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Private Sector Project for Women's Health

Evaluation Report Evidence-Based Medicine (EBM) for Family Planning Program

Submitted to:

Dr. Basma Khraisat
Contracting Officer's Technical Representative (COTR)
USAID/Jordan

Submitted by:

Reed Ramlow
Chief of Party
Private Sector Project for Women's Health
Abt Associates Inc.

Prepared By:

Dr. Nadia Al-Alawi

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A. Executive Summary

One of the main activities of the Private Sector Project (PSP) for Women's Health, funded by the United States Agency for International Development (USAID), is to address provider bias and negative attitudes and behaviors towards hormonal family planning (FP) methods and to increase knowledge of modern contraceptive methods among physicians providing family planning (FP) services to Jordanian women. To do this, PSP enacted an Evidence Based Medicine (EBM) for Family Planning/Reproductive Health program, in which PSP collaborated with Bayer Schering Pharma to organize 16 "roundtable" seminars for 247 physicians to disseminate best research evidence on combined oral contraception (COC) methods through a Critically Appraised Topic (CAT) format. PSP then reinforced knowledge through individual visits to doctors, providing specific messages and materials on key COC topics.

PSP conducted an assessment of knowledge, attitudes, and practices of physicians participating in its 2009/2010 EBM program both before and after participation in the program. The assessment found that the PSP-Jordan EBM program was an effective method for improving private sector provider knowledge, attitudes, and practices on FP. Following participation in the EBM program, participating physicians:

- Improved reported FP discussion practices. Physicians discussed FP with patients more often after participating in the program.
- Improved reported COC pill prescription practices. Physicians were more willing to prescribe COC pills to appropriate clients and less likely to inappropriate clients after participating in the program.
- Improved reported attitudes on the importance of patient preferences. Participants were more likely to state that a woman's preference for a method was the most important factor and the provider's preference for a method the least important factor when deciding which FP method to suggest to a woman after participating in the program.
- Increased knowledge of COC pills. More physicians were able to dispel myths and correctly identify specific risks and benefits of the COC pills after participating in the program.

Participating physicians felt the EBM program was more beneficial than traditional continuing medical education programs because it was more likely to change their clinical behavior. Unlike the EBM program (which improved several measures of knowledge, attitudes, and practices), the only differences in knowledge, attitudes, or practices on FP between physicians attending non-EBM trainings, workshops, or conferences and those not attending was an increase in frequency of discussing FP with patients. The EBM program therefore, may be more effective at changing knowledge, attitudes, and practices on FP than other training programs.

Based on assessment results, it is recommended that PSP:

1. Continue to use the EBM program to improve provider knowledge, attitudes, and practices on COC pills.
2. Increase the number of male physicians participating in the EBM program because many FP providers in Jordan are male, and the knowledge, attitudes, or practices of male physicians is generally not as good as female physicians.
3. Expand the EBM program to reach more physicians.
4. Expand the EBM program to include other modern contraceptive methods.

B. Introduction

The Private Sector Project (PSP) for Women's Health, funded by the United States Agency for International Development (USAID) 2005 - 2012, has a mandate to improve the health of Jordanian women and families. The project uses an integrated approach to increase demand for modern contraception and related women's health services, increase availability of quality private sector health care services, increase early detection of breast cancer, and address domestic violence against women. One of the project's major activities is to increase knowledge of modern contraceptive methods among physicians providing family planning (FP) services to Jordanian women.

Evidence Based Medicine (EBM) is the process of systematically reviewing, appraising, and using clinical research findings to aid in clinical decision making, to ensure the best medical care for patients. PSP-Jordan is addressing provider bias and negative attitudes and behaviors towards hormonal FP methods by integrating the EBM approach into training programs for FP practitioners. PSP partnered with Bayer Schering Pharma in organizing "roundtable" seminars to disseminate updated research on combined oral contraception (COC) pills in Critically Appraised Topic (CAT) format. PSP then reinforced the knowledge learned through "detailing" of physicians. During detailing, PSP and Bayer Schering Pharma visit the doctors, providing specific messages on key program topics and materials such as the FP Global Handbook.

