# Contraceptive counseling in 2 urban cities in Ghana and the extent of shared decision-making

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**BACKGROUND:** Increased use of contraception is associated with reduced maternal mortality worldwide; however, an unmet need remains high in many places, including Ghana. The quality of care provided by family planning practitioners influences contraceptive use; one way to improve the quality of care is to adopt a client-centered approach to counseling, including engaging in shared decision-making. In Ghana, little is currently known about the extent of shared decision-making between clients and providers in contraceptive counseling encounters.

**OBJECTIVE:** The purpose of this study was to explore the extent of shared decision-making during contraceptive counseling in 2 cities in Ghana.

**STUDY DESIGN:** This was a cross-sectional study across 6 urban family planning clinics in Accra and Kumasi, Ghana. We recorded, transcribed, and analyzed 20 family planning patient-provider interactions using the "Observing PatienT InvOlvemeNt" (OPTION) scale. This scale has 12 domains, which are scored on a 5-point scale, from 0 ("the behavior is not observed") to 4 ("the behavior is observed and executed at a high standard"); the scores of each domain are summed up for a total score ranging from 0 to 48.

**RESULTS:** In these encounters, the mean total scores for each interaction ranged from a low of 9.25/48 to a high of 21.5/48. Although providers were thorough in sharing medical information with clients, they did not actively involve clients in the decision-making process and did not generally elicit client preferences. Across the 12 domains, the mean total score was 34.7%, which is below the 50% that would correspond with a "baseline skill level," suggesting there are very low levels of shared decision-making currently occurring.

**CONCLUSIONS:** In these 20 patient-provider encounters, counseling was mainly a sharing of medical information from the provider with the client, without the provider eliciting information from the client about her preferences for method characteristics, side effects, or method preference. Family planning counseling in these settings would benefit from increased shared decision-making to engage patients in their contraceptive choice.

**Key words:** contraception, family planning, Ghana, quality of care, shared decision-making

## Introduction

Over the past 2 decades, increasing use of contraception has been associated with reduced maternal death across 172 countries.[1] Despite these gains, there remains an unmet need for family planning. In 2015, 34 African countries were reported to be meeting less than half of the demand for effective contraception with modern methods.[2] Many low-income and middle-income countries have joined Family Planning 2030, a global partnership aimed to empower women by addressing barriers and expanding access to modern contraception.[3] In 2012, Ghana declared maternal mortality as a national emergency and joined the partnership to follow FP 2020 aims. The 2014 Ghana Demographic and Health Survey reported that the unmet need for contraception in Ghana is high, at nearly 30% for married women and 42% for sexually active unmarried women.[4] Efforts in Ghana to increase access to contraception, specifically the use of modern methods of contraception, are being implemented.[5]

The quality of family planning services in many parts of Africa are deficient.[6] Evidence shows that the quality of care provided by family planning providers influences contraceptive use,[7]

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**AJOG Global Reports at a Glance**

**Why was the study conducted?**

This study aimed to assess the level of shared decision making in contraceptive counseling in urban Ghana.

**Key findings**

There is very little shared decision-making occurring in contraceptive counseling encounters in this setting.

**What does this add to what is already known?**

Providers in this setting do not elicit patient preference around contraception, which could explain high levels of discontinuation because of the experience of side effects.

and that contraceptive use and continuation of contraception increase when women receive high-quality care.[7,8] The low quality of care that many women in Africa are receiving contributes to fewer women using family planning services than would be expected given stated fertility preferences.[9]

One way to improve the quality of care women receive when seeking contraceptive services is to adopt a client-centered approach to counseling. Patient-centered or client-centered care focuses on an individuals' specific needs, preferences, and values. In this model, practitioners empower clients to participate in their own care.[10] Client-centered care impacts clients' perceptions of satisfaction, as well as the quality of care received.[11] The quality of contraceptive counseling is improved when working with an empowered client.[12] Further, increased method continuation is seen when clients receive patient- or client-centered counseling.[13]

