology, and need for technical assistance.
- CCA managers voiced some concerns about the use of PDAs for data collection. Foremost among the worries is the cost to the organization; there is also a fear that CHWs will lose or sell the devices intended for data collection. There is concern that use of PDAs will significantly alter the manner in which supervisors assess the work of the CHWs.
- During the trip, a meeting with the Department of Statistics (DOS) was convened to discuss their experiences with PDAs for data collection of household surveys. In 2007, the PDA was used for administration of an agricultural census. In 2008, the device was used to collect information on labor, income/expenditures, and population demographics. Supervisors instituted regular checks to ensure the consistency and validity of the data. The technology was developed, training conducted, and technical assistance provided by Informability. Staff trained in PDA use had, at minimum, a B.A. The DOS project used C# as the programming code and an Oracle database to collect household survey data with PDAs. Lessons learned include: daily, routine synching to backup data from the PDAs; daily, routine charging of PDAs to prevent battery drain; all data collection staff should be equipped with paper forms to ensure data can be collected if software malfunctions. Overall, DOS was happy with the experience and continues to use PDAs for data collection.

3. Monitoring and evaluation

- During a two-day workshop, the PMP was revised to determine the appropriateness of the existing indicators for the monitoring of ongoing project activities. The PMP has a wide-range of indicators which measure PSP activities.
- Minimal modifications are needed to the existing PMP.

RECOMMENDATIONS

1. Outreach program visit protocol

- All women aged 15-60 should receive two visits. This represents a continuation of current program policy. At these visits, community health workers will discuss FP methods, breast health, cervical health, and other topics which address women's health needs.
- Married women of reproductive age who are non-method users or who utilize a traditional method should receive a third and fourth visit.
- If at the fourth visit, a woman is not using a FP method, is breastfeeding, or is pregnant, she should receive two to four additional visits, resulting in six to eight total visits. Women, who expressed a desire to become pregnant, yet have not reported a pregnancy, and who are not using a method, should be excluded from this group. Women who receive a fifth visit, should be followed until adoption or the eight visit.
- Non-method users who adopt a modern method during the period of additional visits (visits five through eight), should receive two additional visits following adoption.
- Women, who indicate a problem with breast or cervical health, should be visited until care is sought, plus one follow-up visit. If the woman does not seek care by the eighth visit, follow-up will terminate at the eighth visit.

2. Modifications to the data collection cards

- As CHWs target women who reside in Jordan's pockets of poverty, it is necessary to collect standardized information on socioeconomic status. Currently a woman is classified as lower, middle, or upper class based on CHW observation and not on standardized criteria. The utilization of the questions found in the JPFHS to assess socioeconomic status will allow for a standard measure. The JPFHS questions rely on interviewer observation and respondent reporting; the data is collected only at the first visit. Information is collected on such variables as material of walls, material of floor, source of water, and household possessions.
- CHWs suggest that information be collected on education level of the women visited. This information would be gathered at the initial intake visit.
- Data on referral outcome is collected through self-report. The data can only be confirmed for women that visit a provider in the private sector, as these forms are submitted to PSP for reimbursement. Referral completion rates vary by procedure and location of referral, but hover around 50%. To better understand why women are not seeking care following

referral by a CHW, it is recommended that data be collected on this question. CHWs suggested that possible answers include: cost, distance, fear of results. Additional plausible responses are lack of childcare, family opposition, dissatisfaction with location of referral, changed mind regarding need to adopt a contraceptive method.

- In analysis of the GUVS data, 23.44% of women report that they have no stated plan regarding modern contraception use. This is in sharp contrast to the 1.53% reported by CCA. Discussion with GUVS staff revealed that this answer is selected when a woman is pregnant or post-partum and breastfeeding at the first visit. The woman is unable to predict the return of her menstrual cycle and, therefore, has no stated plan. The coding of this response should be standardized among GUVS and CCA CHWs.