Together, PSP-Jordan and Bayer Schering Pharma implemented 16 EBM roundtable discussions on combined oral contraceptives over a one year period starting in April 2009, reaching a total of 247 physicians with roundtable discussions, and detailing messages on COC pills.

International research and private sector experience reveal detailing to be a major source of learning and behavior change for doctors. PSP-Jordan assessed the impact of its 2009/2010 COC EBM program on the knowledge, attitudes, and practices on FP of private health care providers. This report presents findings from the assessment.

C. Methodology

Physicians participating in the EBM roundtable education activities for COC pills each received a study identification number. Physicians completed baseline questionnaires (see Annex 1 for baseline questionnaire) prior to participating in the education session. Physicians arriving after the start of the education session did not complete the baseline questionnaire. Project staff entered data from 180 completed questionnaires into Excel spreadsheets.

Approximately three months after the completion of the COC EBM program PSP-Jordan detailers or Bayer Schering Pharma representatives visited participating doctors and asked them to fill in an endline questionnaire (see Annex 2 for endline questionnaire). The endline questionnaire included all questions from the baseline questionnaire, with some additional questions on physicians' opinions on the EBM program. Project staff entered data from 148 completed endline questionnaires into Excel spreadsheets.

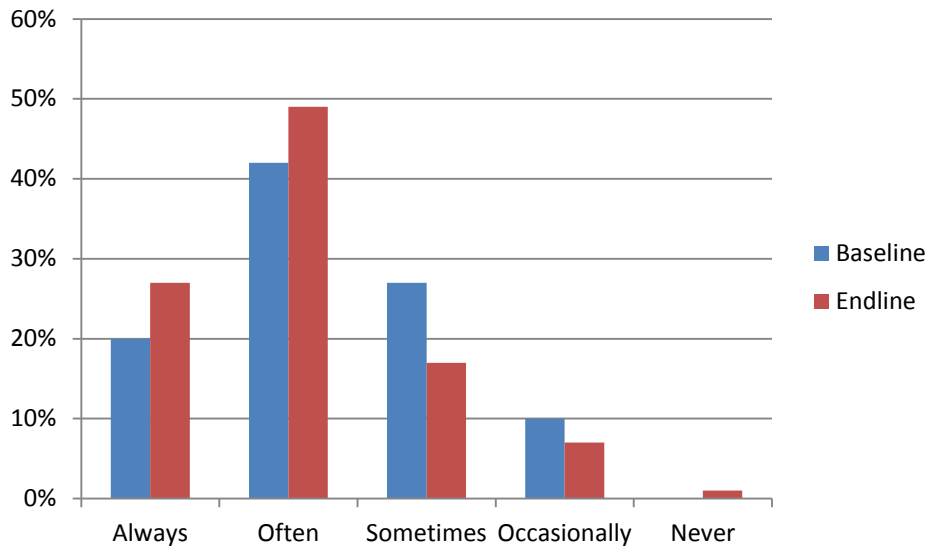
PSP hired a consultant, Nadia Al-Alawi, to analyze and write a report on the evaluation. The consultant analyzed data from 113 paired data sets (baseline and endline) using SPSS software.

D. Results

Usefulness of EBM Approach in Improving FP Practices and Attitudes

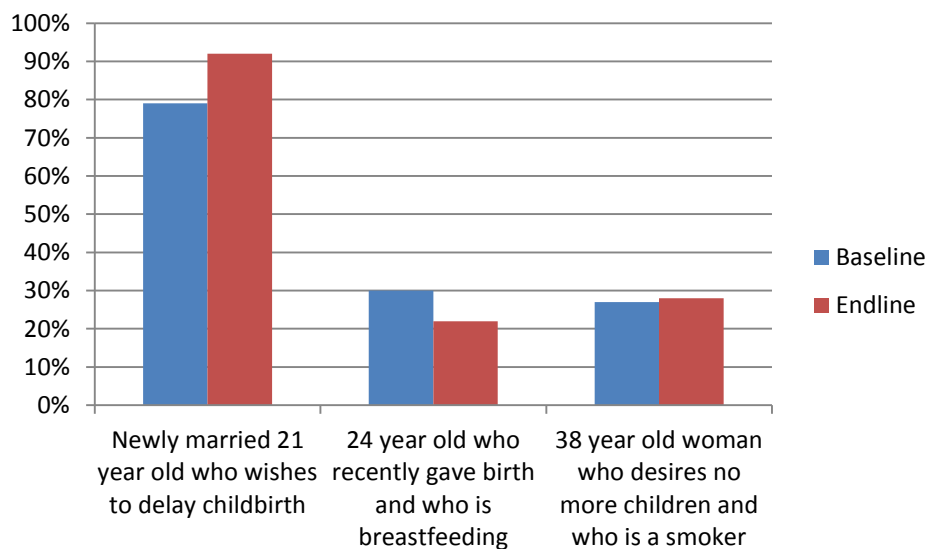
The EBM program was useful in improving overall private sector provider FP knowledge, attitudes, and practices. Following the EBM roundtables and detailing visits, responding providers (113 in total) discussed family planning significantly more frequently with their patients than prior to participation in EBM program (see Figure 1 below).

