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Towards client-centered counseling: Development and testing of the WHO Decision-Making Tool

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ABSTRACT

Objective: To describe development and testing of a counseling tool intended to inform family planning clients while helping the family planning provider facilitate the client's decision-making process; and to discuss challenges and requisites for shifting to shared decision-making from the extremes of decision-making dominated by the provider, on one hand, or unaided by the provider, on the other.

Development of the tool: The WHO Decision-Making Tool for Family Planning Clients and Providers is derived from evidence-based principles of client-centered care and counseling. This article discusses how these principles are manifested in the Tool and how the Tool aids both provider and client in improving counseling.

Methods: Development of the Tool involved formative workshops with providers in Indonesia, Mexico, South Africa and Trinidad and Tobago and observational evaluation research in Indonesia, Mexico, and Nicaragua. Analysis of videotaped counseling sessions quantitatively assessed client–provider communication and decision-making. Also, focus-group discussions, interviews, and a questionnaire collected qualitative data from providers and clients.

Results: In general, use of the Tool improved providers' counseling performance: they engaged clients more and gave more and better tailored information. For clients, the Tool increased their communication and involvement. Both the Nicaraguan and Mexican studies found marked shifts toward the client in the locus of decision-making after introduction of the Tool.

Practice implications: Use of the tool improves the performance of both providers and clients in family planning counseling and decision-making. There are challenges, however, at the levels of both the provider and the organization in sustaining these changes and scaling up such initiatives in quality of care.

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1. Introduction

Nowhere is client-centered counseling more appropriate and valuable than in choosing a contraceptive method. For many women and couples, decisions about contraception and reproductive choices are life-determining decisions. Women and men can benefit from their health care provider's help to make well-informed, well-considered choices that suit their needs, preferences, and concerns.

Informed choice has long been a fundamental tenet of family planning and a defining element of quality of care [1]. The principle encompasses not only an initial choice of whether and when to use contraception and if so, which method, but also a continuing

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option to stop or to switch methods as one's needs and preferences change [2]. Informed choice has roots in human rights but also has a pragmatic aspect: When women use the method that they want, they are more likely to continue using it [3].

Contraceptive choice is appropriately the user's decision. There are a number of contraceptive methods to choose among, and their effectiveness and safety do not vary so much as to override the user's preferences in most circumstances. Medical conditions that rule out certain methods are uncommon, particularly among young women. Furthermore, because contraception is linked to sex and reproduction, choice and use of a method can be highly sensitive to a user's important personal and social concerns.

In conventional provider-centered family planning care, based on a medical model of treatment decisions, the provider makes the decision on what is best for the client without eliciting her or his preferences. With the programmatic emphasis in the past several decades on informed choice in family planning, some providers have shifted to the other end of the spectrum, giving clients

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standard or routinized information on all available methods and leaving the client to make decisions unaided [4]. In between these two extremes lies a model of client-centered care where the decision-making process is shared by the client and provider: the provider facilitates the process and the client actively participates. The provider offers technical expertise while the client is the expert on her or his own needs, situation and preferences. This view brings into focus both the client's role in decision-making and the goal of the decision-making process: to match care with clients' preferences.

Client-centered counseling can improve satisfaction with and continued use of a contraceptive method [5]. To this end, the World Health Organization (WHO) began in 2001 to develop a job aid to support contraceptive counseling, the *Decision-Making Tool for Family Planning Clients and Providers*. This article will describe how the tool applies counseling principles; review field-test findings; and discuss challenges and requisites for moving to shared decision-making.

1.1. Use of job aids in client-centered counseling

Why can a job aid be particularly helpful to counseling on family planning decisions?

First, as noted, there are many contraceptive methods to choose from. While this can facilitate finding a method that suits one's circumstances and preferences, it also complicates decisionmaking. Methods have a range of attributes that can be important to potential users, such as how the method is used, effectiveness. side effects, and whether it protects against sexually transmitted infections. For a client, a decision-making aid can help to clarify what he or she wants in a method, to weigh the pros and cons of different options, and to understanding how the options would affect her or him personally [6]. With the use of a decision-making aid, clients can feel confident that they have the information necessary to make a decision. For providers, who may lack the training and experience to offer good-quality counseling, job aids can help them provide more accurate, structured and complete information; can reduce the need to memorize information; and can help assure compliance with standards [7–10].