3. Outreach program technological updates

- Accessibility of the outreach data, ease of reporting, and communication between site offices would be improved by the implementation of a web-based server for data storage. The technological capacity for this project is available in the existing technology staff. Database programmers suggest that data be entered offline and then uploaded to a web-based server. The server will facilitate report generation and aid in the storage of large datasets. Storage on a central server will also allow PSP staff to monitor data collection.
- The process of uploading data to a server can be implemented regardless of the method used for data collection (paper card, PDA, laptop). The use of a PDA or laptop for data collection reduces data entry burden and allows for validity checks to be implemented as data is entered. This will ensure cleaner data that is available for analysis and program evaluation with minimal cleaning.
- All modifications to the data collection cards should be reflected in the database.

4. Research

- A cohort of women who participate in the outreach program and who adopt oral contraceptives or IUDs as their method of birth control should be followed for a minimum of 12 months. In addition to the data collected during a routine visit with a CHW, questions should be asked regarding source of method, cost, reason for continuation or discontinuation, and perception of the method used. This will contribute to the body of knowledge on patterns among program participants as well as continuation and discontinuation rates. JPFHS data indicates that discontinuation rates within the first year of use are 47% for pill users and 12% for IUD users.¹ Neither current outreach protocol nor JPFHS data allows for the evaluation of the impact of visits by CHWs on discontinuation rates. Following a cohort of new adopters would help determine the optimum number of visits by CHWs to encourage prolonged use of contraception.

¹ Department of Statistics [Jordan] and Macro International, Inc. 2008. *Jordan Population and Family Health Survey 2007*. Calverton, Maryland, USA: Department of Statistics and Macro International, Inc.

- PSP has conducted extensive training in a variety of FP/RH topics. Providers, with schedules strained by the number of patients that they treat and few support staff, have minimal time to participate in quality improvement and data collection processes. Qualitative research with private providers to determine the non-monetary incentives which encourage participation in quality improvement and evaluation would help determine ways to engage providers. This research, in the form of focus groups, should generate an official report.
- In a sample of 9,463 women who received a fifth visit, 8, 276 failed to adopt a modern method. Of these non-adopters, 63.77% indicated in the first visit that they wished to space future births. A series of focus groups or informant interviews with non-adopters who voiced a desire for birth spacing will help shape the messages which this difficult to reach population receives.

NEXT STEPS

1. Outreach program visit protocol

- Follow-up with supervisors at CCA and GUVS to ensure that the new visit guidelines have been disseminated to project staff.

2. Outreach visit technology updates

- Continue meetings with database development staff to finalize the timeline for implementation of database changes. Ensure that all modifications to the database are complete and functional prior to October 1, 2009.
- Gather input from key stakeholders on modifications needed to the data collection cards and finalize the revised instrument.
- The cost of transitioning from paper cards for data collection to a PDA pilot is approximated below. The cost does not account for the discount which may be applied for placing a bulk order of PDAs. Labor costs are undefined pending bids by technology firms. Survey development should take approximately 15 days of labor. To train CHWs in use of the PDA will require three days, including an observed site visit. The technology firm which is contracted to oversee the PDA implementation would be expected to provide ongoing technical assistance.

Item	Cost per Unit	Quantity	Total Cost
PDA- Palm E2	\$140USD*	28**	\$3,920
Survey software***	\$2100USD	1	\$2,100
Survey development		15 days	
Training		3 days	

Comment [b1]: Cost in Jordan has been estimated at 200-400 JD each. Providing that the device will have a high data storage capacity.

Comment [b2]: A new data system is to be introduced for a better quality reporting. Cost has been estimated at 25,000-30,000 JD.

* PSP note: Cost in Jordan has been estimated at 200-400 JD each. Also, the device may need a high data storage capacity for outreach visits and may be more expensive.

**Finnegan note: The number of PDAs allows for 10 users to be trained in each organization with four additional PDAs for backup in the event of malfunction or loss.