Figure 1: Percentage of providers discussing FP with patients during the past week



Participation in the EBM program also improved reported prescription habits. After participation in the EBM program, private sector providers were significantly more willing to prescribe COC pills to newly married young women who wished to delay childbirth, than prior to participation in the EBM program. Physicians were also significantly less willing to prescribe COC pills to 24 year olds who recently gave birth and were breastfeeding. See Figure 2 below for details. There was no significant change in willingness of the provider to prescribe COC pills to older women who desire no more children and who smoke.

Figure 2: Percentage of providers willing to prescribe COC pills to specific patients



Participation in the EBM program also improved physicians' attitudes on the importance of specific factors when deciding which FP method to suggest to a woman. Notably, participation in the program increased the percentage of physicians who believed a woman's preference was the *most* important factor when deciding which FP method to suggest to a woman. Participation also increased the percentage of physicians who identified their own preference for method as the *least* important factor when deciding which FP method to suggest to a woman.

There were other differences between baseline and endline data in physicians' beliefs on the most important factor (see Figure 3 below) and least important factor (see Figure 4 below) when deciding which family planning method to suggest to a woman.

Figure 3: Percentage of physicians who believe specific factors are MOST important when deciding which family planning method to suggest to a woman

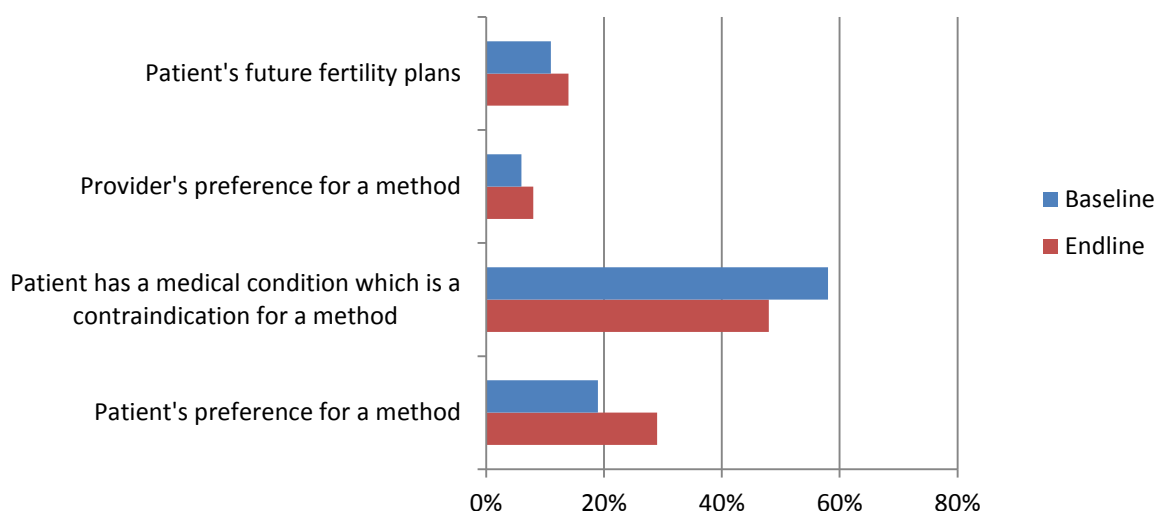
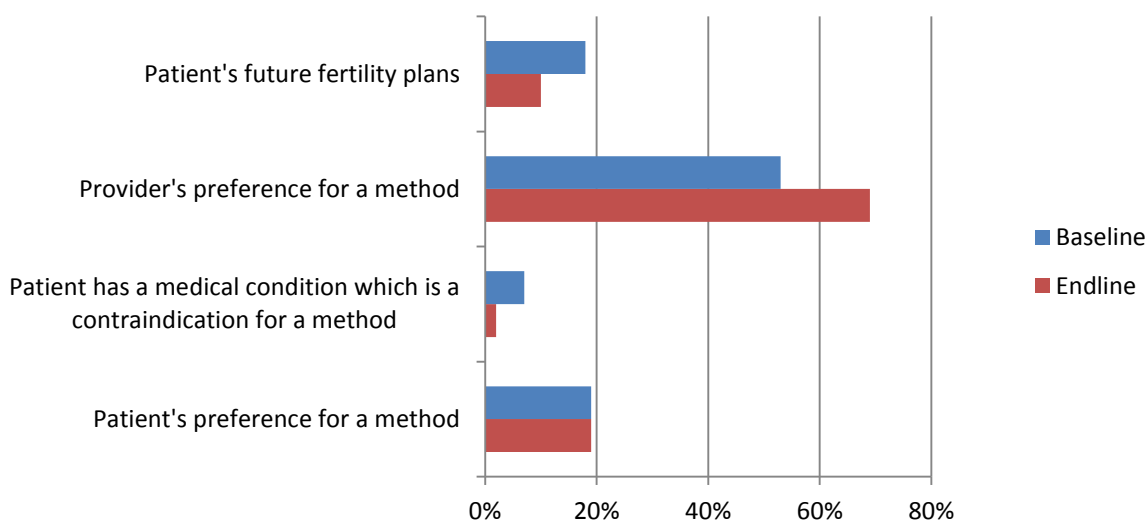
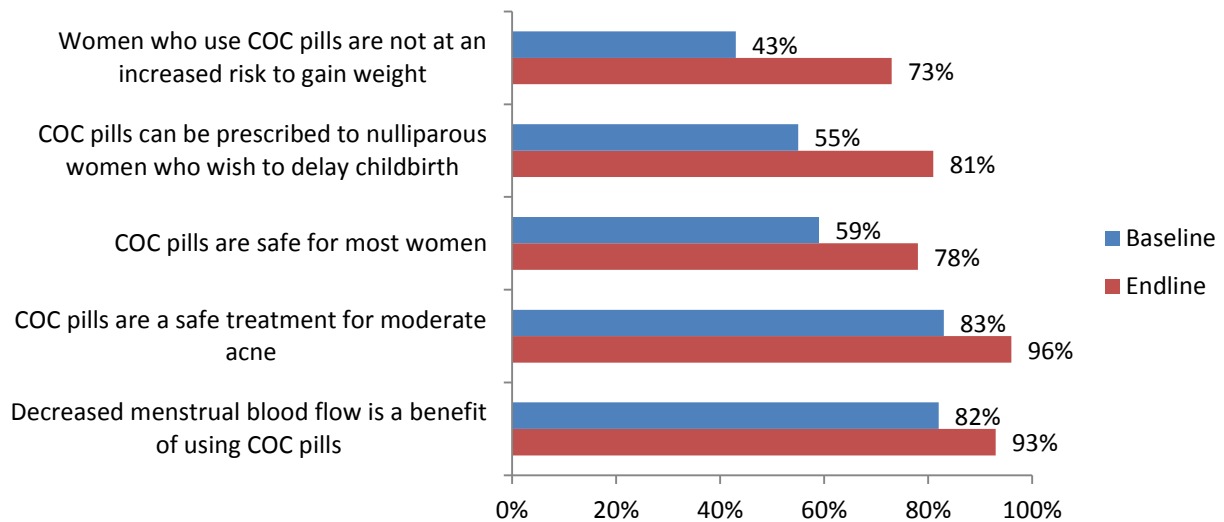


Figure 4: Percentage of physicians who believe specific factors are LEAST important when deciding which family planning method to suggest to a woman



Participation in the EBM program also significantly increased physician knowledge of some of the risks and benefits of COC pills (see Figure 5 below).