Second, job aids, if so designed, can provide a process that simultaneously guides decision-making for the client and structures counseling for the provider. In much of the world, family planning clients are not accustomed to playing an active and assertive role in health care decision-making. A decision-making aid can embody an interaction that gives the client opportunities to participate or even gently necessitates it. For providers, job aids can be normative. They can guide the provider to better counseling, away from practices that dominate or distort decision-making, and shift the locus of decision-making towards the client.

1.2. Background on the tool

The Decision-Making Tool incorporates WHO's evidence-based recommendations regarding who can use and how to use contraceptive methods, and it aims to facilitate application of these recommendations during the client-provider interaction [11,12]. At the same time, it reflects evidence on best practices in family planning counseling (see Table 1).

The tool is a flipchart designed for use in the counseling session. For each page addressed to the client, there is a corresponding page for the provider on the other side of the flipchart. For the client, the tool serves as a decision-making aid, while for the provider it serves as a job aid. The client's pages raise key questions and provide brief information. The provider's pages offer prompts, suggested wording of responses, and information for answering questions and concerns.

Table 1

Evidence-based best practices in counseling facilitated by the WHO Decision-Making Tool.

- The client receives the method that she or he has in mind, provided it is medically appropriate and truly meets her or his needs [13]
- The provider offers information that is tailored, well-structured, and concise [4,14,15]
- The client receives full information on what to expect when using the method, including side effects [16,17]
- The provider offers support for the continuing client, including for switching methods when the client desires [18,19].

Table 2

Major client-centered counseling principles guiding design of the WHO Decision-Making Tool.

- 1. The client makes the decisions
- 2. The provider helps the client consider and make decisions that best suit that client
- 3. The client's wishes are respected whenever possible
- 4. The provider responds to the client's statements, questions, and needs
- 5. The provider *listens* to what the client says in order to know what to do next

The Decision-Making Tool was developed with the input of international experts, family planning providers, program managers, and clients. It has been translated into nearly 20 languages and has been introduced in nearly 50 countries. It was developed as a generic or prototype tool; WHO provides materials on how to adapt it to a specific local context and how to introduce it, including a training guide and training materials.¹

1.3. Principles of client-centered counseling in the tool

The Decision-Making Tool supports the client and the provider in complementary roles. It guides the client to better practices – more participation in discussion and decision-making, greater self—awareness, and, underlying that, implicit recognition that she has a right to put her own needs and preferences first. At the same time, the provider is channeled into and supported in the roles of informant and guide to the decision-making process. Thus, the provider is given an important role that is an alternative to the role of decision-maker. The Tool helps the provider guide the client through a process of consideration and decision-making without imposing the provider's own judgments or opinions on the client's decision itself. In other words, the Tool specifies a process without determining its outcome.

The Decision-Making Tool is different from most other family planning counseling aids. The Tool was developed deductively from an explicit set of principles that define client-centered counseling (see Table 2). These principles focus on communication skills, effective interaction, and empowerment of the client—both to participate in the counseling and to make personally appropriate decisions.

Thus, a basic principle behind the tool is that the client's needs and interests guide the course of counseling. The structure of the flipchart enables this. It contains multiple, branching pathways available in the form of tabbed sections of the tool. While multiple pathways are common in computer-based decision aids, the Decision-Making Tool applies this approach in a printed tool, suited to health care facilities that do not have computers available. The process begins with the provider asking the client why she or he has come, thus getting immediately to the client's

¹ The Decision-Making Tool and supporting materials are available online at http://www.who.int/reproductivehealth/publications/family_planning/9241593229index/en/index.html or by writing publications@who.rhr.int.

purpose. This approach replaces the usual list of standard questions, which may seem—and be—irrelevant to the client.

Continuing in this fashion, the tool poses questions for the client throughout the course of counseling. The provider, rather than flipping through all the flipchart pages one after another, uses the client's responses to determine the path of the discussion by using the tabs. For example, because research finds that women who receive the contraceptive they want will use it longer [13], the provider first asks if the new client has a method in mind, rather than presenting her with an array of options. If she does have a method in mind, counseling focuses on that method and whether it truly suits her.

For clients who do not have a method in mind, the tool provides the information needed to make a choice. It is designed to help providers tailor the information for the particular client rather than describing each method without regard to the client's interests. Further, the counseling process aims to help the client become more aware of what is important to her in a method and to formulate a sense of her own needs and preferences.

