Evaluation of Uganda Continuing Medical Education (CME)

Final Report

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Executive Summary

Background
In 2005-2006, Family Health International (FHI) worked with the Ugandan Ministry of Health (MOH) to conduct 11 Continuing Medical Education (CME) workshops. The objectives were to update participants in current family planning trends in Uganda (including the decline in intrauterine device (IUD) use), to sensitize participants to the latest changes in the World Health Organization (WHO) Medical Eligibility Criteria (MEC), to share experiences from the reintroduction of the IUD in Kenya and to introduce several job aids including the pregnancy checklist, combined oral contraceptive (COC) checklist, IUD checklist and Depot medroxyprogesterone acetate (DMPA) checklist. In addition, in the 2006 workshops an addendum to the reproductive health service guidelines was also introduced.

Over 400 medical providers and community representatives participated in these workshops. Tests of general knowledge were administered immediately before and after the workshops and showed significant increases in knowledge levels. However, data about the longer term effects on knowledge and changes in behavior were not known. Therefore, an evaluation was conducted in 2007 to explore participant memories of key messages from the workshops, the availability and use of the job aids and how participants used the information they received from the workshops.

Study design
This study design was a one-time cross-sectional follow-up survey of workshop participants selected in a purposive sample of districts. Interviews were conducted with workshop participants from six of the 11 CME workshop districts. Two districts, Hoima and Sembabule, were selected from the first phase of workshops (2005) and all four districts (Arua, Lira, Luwero and Mubende) from the second phase (April 2006) were included. The aim was to interview a broad spectrum of participants and to conduct at least 50 interviews.

Data was collected between April 2007 and May 2007. Interviews were conducted with 18 providers, 20 managers and 15 community representatives for a total of 53 interviews.

Key Results

- The majority of CME participants interviewed found the CME "very helpful" and the remainder said it was "somewhat helpful." Updates on family planning trends was considered one of the most useful topics. Providers and managers also found the session on IUDs very useful.
- All but one participant interviewed reported that they had shared information learned at the workshop with others.
- At least two-thirds of the providers and managers reported seeing various job aids that should have been presented in the presented in the workshop. The COC, DMPA and IUD checklists were the ones most likely to be seen; fewer reported seeing the pregnancy checklist and family planning addendum.

- Only between 28-50% of the providers and 35-85% of the managers had copies of the aids. Eighty-three percent of providers and 75% of managers said they received training on how to use the job aids and those who received training found it very useful.
- Use of checklists was not widespread. Providers were most likely to report that they used the COC checklist (59%), DMPA checklist (47%) and pregnancy checklist (35%). Managers were most likely to say that they had used the family planning addendum (40%), and COC and DMPA checklists (35% each). Nearly all of the providers and managers who used the checklists said that they were "very helpful"; one provider said the DMPA checklist was "somewhat helpful."
- All of the participants said that the CME changed the way they work. For the community representatives, the main ways their work has changed has been to educate more about family planning; several mentioned that they now have a more positive attitude toward family planning. The main way managers reported that their work has changed is through the way they do supervision of health workers. For providers they report their work has changed primarily through the way they counsel and screen family planning clients.

Conclusions

CME participants who participated in this evaluation were nearly unanimous in reporting that the CME was useful to them and influenced their work. For community representatives the CME seemed to be instrumental in influencing their attitudes about family planning and in motivating them to educate community members about it. Medical personnel reported that the CME helped improve their knowledge of family planning methods and counseling techniques. It may be useful in future CMEs to separate clinical and non-clinical audiences to tailor the messages of the workshop appropriately.

Although CMEs were meant to disseminate the checklists and other job aids, many participants did not receive copies of them. For those providers that did have copies, most used them and found them very helpful to their work. It would be important for future CMEs that enough copies be available for all participants.

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List of Abbreviations

CME	Continuing Medical Education
COC	Combined oral contraceptive
DMPA	Depot medroxyprogesterone Acetate
FHI	Family Health International
IUD	Intrauterine device
MEC	Medical Eligibility Criteria
MOH	Ministry of Health
UNMHCP	Ugandan National Minimum Health Care Package
WHO	World Health Organization

I. INTRODUCTION AND BACKGROUND

Continuing Medical Education (CME) for medical workers is a process in which the competencies of health workers continue to be maintained and improved, and new ones acquired following the completion of basic training. CME can be provided to medical workers through various means, including workshops, seminars, formal lectures, radio and television programs and support supervision. The Uganda national health policy and its implementation through the health sector strategic plan, focuses on enabling health workers to deliver the Ugandan National Minimum Health Care Package (UNMHCP). One of the strategies to achieve this is to expose those already in service to CMEs.