Figure 5: Percentage of respondents able to correctly identify specific risks and benefits of COC pills



Participation in the EBM program did not significantly change physician perceptions on the ability of COC pills to reduce severe symptoms of dysmenorrhea (awareness of this was already very high at 92% and 94% awareness before and after participation in the EBM program respectively), protect against ovarian cancer (awareness for this was fairly high, at 75% and 74% before and after participation respectively), or change in incidence of breast cancer (53% in both cases). The research presented for breast cancer gave no definitive answer to whether use of COC pills is associated with breast cancer.

Comparison with Other Information Sharing Methods

Physicians felt the EBM program was extremely beneficial when compared with traditional continuing medical education programs. Virtually all physicians agreed that:

- An EBM continuing medical education program is more likely to change their clinical behavior (100% of respondents agreed).
- The EBM program with the use of CATS is more convincing since they have the data available for their immediate review (100% agreed).
- They have more confidence in the speaker because they can see the research on which they base their conclusions (100% agreed).
- The EBM program is more helpful because it includes not only the research, but also the attitudes of the physicians attending the seminar (99% agreed).
- The EBM program is more helpful because it includes not only the research, but also the attitudes of the patients they see in their practice (94% agreed).

Participating physicians also readily shared EBM information with colleagues. Eighty-five percent shared the EBM talk with colleagues outside of the EBM training. Seventy-nine percent used the CATs in talks or speeches they gave. Fifty-five percent of physicians gave CATs to colleagues outside of the EBM training.

Prior to participation in the EBM program, physicians who had attended other FP trainings (63 in total), workshops, or conferences discussed FP with patients more frequently than

those who had not (49 in total). After participating, however, there were no differences in frequency of discussion of FP with patients between physicians who attended FP trainings, workshops, or conferences and those who had not.

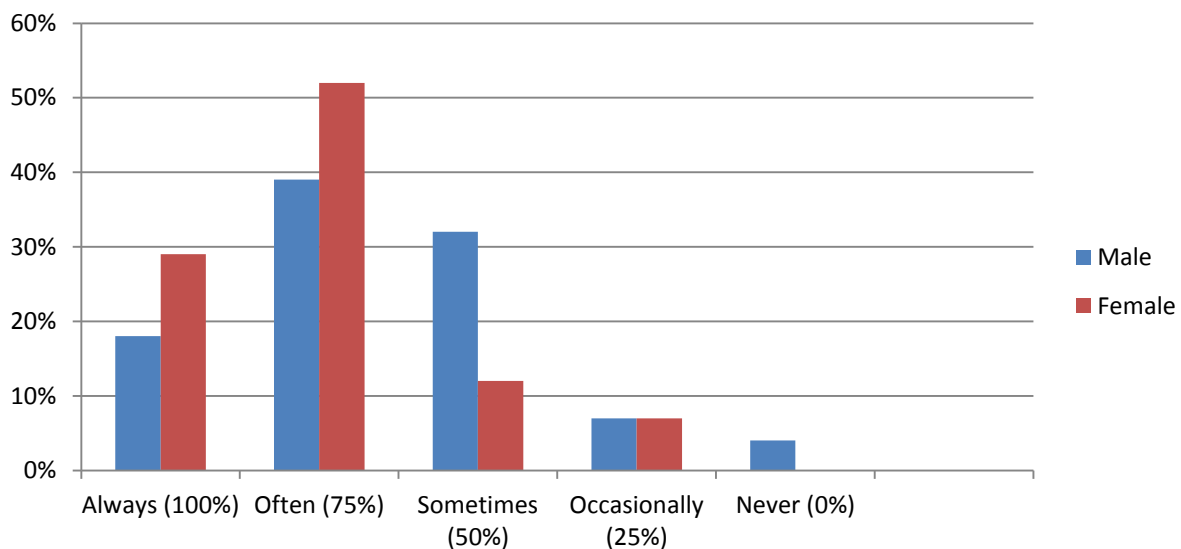
After participation in the EBM program, there were no differences in physician knowledge, attitudes, and practices on FP when comparing physicians who attended other FP trainings, workshops, or conferences with those who had not.