Clients are more satisfied with their choice of a method when they are told what to expect when using it. In particular, women who have been counseled on side effects are more likely to continue using the method when they experience them [20,21]. The tool emphasizes discussing with clients what to expect, countering the common provider practice of not mentioning side effects for fear of frightening the potential user [22].

In a mature family planning program, the majority of clients are returning clients. Few counseling aids, however, address the return visit. Discussion at a return visit could seem more open-ended than discussing initial method choice. In just two pages for each method, however, the Decision-Making Tool offers a process for addressing returning clients' varying needs, including addressing side effects and problems using the method, if they have occurred. Thus, the tool responds to a client's changing needs over time, including switching methods.

2. Quantitative evaluation and field testing of the WHO Decision-Making Tool

In Nicaragua [23], Mexico [24] and Indonesia (unpublished) we studied whether and how the Decision-Making Tool can improve family planning counseling. These studies had both qualitative and quantitative components. The qualitative component, discussed in the section on practice implications, sought to understand the strengths and weaknesses of the Tool and how it could be improved. The quantitative component sought to find out whether

use of the Decision-Making Tool improved the quality of routine family planning counseling. In this section we briefly describe study methods and some key findings from the three countries, looking at both the performance of providers and the behavior of clients.

2.1. Study methods

The studies in all three countries employed a pre-post design without a control group. The intervention consisted of a 2- to 4-day training workshop for providers to introduce the Tool and then use of the Tool in routine work for a time (4 months in Nicaragua, 1 month in Mexico and Indonesia). Every provider in the study received a copy of the Tool in the local language.

We videotaped, before and after the intervention, 59 service providers (doctors, nurses, nurse assistants) in counseling sessions with 426 clients in Nicaragua, 13 providers (doctors, nurses, and social workers) with 83 clients in Mexico, and 12 providers (nurse-midwives) with 96 clients in Indonesia (see Table 3). We also collected qualitative data through client exit interviews and provider interviews (see Section 3).

Trained professionals analyzed the videotapes by directly watching them in local languages. We used a combination of three tools to analyze the videotaped consultations. In all three studies we used a decision-making assessment instrument that is an adaptation of the OPTION tool designed by Elwyn et al. [25] to analyze decision-making in developed-country medical encounters. The original OPTION tool gauges only provider behaviors, whereas our adapted instrument studies both provider performance and client involvement in decision-making, including the locus of decision-making. Locus of decision-making is a scale comprised of five possible categories: solely by provider, largely by provider, equally by client and provider, largely by client, and solely by client. The tool employs a 5-point scale to rate 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, reflecting whether the client is choosing a new method or electing whether to continue 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 Nicaragua we also used a client-provider interaction (CPI) checklist designed specifically for this study to focus on: [1] perceived weaknesses

Table 3Number of facilities, service providers and clients, study design, data collection methods and analysis tools, by country.

	Nicaragua	Mexico	Indonesia		
Number and types of facilities	49 government health facilities in three districts	9 government health facilities in Mexico City: 5 maternity hospitals, 2 general hospitals, 1 primary health care clinic, and 1 clinic at a women's prison.	6 public health clinics in Yogyakarta		
Numbers and types of service providers	Total 59–13 doctors, 32 nurses, and 14 nurse assistants	Total 13–9 doctors, 2 nurses, and 2 social workers	12 nurse-midwives		
Number of consultations with clients	426	83	96		
Data collection	Videotaped consultations	Videotaped consultations	Videotaped consultations		
Study design	Pre- and post-intervention comparison, no control group	Pre- and post-intervention comparison, no control group	Pre- and post-intervention comparison, no control group		
Intervention description	3-day training for providers and 4-month period to use DMT	2 -day training for providers and 1-month period to use DMT	4 days of training for providers and 1-month period to use DMT		
Tools used to analyze the videotaped sessions	FP OPTION decision-making assessment tool	FP OPTION decision-making assessment tool	FP OPTION decision-making assessment tool		
	FP client-provider interaction (CPI) checklist	Roter Interaction Analysis System (RIAS)	Roter Interaction Analysis System (RIAS)		

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 Tool, such as the need for dual protection against HIV infection as well as pregnancy. Different checklists were created for new and continuing clients. The third instrument is an adaptation of the Roter Interaction Analysis System (RIAS) [26], which assigns one of several dozen mutually exclusive codes to each utterance of a client or provider, based on its content. RIAS codes of interest were combined into two categories to form dependent variables for the analysis: [1] client's active communication and [2] provider's facilitative communication. We used the RIAS tool for the Mexican and Indonesian studies.

