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Patient Education and Counseling 66 (2007) 235–242

Patient Education and Counseling

www.elsevier.com/locate/pateducou

# Evaluation of the World Health Organization's family planning decision-making tool: Improving health communication in Nicaragua

Young Mi Kim [a,*], Claudia Davila [b], Carolina Tellez [b], Adrienne Kols [a]

[a] *Johns Hopkins Bloomberg School of Public Health, Center for Communication Programs, Baltimore, MD, USA*
[b] *Centro para Programa de Comunicación, Managua, Nicaragua*

Received 10 November 2006; accepted 15 December 2006

**Abstract**

*Objective:* The World Health Organization has led the development of a *Decision-Making Tool for Family Planning Clients and Providers* (DMT) to improve the quality of family planning counseling. This study investigates the DMT's impact on health communication in Nicaragua.
*Methods:* Fifty nine service providers in Nicaragua were videotaped with 426 family planning clients 3 months before and 4 months after attending a training workshop on the DMT. The videotapes were coded for both provider and client communication.
*Results:* After the intervention providers increased their efforts to identify and respond to client needs, involve clients in the decision-making process, and screen for and educate new clients about the chosen method. While the DMT had a smaller impact on clients than providers, in general clients did become more forthcoming about their situation and their wishes. The DMT had a greater impact on sessions in which clients chose a new contraceptive method, as compared with visits by returning clients for a check-up or resupply.
*Conclusion:* The DMT proved effective both as a job aid for providers and a decision-making aid for clients, regardless of the client's level of education.
*Practice implications:* Job and decision-making aids have the potential to improve health communication, even or especially when clients have limited education and providers have limited training and supervision.


*Keywords:* Job aid; Decision aid; Patient physician communication; Reproductive health

## 1. Introduction

Effective communication is essential to help patients make informed decisions when they are faced with multiple health care options. Such communication has been lacking, however, in many international family planning programs even though informed choice is an avowed goal [1,2]. On one hand, family planning providers in developing countries—usually nurses—frequently receive limited training and supervision, are responsible for a wide range of health services, and can spend little time with each patient due to time pressures [3–5]. On the other hand, family planning clients frequently are passive, speaking little and giving the provider few clues about their needs and preferences [6–8].

Given these circumstances, it is not surprising that providers often do not give clients accurate and complete information, nor do they tailor that information to a client's individual situation [5,9,10]. Providers also have difficulty balancing their own and the client's roles in decision-making: some act paternalistically in the belief that they should know what is best for clients, while others relinquish all involvement in the decision-making process in a mistaken interpretation of informed choice [8,11].

To help overcome these problems and improve the quality of family planning services, the Department of

* Corresponding author at: Johns Hopkins Bloomberg School of Public Health, Center for Communication Programs, 111 Market Place, Suite 310, Baltimore, MD 21202-4024, USA. Tel.: +1 410 659 6258; fax: +1 410 659 6266.
*E-mail address:* ykim@jhuccp.org (Y.M. Kim).

0738-3991/$ – see front matter 
doi:10.1016/j.pec.2006.12.007

Reproductive Health and Research at the World Health Organization (WHO) is leading the development of a series of evidence-based guidelines and tools [12]. One of these tools, the *Decision-Making Tool for Family Planning Clients and Providers* (DMT), is the subject of this study [13]. The DMT takes the form of a two-sided flipchart: the side directed to the client functions as a decision aid, while the side facing the provider operates as a job aid. In its role as a decision aid, the DMT uses simple language and illustrations to help clients understand key issues and information, to involve them in decision-making, and to guide them through an orderly decision-making process. In its role as a job aid, the DMT supplies providers with the essential technical information needed at each step in the counseling process, such as the medical eligibility requirements for specific contraceptive methods. It also prompts providers about what questions to ask and what information to offer clients.

The objective of this study was to test whether training on and use of the DMT would improve the family planning counseling and decision-making process in Nicaragua.