There were no differences in willingness to prescribe COC pills to specific women, in beliefs in the most or least important factors when deciding which FP method to suggest to a woman, and in knowledge of the risks and benefits of COC pills between physicians who attended other FP trainings, workshops, or conferences and those that did not either prior to or following participation in the EBM program.

Gender of Physician

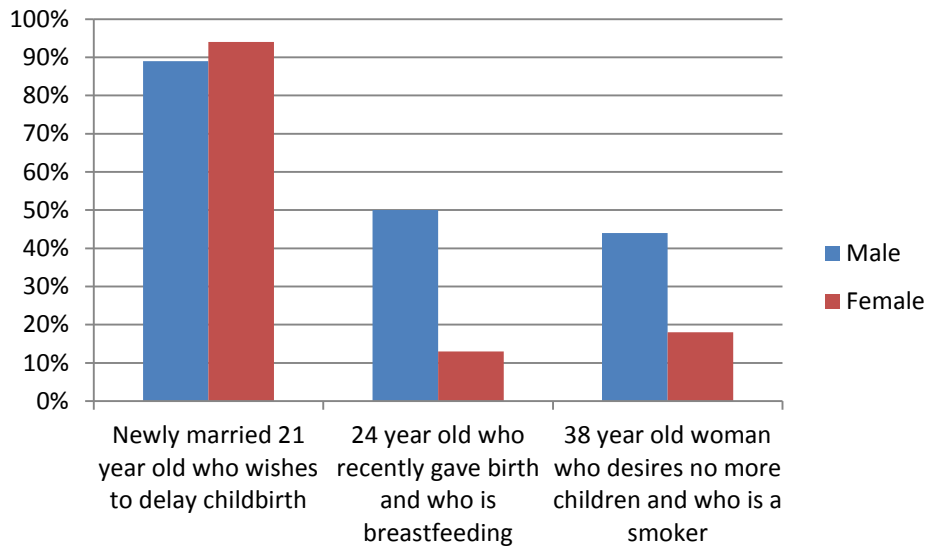
Female physicians generally had better knowledge, attitudes, and practices on family planning than did male physicians. Participating female physicians (85) discussed FP patients more frequently than did male physicians (28), both before and after the EBM roundtable discussions (see Figure 6 below for endline data).

Figure 6: Frequency of discussing FP with patients during the past week, by gender (endline data only)



Female physicians also had better reported prescription habits than male physicians. Female physicians expressed more willingness to appropriately prescribe COC pills when compared with male physicians, both before and after participation in the EBM program. They were more willing than male physicians to prescribe COC pills to newly married young women who wished to delay childbirth, and less willing than male physicians to prescribe COC pills to 24 year olds who recently gave birth and were breastfeeding, or older women who desire no more children and who smoked (see Figure 7 below for endline data).

Figure 7: Frequency of willingness of provider to prescribe COC pills to specific patients, by provider gender (endline data only)



Female physicians also expressed more appropriate attitudes, when compared with male physicians, on the importance of specific factors when deciding which FP method to suggest to a woman. More female than male physicians believed the most important factor when deciding which FP method to suggest to a woman was either a female patient’s medical condition which was a contraindication for a specific method (51% for female physicians and 39% for males, endline data) or that a woman’s preference was the most important factor (31% and 25% female and male physicians respectively, endline data). There were no significant differences between female and male physicians’ views on the least important factors when deciding which FP method to suggest to a woman.

There were no significant differences between female and male physician’s knowledge of the risks and benefits of COC pills either before or after participation in the EBM program.

E. Conclusions and Recommendations

The PSP-Jordan EBM program was an effective method for improving private sector provider knowledge, attitudes, and practices on FP. Following participation in the EBM program, participating physicians:

- Improved reported FP discussion practices. Physicians discussed FP with patients more often during the previous week after participating in the program.
- Improved reported COC pill prescription practices. Physicians were more willing to prescribe COC pills to appropriate clients and less likely to inappropriate clients after participating in the program.
- Improved reported attitudes on the importance of patient and provider preferences. Participants were more likely to state that a woman’s preference for a method was the most important factor and the provider’s preference for a method the least important factor when deciding which FP method to suggest to a woman after participating in the program.