3. Results

3.1. Evidence of improvements in providers' counseling

The findings from all three countries indicate that, in general, the introduction of the Decision-Making Tool, after brief training for providers and a period of practice on the job, improved providers' counseling performance during family planning consultations. For providers the Tool proved an effective job aid. Providers' overall decision-making scores rose significantly from the baseline rating to the post-intervention rating in Nicaragua (28.6-36.8, p < 0.001), in Mexico (20.0-33.8, p < 0.001), and in Indonesia (26.8–31.5, p < 0.01) (see Table 4). Not all behaviors improved. Some positive behaviors were already so widespread at baseline that there was little room for improvement. At the same time, some behaviors encouraged by the Tool (e.g. inviting the client to participate in the counseling session) may have been so new to providers that they found it difficult to make such radical changes. The performance improvement post-intervention differed slightly in degree and specific behaviors among the three studies. Still, the common findings were that providers tended to engage clients more; they gave more information; and the information was more tailored to the specific client.

In Nicaragua, after the intervention providers significantly increased their efforts to identify and respond to clients' needs, involve clients in the decision-making process, and screen for and educate new clients about the chosen method. After the intervention more providers gave new clients opportunities to ask questions (increasing from 13% of sessions to 63%, p < 0.001), checked whether clients understood information (from 9% to 51%, p < 0.001), and explored their level of comfort with making the decision (from 6% to 56%, p < 0.001). In addition, the results from the CPI checklist showed that providers were more likely to probe the new client's need for dual protection (from 19% to 66%, p < 0.001) and to begin by talking about the client's preferred contraceptive method if she or he had a method in mind (from 60% to 93%, p < 0.001). The CPI checklist also showed that after the intervention providers were nearly six times more likely to thoroughly review the method's side effects (from 10% to 59%, p < 0.001) and to give the client at least two key instructions on its use (from 5% to 36%, p < 0.001).

In Mexico, with both new and continuing clients, there was a significant shit from provider-dominated to shared decision-making after the intervention (see Shift of locus of decision-making

below). Providers gave clients more information on family planning (from 14 to 47 utterances, p < 0.001) and more facilitative communication (from 10 to 21 utterances, p < 0.001). In more consultations providers discussed HIV/AIDS prevention (from none to 81%, p < 0.001) and dual protection (from none to 79%, p < 0.001). Of the 13 items in the decisionmaking assessment tool, the greatest progress was made in: checking that the new client understood information (from none to 76%, p < 0.001), tailoring method information to the client's needs (from 3% to 76%, p < 0.001), and asking/validating whether the client had a method in mind (from none to 73%, p < 0.001). In Indonesia the greatest improvements in provider performance with new clients were: tailoring information to the client's situation (from 9% to 40%, p < 0.05), exploring client's feelings about using a method (from 0% to 40%, p < 0.001), and exploring the client's comfort level for decision-making (from 5% to 25%, p < 0.05).

3.2. Evidence of clients' increased participation

Use of the Decision-Making Tool enhanced client participation and decision-making in all three countries, demonstrating the Tool's effectiveness as a decision-making aid. The overall decisionmaking score for new clients increased from 22.5 to 27.6 (p < 0.001) in Nicaragua; from 19.1 to 32.2 (p < 0.001) for all clients in Mexico, and from 22.2 to 30.2 (p < 0.001) for new clients in Indonesia (see Table 4). The impact of the Tool on client involvement is notable, given that family planning clients in many countries say little, ask few questions, and rarely assert their needs. The Tool's use of a normative decision-tree model of clientresponsive counseling helps explain the increase in client participation. In general, clients were more forthcoming about their situation and their wishes, although the improvement differed in degree and in behaviors among the three studies. The increase in clients' participation was much greater in Mexico than in Nicaragua and Indonesia. Baseline measurements of client participation were much lower in Mexico than in the other two studies. This could be due to differences in the predominant provider type-hospital doctors in Mexico in contrast to clinic nurses in Nicaragua and Indonesia.