***PSP note: A new data system (non-survey) may be introduced for better reporting and analysis. Cost has been estimated by PSP at JD25,000-30,000. So above costs only an initial estimate.

3. Research

- Determine the sample size needed for a study assessing continuation rates among adopters of IUDs and COCs. PSP Note: Costing will be based on sample size and potential agencies (including CHW's) to collect the information.

ANNEX A: Contacts

USAID

Dr. Basma Khraisat,
Project Management Specialist
USAID, Population & Family Health
American Embassy,
PO Box 354, Amman 11118 Jordan
Tel: 590-6622
Mobile: 07958-44446
E-mail: bkhraisat@usaid.gov

CCA

Mr. Basim Aziz,
Director RH Project
Circassian Charity Association
Amman – Jabal Al-Weabdeh
Tel: 4628600
Mobile: 07955-59018
E-mail: baziz@go.com.jo

Dr. Sahar Izzat,
Field Director, RH Project
Circassian Charity Association
Amman – Jabal Al Weabdeh
Tele: 4628600
Mobile: 07956-29233
E-mail: hsmmeddr@hotmail.com

GUVS

Mr. Ali Alzo'bi,
Reproductive Health Project General Supervisor
General Union for Voluntary Society
Amman – Baqa'a Camp
Tel: 5690005
Mobile: 0777-78569

Informability

Mr. Ahmad Mansour
Systems Architect
Informability
Tel: 96265164636
Email: amansour@informability.com

Jordan Department of Statistics

Mr. Basam Shannak

Jordan Department of Statistics
Amman – Al Jbbeha
Tel: 530-0700
Email: basem@dos.gov.jo

PSP

Private Sector Project for Women's Health
Mecca Street, Bldg. 25
PO Box 930672 Amman 11193 Jordan
Tel: 551-2647 / 551-2735 – Fax: 5512756

Dr. Rita Leavell,

Project Director
Mobile: 07955-80258
E-mail: Rita.Leavell@psp.com.jo

Dr. Maha Shadid,

Deputy Project Director
Mobile: 07779-22409
E-mail: maha.shadid@psp.com.jo

Ms. Ansam Bizzari

Outreach Program Coordinator
Mobile: 96278570754
Email: ansam.bizzari@psp.com.jo

Ms. Randa Ahmad,

Outreach Program Coordinator
Mobile: 07958-27802
E-mail: randa.ahmad@psp.com.jo

Dr. Nagham Abu Shaqra,

QA & Program Technical Specialist
Mobile: 07952-09729
E-mail: n.abushaqra@psp.com.jo

Ms. Lubna Al Weshah,

M&E Training Coordinator
Mobile: 07772-37423
E-mail: lubna.weshah@psp.com.jo

Ms. Arwa Bustami,

VAW Coordinator
Mobile: 07968-18716
E-mail: arwa.bustami@psp.com.jo

Ms. Mays Halasa,
Health Market Research Coordinator
Mobile: 07956-80387
E-mail: mays.halassa@psp.com.jo

Ms. Iten Ramadan,
Sr. Training Advisor
Mobile: 07955-65611
E-mail: iten.ramadan@psp.com.jo

Sweidan

Mr. Samer Jwainat
Executive Manager
PO Box 3089 Amman 11821 Jordan
Tel: 96265823654
Email: samer@sweidangroup.com

ANNEX B: Codebook

Table 6. Variable definitions for table labeled Mrs_general_information.