In 2005-2006, Family Health International (FHI) worked with the Ugandan Ministry of Health (MOH) to conduct 11 CME workshops in 11 different districts around the country. Nine of the workshops targeted district level management teams, program managers, opinion leaders, service providers and other stakeholders, and two of them targeted reproductive health trainers drawn from various districts. The objectives of the first five workshops, held in 2005, were to update the participants on current family planning trends in Uganda (including the decline in the use of the intrauterine device (IUD)), to sensitize participants to the latest changes in the World Health Organization (WHO) Medical Eligibility Criteria (MEC) and their implications to service provision, and to share experiences from IUD reintroduction in Kenya. In addition, participants were introduced to several job aids including the pregnancy checklist, combined oral contraceptive (COC) checklist, IUD checklist and Depot medroxyprogesterone Acetate (DMPA) checklist.

A total of five presentations were made during each of the workshops. The presentations focused on various areas including reproductive health trends, an overview of the WHO MEC, a summary of recent changes in the WHO MEC, an example of how evidence was used to update the IUD eligibility criteria, and the Kenya experience in reintroducing the IUD. In addition, group work and a role play activity were also conducted to give participants an opportunity to operationalize information gained.

In 2006 a second phase of four additional workshops was held with the same objectives. In the intervening period, an addendum to the reproductive health services guidelines had been developed in accordance with the WHO MEC updates and was introduced to participants in this second phase of workshops. Family planning provider checklists were also revised to reflect the same changes, adopted by the MOH and subsequently disseminated during the second phase CME workshops. Both the addendum and the checklists were completed in 2006, hence only the 2006 CME participants were oriented to them. The 2006 CMEs included the same presentations as in 2005; however because of the additional materials there were additional presentations and group work in 2006 centered around the addendum and the family planning checklists.

Rationale

Over 400 medical providers, representatives from district level health management teams, program managers, representatives from professional associations, religious leaders, community representatives and reproductive health trainers attended the workshops. Participants completed a short test of general knowledge questions both before and immediately after the workshop, which produced a quantitative measure of changes in knowledge achieved as a result of the workshop. All of the workshop participants achieved significantly increased levels of knowledge. Participants also completed an evaluation form asking for their opinions about the usefulness of the workshop and suggestions for improvements. Nearly 100% of participants rated the workshop as good or excellent. The pre/post test and workshop evaluation methods are useful for understanding the short-term effect of the workshops; however, data about the longer-term effect on knowledge and changed behaviors is essential to determine the extent of utilization. Such data will be useful when developing future strategies to disseminate information, train and ensure utilization.

Study objectives

The objectives of this evaluation were to explore:

1. Participants' memories of the key messages of the workshops
2. The availability and current usage of the checklists by providers (by checklist type)
3. The perceived usefulness of the checklists by providers and program managers (by checklist type)
4. How participants have used the information they received during the workshops

II. STUDY DESIGN

This study design was a one-time cross-sectional follow-up survey of workshop participants selected in a purposive sample of districts. Interviews were conducted with workshop participants from six of the 11 CME workshops. Two districts, Hoima and Sembabule, were selected from the first phase of workshops (2005) and all four districts (Arua, Lira, Luwero and Mubende) from the second phase (April 2006) were included.

Description of the target population and sample size

The target population of the study was participants in district-level workshops. The participants are grouped into three categories: administrators/policy makers, providers and community/religious leaders. Since this study collected data for descriptive purposes only, no formal sample size calculation was performed. We attempted to collect a broad sample of participants by choosing districts that participated in both the 2005 and 2006 sessions and by ensuring that both urban and rural districts were included. We also sought a broad representation of participants by stratifying participants by type and selecting people from each stratum. Due to resource constraints, we were only able to select a small number of people from each stratum. Selecting a small sample from each stratum results in obtaining the widest spectrum of responses, rather than collecting statistically generalizable responses. The aim was to interview at least 50 people out of the original 400 participants (6 districts x 3 strata x 3 people per stratum) and this aim was met.