One facet of client-centered care is shared decision-making (SDM): in clinical interactions where there are multiple treatment options, providers can involve clients in making a decision about which course of action to take.[14] This model is particularly relevant for preference-sensitive decisions, when 2 or more options are medically appropriate and the best choice for an individual client depends on their own assessment of the relative importance of different characteristics or potential outcomes associated with these options.[15] Providers use shared decision-making to move away from being authoritative decision-makers and to better respect client autonomy.[16]

SDM requires that the 2 parties, the provider and the client, rely on information sharing from one another.[17] The provider is responsible for contributing medical expertise, offering options and treatment alternatives, as well as describing the risks and benefits of each option.[16] Crucially, the client provides information on their own values and preferences. The provider elicits client perspectives and concerns and suggests options in coordination with the client's values and lifestyle.[16] With SDM, each participant better understands significant factors involved in making the decision and comes to share the responsibility of making a decision.[17] Together, a consensus on treatment and next steps is reached.

When choosing a method of contraception, there are often multiple medically appropriate options available to women and a range of individual goals surrounding contraceptive use, making SDM an appropriate approach.[18] Clients prefer SDM models in contraceptive counseling and are more satisfied with their method when the decision was driven by them rather than solely by their provider.[19,20] Although there are few studies that explicitly address the extent and effects of SDM in family planning, research suggests this type of client-centered contraceptive counseling leads to increased use of effective contraception.[21]

Currently in Ghana, little is known about the extent of SDM between clients and providers during contraceptive counseling encounters. Therefore, this study aims to explore the extent of SDM in contraceptive counseling in selected facilities across 2 urban cities in Ghana.

## Materials and Methods

### Setting and participant recruitment

We conducted a cross-sectional study across 6 urban family planning clinics in Accra and Kumasi, Ghana, with the main aim of assessing the factors contributing to contraceptive discontinuation for a larger study from which this study was derived. This study is based on baseline data collected between September and December 2017. Participants were recruited from 6 family planning clinics affiliated with 5 district-level hospitals and 1 teaching hospital. Each clinic had a full complement of contraceptive options that could be administered to clients at little to no cost. All women attending these family planning clinics to start a new method of contraception were invited to participate in the study. Women who were eligible were identified to the study team by clinic staff and were approached while waiting for their counseling session. Eligible women were 18 years and older, able to converse in English, Twi, or Ga, and either beginning a new method of contraception or switching methods. Women who met the inclusion criteria and agreed to participate were taken through a comprehensive informed consent process. The present analysis is based on a subsample of 20 women whose family planning counseling sessions were audio-recorded to gain a better understanding of the nature of provider-client interactions during counseling sessions. We transcribed and translated these 20 dyad interactions verbatim and analyzed the transcripts. The translation of the dyads' interactions was performed by a member of the study team from Ghana who is a native speaker of both Twi and Ga.

### Data analysis

We used the "Observing PatienT InvOlvemeNt" (OPTION) scale[22] to score transcripts from each visit. The

OPTION scale was developed to be applied by observers of recordings and transcripts of client-provider interactions to evaluate the extent to which clinicians involve clients in decision-making. The scale was designed to span the entire decision-making process from beginning to end.[23] The revised OPTION scale is internally consistent and valid; and is able to distinguish between different levels of shared decision-making both across and within clinicians.[22,23]

In the OPTION scale, there are a total of 12 domains, which are scored by raters on a 5-point scale, from 0 ("the behavior is not observed") to 4 ("the behavior is observed and executed at a high standard"). A score of 1 is the cut-off value for the presence of ability with minimal attempt, whereas a score of 2 corresponds to a baseline skill level. A total OPTION score is calculated by summing the scores of the 12 domains for a total score ranging from 0 to 48. After scoring the transcripts using this scale, we converted the score to a percentage to characterize the overall skill level exhibited by providers in involving clients in decision-making.