## 2. Methods

### 2.1. Study sample

The study was conducted in 2003–2005 at 49 government health facilities in three districts of Nicaragua. One or two providers at each facility were videotaped with clients during both a baseline round (3 months before a DMT training workshop) and a post-intervention round (4 months after the workshop). A total of 426 consultations were videotaped, 210 during the baseline round and 216 during the post-intervention round. Different clients participated in each round of videotaping.

The 59 service providers who participated in the study included 13 doctors, 32 nurses, and 14 nurse assistants. All but four were female, and their average age was 36 years. They had an average of 14 years experience in providing health services and 8 years experience in serving family planning clients.

All but five of the 426 clients were women, most were under age 25 years and had an elementary school education or less, and 62% were seeking a new contraceptive method (Table 1). Clients in the post-intervention round were significantly more likely to have at least two children than those in the baseline round (77% versus 56%); there were no other significant differences between clients in the two rounds.

Table 1
Characteristics of clients in baseline and post-intervention rounds (percentage distribution)

| Characteristics | Baseline round ($N = 210$) | Post-intervention round ($N = 216$) |
|---|---|---|
| Age | | |
| 17–24 years | 54.0 | 59.0 |
| 25–34 years | 37.4 | 31.8 |
| 35–50 years | 8.6 | 9.2 |
| Number of children*** | | |
| 0–1 | 43.6 | 23.0 |
| 2 | 24.6 | 34.6 |
| 3 or more | 31.8 | 42.4 |
| Education | | |
| Elementary or less | 55.0 | 57.1 |
| Attended or completed high school | 40.7 | 37.8 |
| Some higher education | 4.3 | 5.1 |
| Type of client | | |
| New client | 62.1 | 62.7 |
| Continuing client | 37.9 | 37.3 |
| Contraceptive method | | |
| Injectable | 54.0 | 60.4 |
| Pill | 26.5 | 23.0 |
| Condom | 11.4 | 10.2 |
| IUD | 3.3 | 3.2 |
| Other | 4.8 | 3.2 |

***$p < 0.001$. $p$-Values are calculated using ANOVA. *Note*: New clients were defined as people who wanted to select a new method that day and therefore included some returning clients who wanted to switch methods.

### 2.2. Intervention

All of the providers received a copy of the DMT and attended a 3-day training workshop to learn how to use it. The workshop largely focused on how to use the DMT, with training on technical information limited to topics new to the providers (such as dual protection) and only 2 h devoted to basic counseling skills and interpersonal communication. After the workshop, the providers were instructed to use the DMT with all family planning clients for the next 4 months. There was no follow-up supervision or further training.

### 2.3. Data collection

With the consent of provider and client, counseling sessions were videotaped. Afterwards, a trained fieldworker conducted a private 5–10-min exit interview with the client to collect socio-demographic data, perceptions on quality of counseling, knowledge of the method chosen, and, during the post-intervention round, opinions of the DMT.

After the second round of videotaping, all of the providers participated in 3 focus group discussions of their experiences in using DMT. Nine providers also volunteered for individual in-depth interviews, during which they watched and commented on one of their own counseling sessions on videotape. Individual in-depth interviews were also conducted with eight clients from the post-intervention round. Interviewers asked both providers and clients about the usefulness and clarity of the DMT and solicited suggestions for improvements.

### 2.4. Assessment instruments

The study employed a decision-making assessment tool that was previously used to analyze client and provider behavior during family planning consultations in Indonesia and Mexico [14]; it is an adaptation of the OPTION tool designed by Elwyn et al. [15] to analyze decision-making in developed-country medical encounters. The tool employs a 5-point scale to rate client involvement and provider performance on 13 key decision-making behaviors, such as exploring the reason for the client's visit, tailoring information to the client's needs and circumstances, and client participation in decision-making. There are slightly different versions of the tool for new and continuing clients that reflect whether the client is choosing a new method or electing whether to continue with a current method. The midpoint of the rating scale (a score of 3) is defined as the minimum acceptable level of performance based on family planning program expectations in developing countries. Ratings for each item were summed to create an overall decision-making score.