	Variable Name	Definition	Values
General Information	ID	identification	
	Mrs_name	woman's name	
	Date_of_first_visit	date of first visit	
	Worker_No	community health worker identification number	
	Birthday	birthday of woman	
	Wedding_day	wedding day of woman	
	husband_work	husband's occupation	
	Mrs_work	woman's occupation	
	Home_status	financial status of household	0=missing 1=poor 2=middle 3=good
	Home_own	woman rents or owns home	1=yes 0=no
	mrs_region_id	Region. Part of address	1 to 34
Fertility History	Hamels	parity	
	Nolives	number of live children	
	Dead_on_birth	number of children dead upon birth	
	Dead_after_birth	number of children dead after successful birth	
	ijhaads	number of miscarriages	
	Last_Hamel_date	last birth date	
	Last_Hamel_result	outcome of last pregnancy	1=alive 2=miscarry 3=perinatal death
	Forced_birth	history of a caesarean section	1=yes 0=no
Forced_birht_no	number of caesarean sections		
Pregnancy Risk Factors	Pressure	woman diagnosed with high blood pressure	1=yes 0=no
	Blood_disease	woman diagnosed with blood disease	1=yes 0=no
	Jaltaat	woman diagnosed with infarction, heart problems	1=yes 0=no
	tasammom_hamel_redundance	woman diagnosed with toxemia during pregnancy	1=yes 0=no
	ayboobeh	woman has suffered from coma or unconsciousness	1=yes 0=no
	sokkaree	woman diagnosed with diabetes mellitus	1=yes 0=no
	Self_disease	woman diagnosed with mental health disease	1=yes 0=no
Cancer	woman diagnosed with cancer	1=yes 0=no	

	Heart_Disease	woman diagnosed with other heart disease	0-4
	Any_Bearing_Problem	history of complications during pregnancy	1=yes 0=no
	Generate_Defects	history of genetic defect in children	1=yes 0=no
	Cluster_Bearing	molar pregnancy	
	Out_Bearing	ectopic pregnancy	
	Uterus_Pricking		
	Liver_Disease	woman diagnosed with liver disease	1=yes 0=no
	Nephritic_Disease	woman diagnosed with kidney disease	1=yes 0=no
	Neural_Disease	woman diagnosed with neural disease	1=yes 0=no
	Respiration_Disease	woman diagnosed with respiratory disease	1=yes 0=no
	last_preg_qaysar	last birth was c-section?	1=yes 0=no
	before_nazef	bleeding during pregnancy (in previous pregnancy)	1=yes 0=no
	after_nazef	bleeding after pregnancy (in previous pregnancy)	1=yes 0=no
	marara	gallbladder disease	
	high_pre	high blood pressure during pregnancy	
T1	problems with current pregnancy	1=gestational diabetes 2=preeclampsia 3=bleeding 4=anemia (<9) 5=problem with fetus (i.e. abnormal position, small for gestational age, lack of movement)	
Fertility Plans	Mrs_birthing_plan	woman's current fertility desires	1=wants children 2=spacing 3=limit number of children 4=uncertain 5=no plans stated
	Condom	uses condom	1=yes 0=no
Current contraceptive method	Singular_disks	progestin only pill	1=yes 0=no
	Structured_disk	combined oral contraceptive	1=yes 0=no
	Lawlab	iud	1=yes 0=no
	Hoaan	injection	1=yes 0=no
	Tahaameel_Jel	suppository	1=yes 0=no

	Seperation	withdrawal	1=yes 0=no	
	Safe_period	safe period	1=yes 0=no	
	LAM	lam	1=yes 0=no	
	Norplant	norplant/implanon	1=yes 0=no	
	AMN	amenorrhea	1=yes 0=no	
	Operations	operation-ovary or uterus removed	1=yes 0=no	
	Operation_type			
	others	other method of contraception	1=yes 0=no	
	other_text			
	without	no modern method used	1=yes 0=no	
	Dont_use_seperation	spacing	1=yes 0=no	
	Reason for not using contraception	Want_to_birth	wants more children in the future	1=yes 0=no
		New_Wife	newlywed	1=yes 0=no
		Hamel_Reason	wants to get pregnant	1=yes 0=no
Natural_redaah		breastfeeding	1=yes 0=no	
Husband_doesnt_exist		husband not at home	1=yes 0=no	
Relegion_reasons		religious reasons	1=yes 0=no	
Healthy_reasons		health reasons	1=yes 0=no	
Financial_reasons		cannot afford birth control	1=yes 0=no	
Cultural_reasons		cultural opposition from mother, friends, etc.	1=yes 0=no	
Non_suitable_method		problem with methods	1=yes 0=no	
No_agreemant		disapproval of husband, mother-in-law, or other influential person	1=yes 0=no	
Who_is_not_agree				
Hamel_difficulty		difficulty conceiving	1=yes 0=no	
Afraid_of_methods		fear	1=yes 0=no	
other_methods		other reasons	1=yes 0=no	