The 20 client-provider interactions (transcripts) were independently scored by 3 raters in the United States and 1 rater in Ghana. We calculated descriptive statistics using the OPTION scale scoring to assess the extent to which providers involved their clients in SDM. We determined means, standard deviations, minimums, and maximums for each item and for the total OPTION scores. We assessed inter-rater reliability using intraclass correlation and intra-rater reliability and internal consistency using Chronbach's alpha. Calculations were carried out in SPSS version 26.0 (IBM Corp, 2019).

Ethical review and approvals were obtained from the Ghana Health Service Ethics Review Committee (Protocol No. GHS-ERC:010/07/201) and the University of Michigan Institutional Review Board (HUM00129703). The medical directors of the family planning clinics agreed to have the study conducted at their sites and counselors agreed to have their sessions recorded. All participants, clients, and counselors provided written consent to participate in the study. No identifying information was collected about the individual counselors to protect their privacy.

## Results

### Reliability statistics

The intraclass correlation coefficient among all raters who used the OPTION scale was 0.884 (95% confidence interval, 0.857−0.907). This represented near-complete agreement among all raters. Cronbach's alpha for all raters was 0.769, 0.801, 0.690, 0.896, respectively. These values represented acceptable internal consistency for each rater.

### Shared decision-making

Using the OPTION scale to evaluate the extent of SDM, interactions earned a mean total OPTION score across the 12 domains of 16.7 ± 3.43 out of a total possible score of 48, corresponding to a mean percentage of 34.7%. The mean total scores for each interaction ranged from a low of 9.25/48 to a high of 21.5/48. The distribution is presented in Figure. The OPTION total scores showed a skewed distribution toward scores in the lower range of total scores, suggesting a modest amount of client involvement. Mean total OPTION scores varied considerably by clinic, from a low of 12.7/48 at one facility to a high of 19.9/48 at another facility. To protect confidentiality, we did not determine if the encounters at each facility were performed by 1 or more providers; therefore, differences between facilities could indicate different cultures of engaging clients in the decision among sites or could be due to individual differences among providers.

Mean scores were also calculated for each item of the OPTION scale and ranged from 0/4 to 2.62/4 (Table). The 3 items with the highest scores were "The clinician states that there is more than one way to deal with the identified problem" (2.62/4), "The clinician lists options, which can include the choice of no action" (2.5/4), and "The clinician explains the pros and cons of options to the client" (1.76/4). Conversely, the 3 items with the lowest scores were "The clinician elicits the client's preferred level of involvement in decision-making" (0/4), "The clinician assesses the client's preferred approach to receiving information to assist decision-making" (0.03/4), and "The clinician indicates the need to review the decision" (0.37/4).

Interestingly, there was considerable within-encounter variation; although providers engaged in SDM in 1 or more domains on the scale, this did not translate to all portions of the OPTION scale. For example, providers in some encounters scored 0/4 in 1 item and 4/4 in another.