In addition, a client–provider interaction (CPI) checklist was especially designed to focus on: (1) perceived weaknesses in the quality of counseling in Nicaragua, for example, using a set of universal questions to screen for medical eligibility regardless of method, and (2) key counseling issues addressed by the DMT, such as the need for dual protection against HIV infection as well as pregnancy. Different checklists were created for new and continuing clients.

### 2.5. Data analysis

Two Nicaraguan investigators rated the videotaped counseling sessions using both the decision-making assessment tool and client–provider interaction checklist. They were trained for 1 week on the nature of the decision-making process, counseling issues relevant to family planning, and the assessment instruments, including specific examples of how communication behaviors should be rated. The investigators worked directly from the videotapes, in the original Spanish, when rating the sessions. They watched each videotape twice and completed one instrument during each viewing. To check the reliability of the ratings, 10% of the videotapes were rated by both investigators. Agreement between their ratings of each item ranged from 90% to 95%.

Descriptive statistics were used to analyze client characteristics, decision-making behaviors, and client–provider communication behaviors. Investigators used one-way analysis of variance (ANOVA) to test the significance of differences between baseline and post-intervention measures. Because the decision-making process is different for new clients (who are choosing a family planning method) and continuing clients (who are returning for additional supplies, check-ups, and/or concerns about their method), data on new and continuing clients were analyzed separately.

## 3. Findings

### 3.1. Provider performance

Providers' performance during counseling sessions with new clients improved substantially after the intervention. Their overall decision-making score rose from an average of 28.6 to 36.8 ($p < 0.001$) between the two rounds (Table 2). A closer examination of the individual items in both instruments shows that providers improved in three areas.

First, providers worked harder to identify and respond to new clients' needs. They were more likely to ask the reason for the visit, find out whether the client had a method in mind, and tailor information to the client's needs, according to the decision-making assessment tool (Table 3). In addition, the CPI checklist shows that providers were more likely to probe the client's need for dual protection and to immediately begin talking about the client's preferred contraceptive method if she or he had one in mind (Table 4).

Second, providers increased their efforts to involve new clients in the decision-making process. After the intervention, providers more often gave clients an opportunity to ask questions, checked whether they understood information, and explored their comfort level with making the decision, according to the decision-making assessment tool (Table 3).

Third, the CPI checklist shows that providers did a more thorough job of screening for and educating new clients about the chosen method. After the intervention, providers were nearly six times more likely to thoroughly review the method's side effects and to give the client at least two key instructions on its use (Table 4). Screening for medical eligibility criteria also improved significantly, although less dramatically.

The DMT also had a significant, if smaller, impact on providers' performance in sessions with continuing clients. Their overall decision-making score rose just three points, from 24.1 to 27.3 ($p < 0.001$) (Table 2). As in sessions with new clients, providers increased their efforts to identify and

Table 2
Overall decision-making scores of providers and clients in consultations with new and continuing clients, baseline and post-intervention rounds

| | Baseline round | Post-intervention round |
|---|---|---|
| New client consultations | ($N = 130$) | ($N = 135$) |
| Average provider score | 28.6 | 36.8*** |
| Average client score | 22.5 | 27.6*** |
| Continuing client consultations | ($N = 75$) | ($N = 82$) |
| Average provider score | 24.1 | 27.3*** |
| Average client score | 18.1 | 19.9** |

**$p < 0.01$, ***$p < 0.001$. $p$-Values are calculated using ANOVA. *Note*: Scores may range from 13 to 65.

Table 3
Percentage of family planning sessions with new clients that meet minimum acceptable levels of performance for provider and client decision-making behaviors, baseline and post-intervention rounds