In Nicaragua the main impact of the Decision-Making Tool on clients was to prompt new clients to communicate more fully about their needs, preferences, and personal situation. For example, with the Tool they were more likely to state the reason for the visit (from 31% to 80%, p < 0.001) and to mention at least three aspects of their personal situation or needs (from 30% to 75%, p < 0.001). Use of the Tool also increased the likelihood that new clients left the consultation with their preferred method (from 77% to 90%, p < 0.01). Overall, the OPTION decision-making score for new clients increased from 22.5 to 27.6 (p < 0.001). The Tool had less effect on continuing clients. Their overall decision-making score increased slightly, from 18.1 to 19.9 (p < 0.01). The lesser effect could be due to difficulty clarifying 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. According to the CPI checklist, however, the Tool prompted nearly all continuing clients

Table 4Overall OPTION decision-making scores in baseline and post-intervention rounds of data collection, by country.

	Nicaragua [*]		Mexico			Indonesia*			
	Baseline (<i>n</i> = 130)	Post (n = 135)	P-value	Baseline $(n=35)$	Post $(n=45)$	P-value	Baseline $(n=22)$	Post $(n=20)$	P-value
Provider behaviors Client behaviors	28.6 22.5	36.8 27.6	<0.001 <0.001	20.0 19.1	33.8 32.2	<0.001 <0.001	26.8 22.2	31.5 30.2	<0.01 <0.001

New clients only.

to explicitly state whether they wished to continue or to change methods (from 59% to 96%, p < 0.001), so that the consultation did not proceed based on unspoken and perhaps mistaken assumptions. The Decision-Making Tool's heavy use of text raised some concerns about its usefulness for less literate clients. The findings show, however, that less educated clients benefited more from use of the Tool, perhaps because it helps to standardize and support provider's information-giving and clients' involvement in the consultation

In Mexico client involvement in the decision-making process and clients' active communication both increased, contributing to a shift from provider-dominated to shared decision-making. Greatest increases in new client's participatory behaviors were: playing an active role in decision-making (from 3% to 47%, p < 0.001), expressing a desire for a certain contraceptive method (0–64%, p > 0.001), describing personal needs and priorities for using a method (from none to 60%, p > 0.001), stating what they liked or disliked about specific methods (from none to 58%, p > 0.001), and asking questions (from 0% to 62%, p < 0.001).

In Indonesia new clients' participation increased most for: identifying problems requiring a decision (from 36% to 75%, p < 0.05), expressing feelings about using a method (from 5% to 40%, p > 0.01), and asking questions (from 9% to 75%, p < 0.001). RIAS analysis showed that client active communication rose from an average of 2.3 to 5.3 utterances per session (p < 0.001).

3.3. Shifts in the locus of decision-making

Both the Nicaraguan and Mexican studies found marked shifts toward the client in the locus of decision-making after introduction of the Tool. In Nicaragua at baseline about half of clients already made decisions for themselves. With use of the Tool, 85% made the decision for themselves (see Fig. 1). In contrast, in Mexico at baseline all decisions were made either solely by providers (44%) or largely by providers (56%). Introduction of the Tool shifted 81% of decisions to an equal sharing between client and provider, while providers were largely responsible for 19% of decisions and in no cases were solely responsible for the decision.

The difference in results between the two countries may be explained by the differences in providers and settings (see Table 3). Mexican doctors in hospitals followed an authoritarian medical model of care in their practice that extended to family planning care. In Nicaragua, and in Indonesia as well, most of the providers studied were nurses working in primary care clinics. The ethos of informed choice in family planning was already the norm with these providers before introduction of the Decision-Making Tool.

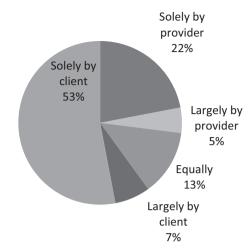
3.4. Process evaluation results

A process evaluation was conducted in parallel with the quantitative studies as well as from feedback from programs that have adopted the Tool. Process evaluation involved in-depth interviews with providers and clients and focus-group discussions with providers and program managers.