	other_methods_type		
	feednocond	breastfeeding	1=yes 0=no
	husband_dis	Husband is sick. Reason for not using	1=yes 0=no
	nafas	post partum period. Reason for not using method	1=yes 0=no
	Old45_49	Age 45-49	1=yes 0=no
	bedawra	amenorrhea due to breastfeeding	
	last_visit	last visit	
	after_use		
	when_modern		1=yes 0=no
	hamel_any_visit		
Other	cr_dr		1=yes 0=no
	Smoke_10	woman is a smoker	
	iaaaat_existence	do not use	
	iaaaah_type	do not use	
	Haamel_Status	do not use	
	Planned	future family planning desires	1=wants children 2=spacing 3=limit number of children 4=uncertain 5=no plans stated
	Last_turn_date	do not use	
	Expected_birthday	do not use	
	Blood_disease_type		
	T2		
	N1		
	N2		
	B1		
	B2		
	D1		
	D2		

Table 7. Variable definitions for table labeled Visits.

	Variable Name	Definition	Values
General Information	ID	identification	
	Visit_Number	number of visit	
	Worker_no	community health worker identification number	
	Visit_date	date of visit	
	First_Visit_Method	contraceptive method at first visit	
	First_Visit_date	date of first visit	

	Final_Visit	Is this the final visit?	1=yes 0=no
Family Planning	Change_method	Is the woman interested in changing method?	1=yes 0=no
	Current_method	current contraceptive method	
	Current_operation_type	ignore	
	Starting_date_of_current_method	Starting date of method. First visit only	
	change_date	date of discontinuation of previous method	
	Reason	reason for changing contraceptive method	1=side effects 2=desire pregnancy 3=failure to use a method has resulted in pregnancy 4=uncomfortable with method 5=pregnant 6=fear of method 7=financial problems 8=change to different modern method 9=influence of relative, friend, or other 10=age 11=other reason
	changeReason		
	New_method	new contraceptive method	
	Operation_type		
	Starting_date	starting date of the new (next) contraceptive method	
	Mordeaah	woman is nursing (using LAM)	1=yes 0=no
	Child_age	age of most recent child	
	Full_or_Partial	full or partial breastfeeding	1=yes 0=no
	Circle	cycle number (refers to LAM condition)	1=yes 0=no
	Referral	Tahweeel	woman referred for method consultation

	Tahweel_reason	reason for FP referral	0=women did not have FP referral 1= iud insertion 2=iud follow-up 3=supplements 4=injection 5=condom 6=suppository 7=tubal ligation 8=counseling 9=Implanon 10=antenatal care 11= other
	Tahweel_place	place of referral	1=MOH hospital 2=jord family planning 3=MOH clinic 4=private 5=UN pal refugees 6= milit. Hosp 7=pharmacy
	Result_tahweel_reason	outcome of referral	1=IUD insertion 2=IUD follow-up 3=pill supply given 4=injection 5=condom 6=suppository 7=tubal 8=counseling only 9=implanon 10=anc 11=other 20=didn't go
	Result_tahweel_place	place woman sought care following referral	1=MOH hospital 2=jord family planning 3=MOH clinic 4=private 5=UN pal refugees 6= milit. Hosp 7=pharmacy
	What_will_do	intention re: current method	1=continue 2=stop 3=change 4=none
	Other_Notes	ignore	
	visit_free	When the woman sought follow-up care, was it free?	1=yes 0=no
	Pregnancy	Expected_hamel	Is woman currently pregnant?
Expected_hamel_date		date of conception	
Expected_birth		date of birth	