Data collection

Two research assistants traveled to each district to contact each of the participants selected, obtain verbal informed consent, and conduct a key informant interview. The research assistants first attended a one and a half day training session with staff from the Kampala and Nairobi offices of FHI. The training incorporated several elements: (1) discussion of fieldwork techniques; (2) careful review of all data collection instruments; and (3) field practice administering data collection instruments. Data was collected between April 2007 and May 2007. The total number of interviews completed is shown in Table 1.

Table 1: Number of interviews completed

	No.	Percentage
Providers	18	34
Managers	20	38
Community Representatives	15	28
Total	**53**	**100**

The interviews were recorded to enable the research assistants to elaborate on their notes. The interviews included a combination of open and closed-ended questions. Depending on the respondent's role in the community, the interviews posed different questions (e.g., to clinicians: "How have you changed your counseling of family planning clients?"; to religious leaders: "How have you changed how you think about and talk about family planning as a result of what you learned at the CME workshop?"). The question domains included: recall of key messages from the workshop, efforts taken to pass the information on to colleagues, changes made in respondent's work/community life as a result of the workshop, and experiences with the checklists. The study initially called for readministration of the workshop posttest questionnaire to measure retention of key messages, but this form was inadvertently left out of the training process.

Select characteristics of the interview participants are shown in Table 2. All but one of the providers was female while more than half of the managers and community representatives were male. The median age for all three groups ranged from 35 years for providers to 46 years for community representatives. The medical personnel that were interviewed were overall very experienced with a median of at least 10 years of experience. All but one of the providers was a nurse or midwife, the other provider was a lab technician (data not shown).

Data management and analysis

Data collection forms were sent from Uganda to FHI/North Carolina. Closed-ended questions from the data collection form were entered into an Epi Info data base which was then converted to Stata version 9 for analysis. Open-ended questions were entered into an Excel database.

Only descriptive analysis was performed for this evaluation. The analysis was stratified by types of participants (e.g. providers, managers and community representatives.). It was not stratified by year of training (i.e. 2005 or 2006) because the analysis cells would have been too small and there were not large enough differences between the two phases to warrant this stratification. In

the tables, percents are presented for cell sizes of 15 or larger. For cell sizes less than 15 only the actual number (N) is shown.

The primary limitation of this study design is that by selecting from only six of the 11 groups that were trained during the CME, the information generated by this exercise will not be able to generalize to participants from all 11 groups. The lack of ability to generalize means that any conclusions made by the evaluation will be exploratory only and will pertain only to those people who were actually interviewed. Another limitation is that 2005 participants in particular had attended other similar workshops since then and could not remember if what they had learned was from the 2005 workshop or another one. Finally, given the small cell sizes, inferences should be made with caution.

Table 2. Select characteristics of CME participants

	Provider N=18	Manager N=20	Comm Rep N=15
Sex			
Female	94%	40%	27%
Male	6%	60%	73%
Age			
Median	35 years	42 years	46 years
Range	27-53 years	30-55 years	30-65 years
Years as provider			
Median	11 years	15 years	NA
Range	4-31 years	3-33 years	NA

NA= Not applicable

III. STUDY RESULTS

The results of this evaluation are divided into four main sections to address to evaluation objectives. These sections include: 1) key messages or topics from the workshop; 2) availability, usage and usefulness of the job aids; 3) participant usage of workshop information; and, 4) participant suggestions for improving CMEs.

1. Key messages or topics from the workshops

All of the CME participants found the workshop very or somewhat helpful with the vast majority saying it was very helpful (Table 3). The session on updates on family planning trends was one of the most useful topics to all three participant groups. Providers and managers also said that the session on IUDs was very useful to them. Most community representatives felt that the CME helped sensitize them about family planning and many said that they began to understand that family planning is not just about limiting births but also about spacing them (data not shown). As reported by one community representative, *"The workshop removed the negative perception I had towards family planning. I now appreciate the importance of family planning and my need to*

sensitize the community about it…" Nearly all of the providers and managers found the CME useful because it improved their knowledge about family planning methods; 11 providers and nine managers specifically mentioned that it improved their knowledge of the IUD (data not shown). In the words of one provider, *"We gained knowledge about family planning and it helped us refresh our minds on things we had long forgotten."*

Table 3. Percentage of CME participants who found the workshop helpful and shared information from it

	Provider N=18	Manager N=20	Comm Rep N=15
	%	%	%
Was the information learned during the CME workshop helpful?			
Very helpful	89	90	100
Somewhat helpful	11	10	0
What were the most useful topics discussed during the CME workshop?			
New FP addendum	17	20	27
Updates to WHO MEC	0	0	0
IUD	83	65	27
Updates on FP trends	56	45	60
FP checklists	17	5	0
Kenya IUD revitalization	0	10	0
Can't remember	0	10	7
Have you had the opportunity to share anything?			
Yes	100	95	100