3.4.1. Changing providers' practices

Overall, the process evaluation found that providers were enthusiastic about using the Decision-Making Tool and perceived multiple benefits. Providers felt that the tool helped them to be thorough. As a Mexican provider noted, "...you can't forget anything because all the information is there". Also, the Tool gave providers credibility; several reported increased client trust because information was displayed on the flipchart. Some providers found that the Tool enhanced their ability to address the sensitive topics of sexual behavior, sexually transmitted infections, and HIV, since it contains a section on this topic. Others

Baseline (n=246)



Post-intervention

(n=239)

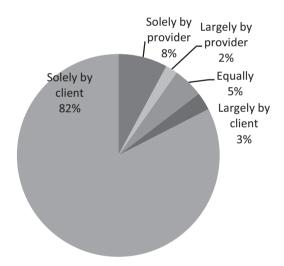


Fig. 1. Locus of decision-making in family planning counseling before and after introduction of the WHO Decision-Making Tool, new and continuing clients in Nicaragua.

also appreciated greater client participation. As one noted, "I ask them to read the first sentence and then I explain...so they get more interested and are not only listening passively". Thus, many wanted to share the Decision-Making Tool with colleagues. Some providers who ran private practices alongside their public-sector work felt that the Tool would draw more paying clients.

It was clear, nonetheless, that providers often struggled to implement client-centered counseling processes fully. In many cases providers reverted to their routine counseling practices. For example, some providers ignored the process to elicit the client's situation and needs and narrow down choices. Instead, they skipped to informational pages and discussed method attributes in detail, as they were accustomed to doing. In some cases providers spent much time going over method options, even though the client already had a method in mind. Interviews with providers

suggested that they struggle to understand how good counseling may not necessarily involve giving large amounts of information on a range of methods. One provider noted:

The flipchart brought a positive change; now my clients are making the decision instead of me. But I am concerned because my clients were making a decision from incomplete choices. I usually present advantages and disadvantages of one method and ask my clients to make a decision to use it or not.

Providers recognized the challenge of counseling effectively, even with a tool to aid them. Counseling is a complex skill to master, needing training and practice. As one provider said:

[Interpersonal communication] should be an integral part of training on the DMT, but it's a difficult skill, and even though we've been trained many times on [it], we still find it difficult. After all, not all people are gifted with being a good counselor.

3.4.2. Changing clients' role

In addition to the increases in client participation reported earlier, interviews suggested that clients were happy with the Decision-Making Tool and appreciated the illustrations and providers' improved explanations. Providers reported that clients were more open to discussing personal problems, as the Tool explicitly raises these issues.

4. Discussion and conclusion

4.1. Discussion

Experience suggests that a systematic process for introducing guidelines is more likely to lead to changes in policies and practices than only introducing a tool or retraining providers [29]. A well-planned and participatory adaptation process helps to ensure that new guidance is accepted, promoted and utilized by providers. WHO has developed a guide to support national introduction of reproductive health guidelines and tools. It recommends a process to adapt and introduce generic guides such as the Decision-Making Tool [30].

For local adaptation of the Decision-Making Tool, WHO has developed a technical guide [31]. Adaptations can include deleting or adding contraceptive method sections according to local availability, using local terminology, and adapting illustrations for a specific population. While in some cases clinical guidance in the Tool may be adapted to match national guidelines, it may be more appropriate to review current guidelines before changing the evidence-based guidance in the tool.

One such adaptation took place in Iran. The Ministry of Health studied the impact of the Family Planning Care Guideline (the adapted Decision-Making Tool) on quality of care in a before-andafter multi-center national study [32]. Family planning quality of care was assessed in six areas—informed choice, information given to the client, provider competence, interpersonal relationship, care continuity and reproductive health care acceptance-using a composite of indicators for each area. In each area changes were assessed in three "quality paths": structure of counseling, the process of decision-making, and clients' satisfaction with the outcome. Data were collected through some 2500 client and provider questionnaires and direct observation of counseling sessions. Integrating the Tool into family planning services improved the quality of care in all three quality paths and raised the overall quality of care score by about 20 percentage points, from 70% to 90% (p < 0.001). As a result of the findings, researchers recommended integrating the Family Planning Care Guideline into services nationwide.

Retraining a large cadre of providers to use the Decision-Making Tool can be challenging. In Indonesia, for example, the program aimed to scale up use of the tool among the thousands midwives who operate rural health posts nationwide. In place of expensive face-to-face training, the local implementing partner developed a training video and distance-learning materials, including case studies illustrating different counseling pathways for different types of clients. WHO also has developed a generic training video, which accompanies the training course. In the long run the most cost-effective strategy is incorporating client-centered counseling into routine in-service training cycles and pre-service training curricula.