**FIGURE**
**Mean total OPTION scale score distribution**

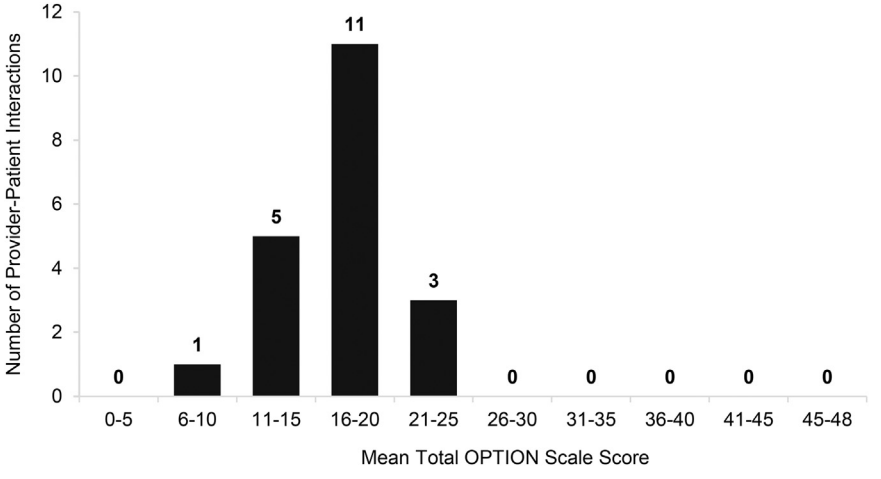

**TABLE**
**Minimum, mean, and maximum OPTION scores per domain[a]**

| Domain | Min | Mean ± SD | Max |
|---|---|---|---|
| The clinician draws attention to an identified problem as one that requires a decision-making process | 0 | 1.75 ± 0.363 | 3 |
| The clinician states that there is more than one way to deal with the identified problem (equipoise) | 1 | 2.62 ± 0.318 | 2 |
| The clinician assesses the patient's preferred approach to receiving information to assist decision-making | 0 | 0.03 ± 0.769 | 1 |
| The clinician lists options, which can include the choice of no action | 1 | 2.5 ± 0.395 | 3 |
| The clinician explains the pros and cons of options to the patient | 0 | 1.76 ± 0.681 | 3 |
| The clinician explores the patient's expectations (or ideas) about how the problem is to be managed | 0 | 1.59 ± 0.537 | 4 |
| The clinician explores the patient's concerns (or fears) about how the problem is to be managed | 0 | 1.19 ± 0.561 | 3 |
| The clinician checks that the patient has understood the information | 0 | 1.67 ± 0.632 | 4 |
| The clinician offers the patient explicit opportunities to ask questions during the decision-making process | 0 | 1.75 ± 0.607 | 3 |
| The clinician elicits the patient's preferred level of involvement in decision-making | 0 | 0 ± 0 | 0 |
| The clinician indicates the need for a decision to be made | 0 | 1.46 ± 0.643 | 3 |
| The clinician indicates the need to review the decision | 0 | 0.37 ± 0.366 | 3 |

[a] Scores based on a 5-point scale (0-4) for each domain

Counseling in family planning clinics was mainly a sharing of medical information from the provider to the client, without the provider eliciting information from the client about her preferences for either method characteristics or side effects. We did not observe any encounter during which a provider asked the client what characteristics or side effects would be intolerable to her. In only 6 out of 20 encounters (30%), providers asked if clients knew which method they preferred.

### Contraceptive uptake outcomes

For each participant, the contraceptive method she preferred at the beginning of the family planning visit, as well as the method she left the visit with, were noted. In the review of all 20 visits, 6 women (30%) indicated a preference in contraceptive method, 5 of whom (83%) left with their originally preferred method and 1 (17%) left with a different method than originally stated. For 14 of 20 women (70%), their preferred method was unclear, or they were never asked for their preference by the provider. By the completion of all visits, 18 of 20 women (90%) left with a contraceptive method. One woman chose male sterilization for her partner over contraception for herself. For another woman, it was unclear what happened after her interaction with the provider. Despite the limited use of SDM in these encounters, the client-provider interactions were effective in establishing contraceptive uptake.

## Discussion

### Principal findings

In this study of 20 client-provider interactions around contraceptive counseling, SDM skills were not widely integrated into the practice of contraceptive counseling. Overall, although providers were thorough in sharing medical information with clients during encounters, they did not actively involve clients throughout the decision-making process, and they did not generally elicit client preferences. Although there is no ideal total OPTION score, a mean total score of 34.7% suggests there are very low levels of shared decision-making currently occurring, and this is below the 50% that would correspond with a "baseline skill level."

Whereas the total OPTION scores indicate that little shared decision-making was detected overall, itemized scores from the 12 domains on the scale, as well as a qualitative review of transcripts, indicate that some facets of SDM were present throughout visits. Particularly, providers exhibited baseline skill at conveying that multiple contraceptive options were valid and needed to be considered, as well as at listing the distinct options available before encouraging clients to make a decision. Reinforcing that more than 1 valid option exists can help clients understand there is no single answer to family planning and that each option needs to be considered. In all encounters reviewed, clients made the decision about which method to use. Providers also attempted to verify clients' understanding of their chosen method and invited them to ask questions explicitly to engage them in the process, both of which encouraged client participation.