| Subject addressed | Providers | | Clients | |
|---|---|---|---|---|
| | Baseline round ($N = 130$) | Post-intervention round ($N = 135$) | Baseline round ($N = 130$) | Post-Intervention round ($N = 135$) |
| Reason for visit | 46.2 | 82.2*** | 30.8 | 80.0*** |
| Need for a decision-making process | 65.4 | 79.3* | 63.8 | 77.8* |
| Client's right to choose | 10.0 | 15.6 | 2.3 | 0.7 |
| Client's responsibility to participate | 1.5 | 2.2 | 2.3 | 2.2 |
| Whether client has a method in mind | 82.3 | 98.5*** | 83.9 | 97.0*** |
| Client's needs and priorities | 83.9 | 84.4 | 64.6 | 65.9 |
| Multiple FP methods | 43.9 | 38.5 | 7.7 | 0.7** |
| Pros and cons of methods for individual client | 41.5 | 74.8*** | 20.0 | 17.8 |
| Client's questions | 13.1 | 63.0** | 16.9 | 23.0 |
| Client's understanding of information | 9.2 | 51.1*** | 4.6 | 9.6 |
| Client's comfort level with making the decision | 6.2 | 56.3*** | 3.9 | 11.1* |
| Client's choice of method | 69.2 | 62.2 | 65.4 | 51.9* |
| Possibility of switching or discontinuing FP methods | 16.2 | 20.7 | 18.5 | 4.4*** |

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. $p$-Values are calculated using ANOVA. *Note*: Minimum acceptable level of performance is defined as a score of 3.

Table 4
Frequency of provider behaviors in consultations with new and continuing clients, baseline and post-intervention rounds

| Behavior | Baseline round | Post-intervention round |
|---|---|---|
| New client consultations | ($N = 130$) | ($N = 133$) |
| If client has method in mind, provider begins to talk about that method (baseline $N = 80$; post-intervention $N = 108$) | 59.7 | 93.4*** |
| Discusses dual protection | 19.2 | 65.7*** |
| Screens for 4 or more eligibility criteria for chosen method | 35.4 | 48.1* |
| Mentions 4 or more side effects of chosen method | 10.0 | 58.7*** |
| Gives 2 or more key instructions on how to use the chosen method | 4.8 | 35.6*** |
| Discusses when to return | 94.5 | 93.9 |
| Continuing client consultations | ($N = 75$) | ($N = 80$) |
| If client raises concern, responds to all questions (baseline $N = 37$; post-intervention $N = 29$) | 51.4 | 79.3* |
| Asks if client has new health condition | 29.3 | 62.5*** |
| Discusses dual protection | 9.3 | 58.8*** |

*$p < 0.05$, ***$p < 0.001$. $p$-Values are calculated using ANOVA.

respond to the client's needs. After the intervention, they were roughly twice as likely to ask the reason for the visit, determine whether the client was satisfied with the method, and tailor information to the client's needs, according to the decision-making assessment tool (Table 5). The CPI checklist shows they were also one and a half times more likely to respond to all questions if the client expressed a concern, twice as likely to ask if the client had developed a new health condition that could affect the use of the method, and six times as likely to discuss the client's need for dual protection (Table 4).

The DMT did not have an effect on many other aspects of provider performance (Tables 3 and 5). There are three possible explanations for this lack of impact. First, baseline levels of provider performance were so high for some behaviors, such as probing new clients' needs and priorities, that there was little room for improvement. Second, some behaviors encouraged by the DMT were novel, for example, discussing the client's responsibility to participate in the session; providers may have found it difficult to make such radical changes in their customary approach to counseling. Third, the OPTION assessment tool was based on a somewhat different model of decision-making than the DMT and measured some behaviors that the DMT did not stress, for example, explicitly stating that it is the client's right to choose a method or other course of action.