	hamel	Is woman pregnant?	1=yes 0=no
Breast and Cervix Care	mas7a_dawri	Has the woman had an irregular pap smear?	1=yes 0=no
	mas7a_problems	Has the woman had a problem with a pap smear?	1=yes 0=no
	mas7a_did	Did the woman seek follow-up care for her pap smear following a visit from a health worker?	1=yes 0=no
	mas7a_ta7weel	Was the woman referred for a pap smear?	1=yes 0=no
	mas7a_ta7weel_reason	Why was the woman referred for a pap smear?	1=referral for breast exam 2=referral for pap smear 3=referral for both
	e_sonar	Did the woman receive an ultrasound?	1=yes 0=no
	e_mamo	Did the woman receive a mammogram?	1=yes 0=no
	e_free	Was the procedure free?	1=yes 0=no
	e_sample	Was a biopsy taken?	1=yes 0=no
	tsh_thdi	diagnosis of breast problem	1=benign 2=malignant 3=normal 4=not diganosed yet
	tsh_r7m	diagnosis of cervix problem	1=benign 2=malignant 3=normal 4=not diganosed yet
	dont_go	did not complete referral for breast cancer check or pap smear	1=yes 0=no
	problem_type	Data entry use only. Is there a problem with breast or uterus?	1=yes 0=no
	Amaleya	Type of treatment. Surgery for breast	1=yes 0=no
	Kemawi	chemo for breast	1=yes 0=no
	Ashe3a	radiation for breast	1=yes 0=no
	el_nothing	no treatment for breast	1=yes 0=no
	Breast_main1	major contributing factors to BC	
	Breast_main2	major contributing factors to BC	
	Breast_main3	major contributing factors to BC	
	Breast_main4	major contributing factors to BC	
	Breast_main5	major contributing factors to BC	
	Breast_main6	major contributing factors to BC	
Breast_main7	major contributing factors to BC		

Breast_main8	major contributing factors to BC		
Breast_main9	major contributing factors to BC		
Breast_main10	major contributing factors to BC		
Breast_com1	secondary factors		
Breast_com2	secondary factors		
Breast_com3	secondary factors		
Breast_com4	secondary factors		
Breast_com5	secondary factors		
Cervix_main1	major contributing factors		
Cervix_main2	major contributing factors		
Cervix_main3	major contributing factors		
Cervix_main4	major contributing factors		
Cervix_main5	major contributing factors		
Cervix_main6	major contributing factors		
Cervix_com1	secondary factors		
Cervix_com2	secondary factors		
Cervix_com3	secondary factors		
Cervix_com4	secondary factors		
Cervix_com5	secondary factors		
Cervix_com6	secondary factors		
breast_tsh	diagnosis of breast problem	1=yes 0=no	
cervix_tsh	diagnosis of cervix problem	1=yes 0=no	
result_visit_free	Was referral free?	1=yes 0=no	
Self_check	Does woman perform self breast exam?	1=yes 0=no	
Ej_mas7a	Does woman receive pap smear?	1=yes 0=no	
ej_sarer	Clinical breast exam?	1=yes 0=no	
el_other	other type of treatment for BC	1=yes 0=no	
ms7a_mjani	subsidized pap smear	1=yes 0=no	
old_mas7a	previous pap smear	1=yes 0=no	
Other	Use_Condom	ignore	
	QTY	ignore	
	Cont	ignore	
	Source	ignore	
	T1		
	T2		
	N1		
	N2		
	B1		
	B2		
	D1		

	D2		
	elaj	treatment	
	help_fact	major contributing factors	