- Increased knowledge of COC pills. More physicians were able to dispel myths and correctly identify specific risks and benefits of the COC pills after participating in the program.

Participating physicians felt the EBM program was more beneficial than traditional continuing medical education programs because it was more likely to change their clinical behavior. Unlike the EBM program (which improved several measures of knowledge, attitudes, and practices), the only differences in knowledge, attitudes, or practices on FP between physicians attending non-EBM trainings, workshops, or conferences and those not attending was an increase in frequency of discussing FP with patients. The EBM program therefore, may be more effective at changing knowledge, attitudes, and practices on FP than other training programs.

Based on assessment results, it is recommended that the PSP:

1. Continue to use the EBM program to improve provider knowledge, attitudes, and practices on COC pills. Focus programming topics on understanding the importance of discussing FP frequently with patients, reducing inappropriate prescription practices, increasing provider belief in patient preferences as an important factor in decision making, and dispelling myths on the risks of using COC pills.
2. Increase the number of male physicians participating in the EBM program because many FP providers in Jordan are male, and the knowledge, attitudes, or practices of male physicians is generally not as good as female physicians, particularly on willingness to prescribe COC pills to inappropriate clients.
3. Expand the EBM program to include more physicians.
4. Expand the EBM program to include other modern contraceptive methods.

Annex 1
Roundtable Baseline Evaluation:

This questionnaire asks for information about your practice and your professional experiences in providing family planning services. The information collected is confidential and will be used to evaluate the training program. The information you provide will have no impact on the trainings, services, or incentives which you receive.

1. Date: _____
2. Sex: Male Female
3. In which type of facility is your primary practice?
 Private center Clinic Hospital Other, specify: _____
4. Where is your primary practice located?
City/town: _____
Neighborhood: _____
5. Specialty: General practitioner Obstetrician/Gynecologist Other: _____
6. Are you a member of the PSP Jordan network of private providers?
 Yes No
7. Have you been certified in the quality assurance family planning program under PSP Jordan?
 Yes No
8. In the past 12 months, have you attended any other trainings, workshops, or conferences about family planning?
 Yes. Please specify where, when (month and year), and the topics covered:

 No

The following questions are related to your practices regarding family planning. Your responses are confidential.

9. In the past week, how frequently did you discuss family planning with patients who were married women of reproductive age?
 Always (100% of visits)
 Often (75% of visits)
 Sometimes (50% of visits)
 Occasionally (25% of visits)
 Never (0% of visits)

10. Would you prescribe a COC to the following women? Please mark yes or no for each scenario.

	Yes	No
A newly married woman, aged 21 who wishes to delay childbearing for one year		
A woman, aged 24, who has recently given birth and who is breastfeeding		
A woman, aged 38, who desires no more children and who is a smoker		

11. Looking at the factors below, please put mark with an “X” the **most** important factor when deciding which family planning method to suggest to a woman.

- Female patient’s preference for a method
- Female patient has medical condition which is a contraindication for a method
- The provider’s (your) preference for a method
- Female patient’s future fertility plans

12. Looking at the factors below, please put mark with an “X” the **least** important factor when deciding which family planning method to suggest to a woman.

- Female patient’s preference for a method
- Female patient has medical condition which is a contraindication for a method
- The provider’s (your) preference for a method
- Female patient’s future fertility plans

13. For the following questions, please mark if you Strongly Agree, Agree, are Uncertain, Disagree, or Strongly Disagree with the statement.

	Strongly Agree	Agree	Do not agree or disagree	Disagree	Strongly Disagree
a. COCs have been shown to reduce severe symptoms of dysmenorrhea.					
b. The use of COCs is associated with an increased incidence of breast cancer.					
c. The use of COCs has a protective effect against ovarian cancer.					
d. Decreased menstrual blood flow is a benefit of using COCs.					
e. COCs are a safe treatment for moderate acne.					
f. COCs are safe for most women.					
g. I should not prescribe COCs to nulliparous women who wish to delay childbirth.					
h. For some oral contraceptives there is a slightly increased risk of a myocardial infarction					
i. Women who use a COC are at an increased risk to gain weight					
j. I know what is best for women who wish to use a modern method of contraception.					