Production and national distribution of materials such as the Decision-Making Tool can be costly. Color printing, tabs, and a binder/stand make WHO's generic version attractive and easy to use but add to costs. Programs can consider cheaper approaches without greatly compromising usability. Also, the generic tool covers 14 family planning methods, but most programs offer far fewer and can omit unavailable methods. In low-resource settings even more substantial adaptation could create a simpler, cheaper counseling aid that still reflects evidence-based counseling principles and embodies the client-centered approach. WHO itself is currently developing a version that is smaller and easier to transport for use at the level of primary health care and the community health worker levels.

Counseling training involving the Decison-Making Tool needs to be participatory and emancipatory, enabling providers to break free of conventional, provider-driven counseling models. Providers also need training to overcome biases against certain methods and to discuss more sensitive topics such as sexual behavior. Training on contraceptive technology may be needed to ensure evidence-based care. Specific training in use of the Decision-Making Tool cannot accomplish all this by itself. These goals should be part of all training of providers and be reinforced on the job.

WHO has developed a training module to introduce the Decision-Making Tool. The module can be tailored to program needs [27] and recommends at least four days of training if both counseling and contraceptive technology are covered. Managers involved in the process evaluation also recommended supportive strategies, including supervisory feedback to support providers' new practices.

Promoting client participation remains challenging, particularly in settings of low literacy. Additional activities may be required to promote client participation—for example, posters in waiting rooms declaring clients' right to informed choice or coaching clients how to ask questions [28].

4.2. Practice implications

While studies find that use of the Decision-Making Tool improves providers' counseling behaviors and engages clients in decision-making, its effective use, and the adoption of client-centered practices in family planning programs requires concerted effort. This section discusses the challenges encountered when introducing the Tool into programs and suggests strategies to overcome them.

Organizational factors can limit client-centered counseling. Time for counseling is inadequate in many settings, and using the Tool usually requires providers to spend somewhat longer with most clients than the conventional counseling that it replaces. Spending less time on rote description of methods in order to spend more time on clients' concerns is not a trade-off always obvious to providers. Staffing shortages in the health sector, coupled with poor organization of work, may therefore inhibit client-centered care. For example, clinic hours without appointments can cause a morning congestion and afternoon idleness.

Unnecessary paperwork can consume time better spent with clients. Programs wanting to make time for counseling can address restructuring of client hours, work flow, task assignment, and paperwork requirements.

The process evaluation also exposed other systems issues. In Indonesia, for example, paying providers more for giving certain contraceptives skewed counseling and, in turn, contraceptive choice. Stock-outs and equipment shortages prevented providers from offering a full range of methods.

4.3. Conclusion

Two independent studies have tried to assess the behavioral impact of the Decision-Making Tool. In Nicaragua, a study of the Tool found that clients who chose pills or injectables after counseling with a flipchart were more likely to report having received good counseling than those without flipchart counseling. However, clients counseled with a flipchart were not more likely to still be using their chosen method, or any family planning method, five to eight months later [33]. Unfortunately, a different family planning counseling flipchart was also in use in parts of the study area, and at follow-up clients could not distinguish between the two tools. A study in the United States by Langston et al., published in this issue, found that adding use of the Decision-Making Tool to existing counseling did not increase the likelihood that clients would choose a very effective method—IUD, implant, or sterilization. In this study, the tool was not used as it was designed to be used: counseling with the tool was standardized rather than individualized. Furthermore, the study assessed an outcome that the tool was not designed to achieve—choice of specific, designated

It is important to further assess the behavioral impact of the tool in its intended setting, and used as designed. The findings of our observational research show a substantial shift to client-centered care with use of the tool. A challenge remains to develop appropriate research methodologies and indicators to measure client-centered care and to explore causal relationships between client-centered care and long-term contraceptive behavior. The wide range of potential determinants influencing contraceptive behavior in different research settings must always be taken into account. New client-centered indicators, which link behavior with clients' own needs and preferences, could be used alongside more conventional public health indicators to help gauge whether client-centered approaches like the Decision-Making Tool are achieving their intended purposes.

Conflict of interest

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