### 3.2. Client communication

The intervention changed clients' behavior although not as much as providers'. The overall decision-making score for new clients increased from 22.5 to 27.6 ($p < 0.001$) (Table 2), and ratings for three items declined significantly while four others rose (Table 3). The main impact of the

Table 5
Percentage of family planning sessions with continuing clients that meet minimum acceptable levels of performance for provider and client decision-making behaviors, baseline and post-intervention rounds

| Subject addressed | Provider | | Client | |
|---|---|---|---|---|
| | Baseline round ($N = 80$) | Post-intervention round ($N = 81$) | Baseline round ($N = 80$) | Post-Intervention round ($N = 81$) |
| Reason for visit | 42.5 | 80.3*** | 5.0 | 9.9 |
| Need for a decision-making process | 10.0 | 8.6 | 10.0 | 1.2* |
| Client's right to choose | 5.0 | 9.9 | 1.3 | 0.0 |
| Client's responsibility to participate | 1.3 | 1.2 | 1.3 | 1.2 |
| Client satisfaction with method | 33.8 | 71.6*** | 27.5 | 32.1 |
| Changes in client's needs, situation, and health status | 68.8 | 76.5 | 21.3 | 43.2** |
| Multiple courses of action | 6.3 | 12.4 | 6.3 | 1.2 |
| Pros and cons of options for individual client | 16.3 | 34.6** | 10.0 | 3.7 |
| Client's questions | 1.3 | 6.2 | 2.5 | 2.5 |
| Client's understanding of information | 6.3 | 17.3* | 1.3 | 1.3 |
| Client's comfort level with making the decision | 8.8 | 9.9 | 1.3 | 2.5 |
| Client's choice of course of action | 17.5 | 18.5 | 16.3 | 9.9 |
| Possibility of switching or discontinuing FP methods | 7.5 | 2.5 | 1.3 | 1.2 |

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. $p$-Values are calculated using ANOVA. *Note*: Minimum acceptable level of performance is defined as a score of 3.

DMT was to prompt new clients to communicate more fully about their needs, preferences, and personal situation, which is essential to informed choice. They were more likely to state the reason for the visit and request a specific method, according to the decision-making assessment tool (Table 3), and to mention at least three aspects of their personal situation or needs, according to the CPI checklist (Table 6). The DMT also increased the likelihood that new clients decided, by themselves, about what method to adopt and left the consultation with their preferred method (Table 6).

The DMT had less effect on continuing clients. Their overall decision-making score increased only slightly, from 18.1 to 19.9 ($p < 0.01$) (Table 2), and ratings for only one individual item rose significantly: describing changes in one's situation or health status (Table 5). There was a significant decrease in client's identifying a problem requiring a decision-making process. According to the CPI checklist, however, the DMT prompted nearly all continuing clients to explicitly state whether they wished to continue or change methods, so that the consultation did not proceed based on unspoken—and perhaps mistaken—assumptions (Table 6). This marked a big improvement over the baseline round, when only 59% of continuing clients made their wishes clear.

The DMT's lesser impact on clients than providers is not surprising. Providers had a far more intensive exposure to the DMT, which began during training and extended over months of use. In contrast, clients were only exposed to the DMT during a single consultation. In addition, the DMT encourages fundamental changes in the way clients interact with providers that they may find difficult and uncomfortable. For example, the DMT encourages clients to be more assertive by asking questions, inquiring about other alternatives, expressing opinions, and seeking clarification.

### 3.3. Client education

The DMT's heavy reliance on text raises concerns about its usefulness for less literate clients. It is possible, however, that less educated clients could benefit the most from the DMT, in part because it encourages providers to offer them the same high standard of care as other clients and in part because it promotes their involvement in the consultation.

An analysis of the data by client's education found that, at the baseline, providers' performance was quite similar in sessions with less and more educated clients. After the intervention, providers' overall decision-making scores improved significantly—and to a similar extent—with all

Table 6
Frequency of client behaviors in consultations with new and continuing clients, baseline and post-intervention rounds

| Behavior | Baseline round | Post-intervention round |
|---|---|---|
| New client consultations | ($N = 130$) | ($N = 133$) |
| Mentions 3 or more aspects of personal situation or needs | 30.0 | 75.2*** |
| Brings up dual protection | 0.8 | 3.0 |
| Is solely responsible for making decision | 62.3 | 87.9*** |
| Leaves with preferred method | 76.9 | 89.6** |
| Continuing client consultations | ($N = 75$) | ($N = 80$) |
| Mentions desire to continue or change methods | 58.7 | 96.3*** |