Annex 2
Roundtable Endline Evaluation:

This questionnaire asks for information about your practice and your professional experiences in providing family planning services. The information collected is confidential and will be used to evaluate the training program. The information you provide will have no impact on the trainings, services, or incentives which you receive.

1. Date: _____
2. Sex: Male Female
3. In which type of facility is your primary practice?
 Private center Clinic Hospital Other, specify: _____
4. Where is your primary practice located?
City/town: _____
Neighborhood: _____
5. Specialty: General practitioner Obstetrician/Gynecologist Other: _____
6. Are you a member of the PSP Jordan network of private providers?
 Yes No
7. Have you been certified in the quality assurance family planning program under PSP Jordan?
 Yes No
8. In the past 12 months, have you attended any other trainings, workshops, or conferences about family planning?
 Yes. Please specify where, when (month and year), and the topics covered:

 No

The following questions are related to your practices regarding family planning. Your responses are confidential.

9. In the past week, how frequently did you discuss family planning with patients who were married women of reproductive age?
 Always (100% of visits)
 Often (75% of visits)
 Sometimes (50% of visits)
 Occasionally (25% of visits)
 Never (0% of visits)

10. Would you prescribe a COC to the following women? Please mark yes or no for each scenario.

	Yes	No
A newly married woman, aged 21 who wishes to delay childbearing for one year		
A woman, aged 24, who has recently given birth and who is breastfeeding		
A woman, aged 38, who desires no more children and who is a smoker		

11. Looking at the factors below, please put mark with an “X” the **most** important factor when deciding which family planning method to suggest to a woman.

- Female patient’s preference for a method
- Female patient has medical condition which is a contraindication for a method
- The provider’s (your) preference for a method
- Female patient’s future fertility plans

12. Looking at the factors below, please put mark with an “X” the **least** important factor when deciding which family planning method to suggest to a woman.

- Female patient’s preference for a method
- Female patient has medical condition which is a contraindication for a method
- The provider’s (your) preference for a method
- Female patient’s future fertility plans

13. For the following questions, please mark if you Strongly Agree, Agree, are Uncertain, Disagree, or Strongly Disagree with the statement.

	Strongly Agree	Agree	Do not agree or disagree	Disagree	Strongly Disagree
a. COCs have been shown to reduce severe symptoms of dysmenorrhea.					
b. The use of COCs is associated with an increased incidence of breast cancer.					
c. The use of COCs has a protective effect against ovarian cancer.					
d. Decreased menstrual blood flow is a benefit of using COCs.					
e. COCs are a safe treatment for moderate acne.					
f. COCs are safe for most women.					
g. I should not prescribe COCs to nulliparous women who wish to delay childbirth.					
h. For some oral contraceptives there is a slightly increased risk of a myocardial infarction					
i. Women who use a COC are at an increased risk to gain weight					

	Strongly Agree	Agree	Do not agree or disagree	Disagree	Strongly Disagree
j. I know what is best for women who wish to use a modern method of contraception.					

14. For the following questions, please mark if you Strongly Agree, Agree, are Uncertain, Disagree, or Strongly Disagree with the statement.

Compared to traditional continuing medical education programs,

	Strongly Agree	Agree	Do not agree or disagree	Disagree	Strongly Disagree
a. An EBM continuing medical education program is more likely to change my clinical behavior.					
b. The EBM program with the use of CATs is more convincing since I have the data available for my immediate review.					
c. I have more confidence in the speaker because I can see the research on which they base their conclusions.					
d. The EBM program is more helpful because it includes not only the research, but also the attitudes of the physicians attending the seminar.					
e. The EBM program is more helpful because it includes not only the research, but also the attitudes of the patients we see in our practice.					

15. Did you share the EBM talk with any of your colleagues outside of the EBM training?

Yes No

16. Did you give the CATs to any of your colleagues outside of the EBM training?

Yes No

17. Did you use the CATs in any talk or speech you gave to others?

Yes No Not Applicable (did not give any talk or speech)