### Results in the context of what is known

No providers in our study elicited a client's preferred level of involvement in decision making or checked for their preferred approach to receiving information. Other studies have reported that clinicians describe an intuitive and implicit understanding of a client's preferred level of involvement, often through nonverbal techniques.[24,25]

Providers have even suggested that questions on these topics can be conceived as "rude" or "inappropriate."[24] Providers in our study may have found these questions unnecessary. However, research suggests that providers are not good at knowing clients' preferred level of involvement without asking[26] and indicates increased client satisfaction with agreement between provider expectations and client preferences, including the client's role in decision-making.[27,28] Providers, therefore, should work to elicit client preferences regarding how they want to receive information and their desired involvement in the decision-making process.

## Clinical implications

Research across different settings has demonstrated that women have greater satisfaction with their contraceptive methods when SDM is used, and that women who are more satisfied with their method are more likely to continue their method.[19,20] However, these studies did not take place in Ghana; therefore, additional studies are needed to determine if this holds true in this setting as well.[19,20] A recent study in Ghana on the client perspective of contraceptive counseling visits indicated that women felt most satisfied when decisions regarding contraception were made together with the provider, not when made by the provider alone or by the client herself.[29]

Almost all of the women in this study started a method of contraception following the counseling session, and participating in SDM is associated both with increased satisfaction and increased method continuation. Studies from diverse settings, including in Africa, have demonstrated that the leading reason for discontinuation of contraception is the experience and fear of side effects.[30,31] Therefore, it is important to match women with a method that matches their side effect tolerance. In our study, we observed that no providers assessed women's ideas or concerns regarding side effects. With improved method match, the potential exists to reduce contraceptive discontinuation because of side effects.

## Research implications

Our study documents the limited degree to which SDM is currently occurring in family planning encounters in this setting. Future research could investigate the use of SDM in contraceptive counseling visits and determine the impact on uptake and continuation of effective contraception to better address women's reproductive health needs and desires.

## Strengths and limitations

This study had several limitations. First, it is based on a relatively small sample size and only includes urban clinics in the 2 largest Ghanaian cities; therefore, the results are not representative of the entire community of contraceptive providers in Ghana and the extent to which the results can be extrapolated is limited.

Another major limitation of the study is the fact that demographic data for both providers and clients were not collected. Demographic data of clients such as level of education, health literacy, and perspectives on or interest in SDM may have influenced the extent of SDM observed in encounters. Further, demographic data for providers, including the level of training in contraceptive counseling, the level of experience, or the educational background, were not recorded as part of an effort to preserve anonymity and ensure that providers were unidentifiable. Future research should be directed to include these aspects that may be influential in the decision-making process to help improve the practice of SDM.

In addition, as far as we know, these providers have not received any explicit training on SDM; therefore, it is possible they were never trained to engage in some of the facets measured by the OPTION scale. This study was designed to determine if this method of interaction was occurring, and to determine some potential intervention points to improve the quality of contraceptive counseling in these clinics. Future research should aim to assess the extent of SDM after formal training of providers on its importance.

Finally, the use of a single scale to measure the clinical decision-making process may not fully capture the dynamic and multifaceted clinical process. The OPTION scale assesses the provider's contribution to the decision-making process and to what extent providers involve patients or clients. The scale does not take into account client participation, which can influence provider scores. For example, if a client were to actively engage in components of SDM, the provider would not have to demonstrate particular behaviors. It is possible that scores were influenced by client participation, and that providers have higher SDM skills than identified.

## Conclusions

This study used a validated instrument to assess the extent of SDM used by providers during contraceptive counseling in urban Ghana. In the observed encounters, SDM was not widely incorporated; instead, counseling on family planning largely appeared to be a provider-dominated process of sharing medical information with clients. Continuous in-service training for providers on the importance of SDM, as well as client education, will improve the quality of and satisfaction with contraceptive counseling. ■

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