**$p < 0.01$, ***$p < 0.001$. $p$-Values are calculated using ANOVA.

Table 7
Frequency of provider behaviors in consultations with new clients, by education of clients, baseline and post-intervention rounds

| Behavior | Clients with elementary education or less | | Clients with some high school or higher education | |
|---|---|---|---|---|
| | Baseline round ($N = 66$) | Post-intervention round ($N = 72$) | Baseline round ($N = 64$) | Post-intervention round ($N = 61$) |
| If client has method in mind, provider begins to talk about that method (baseline $N = 80$; post-intervention $N = 108$) | 64.1 | 87.5** | 55.3 | 100.0*** |
| Discusses dual protection | 10.6 | 56.9*** | 28.1 | 78.3*** |
| Screens for 4 or more eligibility criteria for chosen method | 39.4 | 50.0 | 31.3 | 45.9 |
| Mentions 4 or more side effects of chosen method | 12.1 | 62.5*** | 7.8 | 54.1*** |
| Gives 2 or more key instructions on how to use chosen method | 4.8 | 26.4*** | 4.8 | 46.7*** |
| Discusses when to return | 96.9 | 90.1 | 92.1 | 98.4 |

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. $p$-Values are calculated using ANOVA.

clients, regardless of education (data not shown). However, providers did make bigger gains in talking about the method a client had in mind, discussing dual protection, and giving key instructions in sessions with more educated clients, who were defined as those with more than an elementary-level education (Table 7).

In contrast, the DMT had a greater impact on the behavior of less educated clients than more educated clients. For example, overall decision-making scores for continuing clients rose far higher among less educated clients (from 18.1 to 29.7, $p < 0.05$) than more educated clients (from 18.1 to 20.3, $p < 0.05$); a similar pattern is seen among new clients (data not shown). Less educated continuing clients also posted bigger gains than more educated clients in saying whether they wanted to continue or change methods (49–96%, $p < 0.001$) than their more educated peers (73–97%, $p < 0.05$).

## 4. Discussion and conclusion

### 4.1. Discussion

One of the DMT's most important benefits was to increase the quantity and quality of information that providers offer. This study, like others in Africa and Latin America, revealed a shortfall in essential information given to family planning clients [5,9]. By furnishing providers with critical technical information and answers to common questions, job aids like the DMT can help providers give complete and accurate information. The DMT's client-centered approach also helps providers tailor information-giving to the client's situation and, in so doing, potentially improves the efficiency of the consultation. For example, it enables providers to quickly focus on a client's preferred method and skip extraneous discussion of other methods. This approach can focus a consultation, reduce information overload for the client, and expedite the decision-making process [9,10].

The impact of the DMT on client involvement is also notable, given that family planning clients in many countries say little, ask few questions, and rarely assert their needs [16,17]. The DMT's reliance on a normative decision-tree model of client-responsive counseling helps explain the increase in client participation [18]. At each branching point in the decision tree—and there are many—the DMT calls for the client to respond to a key question or make a choice before the provider can decide how to proceed. This is a departure from conventional family planning flipcharts, which tend to be purely informational. The DMT also encourages client communication by prompting clients to offer and ask for information, cueing providers to give clients positive feedback when they speak up, and seeking to redefine what behavior is appropriate for family planning clients.

Study results suggest that decision-making aids like the DMT may be less useful for clients who want to continue using the same contraceptive method than for clients who want to adopt or switch to a new method—even though the DMT explicitly addresses common concerns of continuing clients, such as side effects. The challenges are twofold. First, it has proven difficult to clarify the need for and objectives of an organized decision-making process for continuing clients, especially those with no complaints and no changes in their health status or personal circumstances. Second, repeated use of the same aid during follow-up visits with a client may quickly become mechanical and burdensome.