Nearly all of the participants in every group reported that they had shared information they learned at the workshop with others. The majority shared information either through informal conversations or formal presentations; a few, however, shared information in radio talk shows which reached large audiences (data not shown). The main message shared by community representatives is about the advantages of family planning and child spacing to the family and the community. Providers and managers reported that they shared information on the checklists, specifics on methods and counseling; eight providers and eleven managers said that they shared information about the IUD (data not shown).

2. Availability, usage and usefulness of the job aids

At least two-thirds of the providers and managers reported they had seen the various job aids (Table 4). Responding that they had seen it did not necessarily mean they had seen the job aids at the workshops but rather that they had seen them at some point prior to their interview. Fewer community representatives reported seeing these aids. Overall, the COC, DMPA and IUD

checklists were the aids most likely to be seen while fewer said they saw the pregnancy checklist or the family planning addendum.

Table 4. Percentage of CME participants who had seen the job aids

	Provider N=18	Manager N=20	Comm Rep N=15
	%	%	%
Have you seen the job aids?*			
COC checklist	100	80	53
DMPA checklist	89	75	53
IUD checklist	94	80	60
Pregnancy checklist	72	70	33
Family planning addendum	67	80	40

* This question asked if the job aid was seen by the participant at any time before the interview and not necessarily at the workshop.

While many providers had seen the aids, far fewer said that they had copies of them (Table 5). Half reported that they had a copy of the COC checklist with between 28-44% reporting that they had copies of the other aids. Managers were more likely to report that they had received copies of the aids, nonetheless, with the exception of the pregnancy checklist, 45% or more did not have copies of the other aids. Far more managers than providers reported they received the pregnancy checklist and family planning addendum. About half the providers and managers said they received the aids at the workshop while the rest had received them from other sources (such as the MOH, a colleague or other organizations or health centers).

Table 5. Percentage of providers and managers who received the job aids and used them

	Provider N=18	Manager N=20
	%	%
Do you have copies of the job aids?		
COC checklist	50	50
DMPA checklist	44	45
IUD checklist	33	35
Pregnancy checklist	28	85
Family planning addendum	28	55
From where or whom did you received the job aids?		
At the CME workshop	50	55
Provided by the district supervisor	0	5
Other (Specify)	22	20
Don't know	6	0
Did you receive any training on how to use the job aids?		
Yes	83	75
No	17	25
Who conducted the training on how to use the job aids?*		
CME workshop	78	75
District supervisor	0	5
Other (Specify)	6	25
Didn't receive training	17	25
Was the training helpful?		
Very helpful	83	75
Didn't receive training	17	25
Have you used the job aids?		
COC checklist	59	35
DMPA checklist	47	35
IUD checklist	29	25
Pregnancy checklist	35	25
Family planning addendum	24	40

* Multiple responses possible.

Most of the providers and managers said they received training on how to use the job aids and most reported that they found this training very useful. Training was primarily received at the CME workshop though some received it from other sources (e.g. an MOH workshop, the Acquire Project, Save the Children and college courses). Use of the aids was not widespread though providers were more likely to have used them than the managers. Providers were most likely to say they had used the COC checklist (59%) followed by the DMPA checklist (47%) and pregnancy checklist (35%). Having a copy of the aids, not surprisingly, influenced use of them. With the exception of the IUD checklist, for each of the aids, all but one provider who had them reported that they used them (data not shown). However, a few providers who reported using them did not report that they had copies of them; it is unclear how they are using them. Managers were most likely to say they had used the family planning addendum (40%) followed by the COC and DMPA checklists (35% each). Providers and managers reported that they used the checklists for help in screening and counseling clients (data not shown). Many of those who said they did not use them said it was because they did not get copies of the checklists (data not shown).

For providers and managers who reported they used the job aids, all but one of the providers said that each of the job aids was "very helpful"; just one provider said the DMPA checklist was "somewhat helpful" (data not shown). There was a little more variation in terms of whether or not the language used in the aids was "very easy" to understand compared to "somewhat easy" (Table 6). No one reported that they were "not at all easy" to understand. More providers found the COC and DMPA checklists and family planning addendum "very easy" to understand compared to those who said it was "somewhat easy". In contrast, more found the IUD checklist "somewhat easy" to understand compared to "very easy" and they were evenly divided on the pregnancy checklist. For each of the aids, all but one manager who used them found them "very easy" to understand while one manager found each one "somewhat easy".