The DMT is intended for use in developing countries where access to education—and hence literacy—remains limited for many women, especially in South/Southeast Asia and sub-Saharan Africa [19]. Unlike health education materials especially designed for low literacy populations, which rely largely on pictures to convey their messages, the client pages of the DMT include considerable text. Concerns that the DMT would not be appropriate or effective for less educated women proved unfounded, however, because of its unique combination of provider job aid and client decision

aid. Unlike standalone client education materials, the DMT is designed for and relies upon oral explanations of its content by providers. The blend of illustrations, text, and one-on-one counseling makes the DMT suitable for use with clients at all educational levels. This flexibility is extremely important in settings where clients come from a wide range of educational backgrounds, as is the case in Nicaragua and many other developing countries.

Two elements of the study design limit the interpretation of the findings. First, it is difficult to distinguish between the impact of the DMT itself and the impact of associated training. Teaching providers the purpose of a new tool and how to use it is an essential part of introducing any job aid or decision aid [20,21]. In the case of the DMT, some limited training is vital because providers can find it difficult to navigate the 100-page tool and because they will follow old counseling patterns without explicit guidance [14].

Second, given the lack of a control group, it is impossible to rule out other influences on providers' performance and clients' behavior. During the intervention period, there was one activity aimed at the delivery of family planning services: the introduction of the Standard Days Method of natural family planning. This initiative is unlikely to have affected the overall quality of counseling, however, since all of its activities (which included provider training, community mobilization, and radio promotion) were focused on a single method. No other communication campaigns, training initiatives, or management changes took place in Nicaragua at this time.

### 4.2. Conclusion

The introduction of the DMT, accompanied by limited training for providers, improved providers' counseling performance during family planning consultations in Nicaragua, thus demonstrating the DMT's effectiveness as a job aid. Use of the DMT also enhanced client participation and decision making, demonstrating its effectiveness as a decision-making aid. Notably, the DMT had a significant impact on providers' and clients' behavior regardless of the client's educational level.

### 4.3. Practice implications

Incorporating job aids and decision aids into health counseling is an affordable and effective way to improve patient–provider communication, even or perhaps especially when patients have limited education and/or providers have limited training and supervision. The DMT demonstrates the feasibility of combining a job aid and decision aid into a single tool, thereby reducing production and distribution costs and increasing the efficiency of training. A combined tool also helps overcome one common barrier to providers' use of job aids: their concern that consulting a job aid in front of clients puts their competence in question and undermines their credibility [20]. Because the DMT also functions as a decision aid for clients, its presence at the consultation is explained. Adapting the language and content of job and decision aids to the local setting, as was done in Nicaragua, makes them more functional for providers and also generates interest and assures buy-in by policymakers and other stakeholders. To this end, WHO has developed an adaptation guide to accompany the generic version of DMT, and provider and client feedback collected as part of this study has been used to further revise the Nicaraguan version of the DMT. Based on the positive results of field tests in Nicaragua and other countries, the DMT is currently being translated into more than a dozen languages, ranging from Arabic to Vietnamese, for use in every region of the world.

## Acknowledgements

The study was funded by the United States Agency for International Development (USAID) through the Information and Knowledge for Optimal Health (INFO) Project (GPH-A-00-02-00003-00). The authors would like to thank the service providers and women in Chinadega, Carazo, and Matagalpa, Nicaragua who participated in the study. In Nicaragua, special thanks go to: Margarita Guadian Lopez, Flor de Maria Cardoza (Ministry of Health); Oscar Ortiz, Mayra Gonzalez (Centro para Programas de Comunicación); Diony Fuentes (Institute of Reproductive Health/Georgetown University); Ximena Gutierrez, Roberto Pao, Francisca Rivas (NICASALUD); Claudia Evans (USAID/Nicaragua); and Raul Montesano (OPS/WHO). We also thank those who supported us closely throughout the study: Sarah Johnson (WHO); Ward Rinehart (JHU/INFO Project); Dawn Chin-Quee, Barbara Janowitz (Family Health International); Margarita Monroy, Jerry Marcus (IRH/GU); and Jim Shelton (USAID/DC).

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