Table 6. Number of providers and managers who used the job aids who found them easy to understand

	Provider				Manager			
Was the language used easy to understand?	N	Very easy	Somewhat easy	No response	N	Very easy	Somewhat easy	No response
COC checklist	10	6	3	1	7	6	1	0
DMPA checklist	8	6	1	1	7	6	1	0
IUD checklist	5	2	3	0	5	4	1	0
Pregnancy checklist	6	3	3	0	5	4	1	0
Family planning addendum	4	3	1	0	8	7	1	0

About two-thirds of the providers and managers felt very confident that the information contained in the job aids was correct; about 10% were somewhat confident that the information was correct (Table 7). No one said that they were not confident at all. Most of the providers and managers felt that it was very important that the checklists were endorsed by the Ugandan MOH.

Table 7. Percentage of providers and managers who are confident that the job aid information is correct

	Provider N=18	Manager N=20
	%	%
How confident are you that the information is correct?		
Very confident	67	65
Somewhat confident	11	10
No response	22	25
How important is it that these checklists are endorsed?		
Very important	89	95
Somewhat important	6	0
No response	6	5

3. Participant usage of workshop information

All of the participants said that the CME changed the way they work (data not shown). For the community representatives, the main ways their work has changed has been to educate more about family planning mainly by talking to health workers, and planning workshops and community meetings. Several mentioned that they now have a more positive attitude toward family planning. The main way managers reported that their work has changed is through the way they do supervision of health workers. For instance some said they educated their staff on family planning though workshops or other means. Another mentioned that *"I equip the health care providers that I supervise with the equipments, reports, checklists and other documented information necessary for family planning."* Two specifically reported that they tried to introduce IUDs in their health centers though one said he ran into obstacles due to a lack of privacy. Providers reported their work has changed primarily through the way they counsel and screen family planning clients. Some said that they now do their counseling in private. Others reported how they present a range of methods to clients and let them make their own choice. In the words of one provider, *"I used to choose a method for my client but after the CME I learned that it's the client to choose her own method to us."* Some providers talked about how the CME gave them more confidence to talk about family planning as illustrated by this quote, *"I gained the confidence and now have the ability to counsel clients myself instead of referring them like I used to."*

4. Participant suggestions for improving CMEs

All the participants had suggestions for how to improve the CME (data not shown). These include lengthening the workshop; holding CMEs more often, including more or different groups of people (e.g. political or religious leaders, midwives); holding separate workshops for medical and non-medical personnel; and following up participants. In addition, many providers and managers felt that practical sessions should be included. Finally, there were complaints from many that there were not enough handouts so that many did not get to take them with them. One manager expressed his frustration this way, *"Why should they train us on how to use the checklist and finally we don't get any?"*

IV. CONCLUSIONS

CME participants who participated in this evaluation were nearly unanimous in reporting that the CME was useful to them and influenced their work. In fact, many urged that CMEs be conducted more often. For community representatives the CME seemed to be instrumental in influencing their attitudes about family planning and in motivating them to educate community members about it. Medical personnel reported that the CME helped improve their knowledge of family planning methods and counseling techniques. The CME emphasized information on the IUD and the WHO medical eligibility of all methods. Many of the managers and providers talked about how their knowledge on these topics improved. It may be useful in future CMEs to separate clinical and non-clinical audiences to tailor the messages of the workshop appropriately.

Although one of the objectives of these CMEs was to disseminate checklists and other job aids, many participants did not receive copies of these tools. For those providers that did have copies, most used them and found them very helpful to their work. It would be important for future CMEs that enough copies be available for all participants. It would also be useful to ensure that participants in the previous CMEs have copies of the checklists at present, since they have been sensitized to them and it appears that they are willing to use them.

According to the reports of those interviewed, the CME appears to have played a useful role in educating and sensitizing participants about family planning. Future similar efforts would likely be appreciated. Organizers may want to consider the topics that participants found most interesting and useful when planning new workshops. One weakness of this evaluation, however, is that it did not test the knowledge of the providers. It would be useful to ascertain if medical personnel are retaining the information they learned in the workshop. This would help in determining the need for future workshops and how much of the information needs to be reinforced.