Exploring User-Centered Counseling in Contraceptive Decision-Making: Evidence from a Field Experiment in Urban Malawi

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EUR Health Economics Research Seminar

Motivation

- **Family planning service provision is a bidirectional process:**
  1. Clients have a set of preferences (fertility/spacing/method...)
  2. Providers guide clients to realize preferences and achieve outcomes (fertility-related, method-related, others)
- **Contraceptive prevalence has been increasing globally**
  - From 46.1% in 2010 to 59.2% in 2016 in Malawi (MDHS)
- **In spite of increases in CPR, are women using the "best methods" that reflect their preferences?**
  - 37% of Malawian women discontinued within 12 months (49.1% due to unmet need)
  - Frictions may exist in women's realization of their ideal method
    - ▶ Reasons

Motivation

- Emphasis on FP programs to provide "full, free, and informed choice" over FP methods
- Significant resources placed on providing complete information
- Approach emphasizes the role of counseling at the initial consultation
- Current FP counseling practice in Malawi:
  - Group counseling then individual counseling ▸ Group Counseling
  - Counselors introduce all FP methods following 'Kulera' flipchart as specified by MOH ▸ FP Flipchart
- **Aim of this approach:** to achieve "informed choice" - clients informed about all possible methods

Motivation

- **But how well does such a counseling approach do in helping women make informed decisions?**
    - **Informed decisions:** women can update beliefs and preferences and can act on these updated preferences
- To what end are the current approaches "user-centered"?
    - **User-Centered Approaches:** client is focal point of interaction and key decision-maker
    - Preferences are elicited, and outcomes reflect updated, elicited preferences
    - Recent examples: BCS, Human-Centered Design, "My Birth Control"

This Study

We conduct a field experiment that:

- Tests elements of user-centered counseling aimed to help women **identify** and **realize** their preferences for FP methods
- Examines role of user-centered counseling on concordance between stated and revealed preferences
- Investigates two channels through which user-centered counseling may impact concordance: **male involvement in counseling** and **short, tailored counseling**

Experimental Setting:

- **Location:** Lilongwe, Malawi
- **Study Sample:** 782 married women aged 18-35

▸ Related Literature

Hypotheses

- **Short, tailored counseling** would allow women to more effectively express and realize their contraceptive preferences
- **Male involvement in counseling** may allow women to more effectively express their contraceptive preferences and, in turn, translate their preferences into behavior

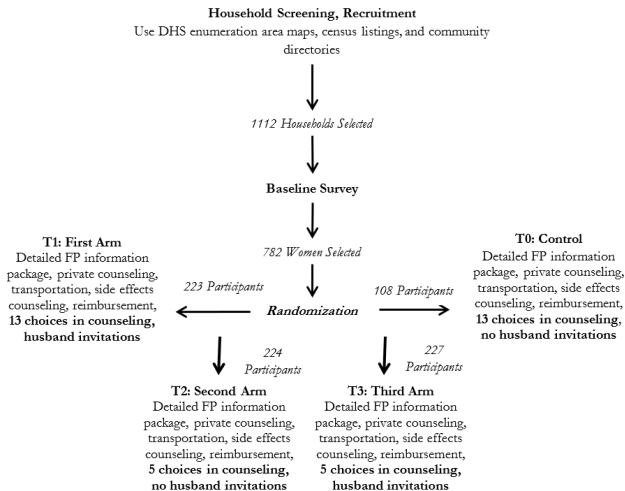# Preview of Results: Short, Tailored Counseling

- Women who received short, tailored counseling were:
    - **slightly more likely** to change their stated ideal method over time
    - **no more likely** to switch from their currently used method to another method from counseling to follow-up
    - **less likely** to be using their stated ideal method at follow-up
    - **more likely to be discordant** in their stated ideal method and actual method use at follow-up

Preview of Results: Male Involvement

- Women who were encouraged to invite their husbands/partners to counseling were:
    - **less likely** to change their ideal method from counseling to follow-up
    - **more likely** to switch from their currently used method to another method from counseling to follow-up (marginally significant)
    - **more likely** to be using their stated ideal method at follow-up
    - **no more likely to be discordant** between their stated ideal method and actual method use at follow-up

Experiment Design

Household Screening, Recruitment
Use DHS enumeration area maps, census listings, and community directories

↓

1112 Households Selected

↓

Baseline Survey

↓

782 Women Selected

↓

T1: First Arm
Detailed FP information package, private counseling, transportation, side effects counseling, reimbursement, **13 choices in counseling, husband invitations**

223 Participants   ←   *Randomization*   →   *108 Participants*

T0: Control
Detailed FP information package, private counseling, transportation, side effects counseling, reimbursement, **13 choices in counseling, no husband invitations**

↓ *224 Participants*   ↓ *227 Participants*

T2: Second Arm
Detailed FP information package, private counseling, transportation, side effects counseling, reimbursement, **5 choices in counseling, no husband invitations**

T3: Third Arm
Detailed FP information package, private counseling, transportation, side effects counseling, reimbursement, **5 choices in counseling, husband invitations**

Baseline and Randomization

Baseline Survey:

- Screening, recruitment and survey of 782 women at home
- Survey elicits information on:
    - Contraceptive and fertility behavior
    - Contraceptive and fertility preferences
    - Method attribute preferences and ranking
- **Attributes:** duration, effectiveness, side effect prevalence, etc.

Randomization:

- Following baseline, women randomized into 4 groups
- Balanced randomization on a range of baseline characteristics

▸ Eligibility Criteria   ▸ Balance Tables   ▸ Summary Statistics

Two Interventions

	No Husband Invitation	Husband Invitation
Standard (long) Counseling	T0: 108	T1: 223
Short Tailored Counseling	T2: 224	T3: 227

Two Interventions

- **Husband / Partner Invitation:** Allows woman choose whether to invite husband to FP counseling session
  - Differs from existing studies on male involvement
  - Offers woman the choice to invite husband rather than requiring husband to attend counseling
- **Short Tailored Counseling:** Elicits preferred method attribute(s) and rank of attributes
  - Ranking elicited most preferred attribute if more than one was chosen
    - ▸ Survey Question - Eliciting Top Attribute ▸ Eliciting Top Attribute
  - Counsel women on subset (up to 5) methods aligned with most preferred attribute ▸ Method Attribute Mapping ▸ Attribute-Specific Flipcharts

Post-Counseling Services

- Following counseling, women received bundle of free FP services
- Service period: One month from counseling
- Three Components:
  1. **Free, private transportation** to the PSI Good Health Kauma Clinic
  2. **Coverage of all FP-related costs** incurred during the service period
  3. **Mobile credit** to make appointments with field manager / taxi driver

▸ ID Cards ▸ Private Taxi ▸ Good Health Kauma Clinic

Follow-Up

One month follow-up data collection:

1. **At Kauma Clinic** when the woman came for FP services
2. **By phone** if the woman did not come to the Kauma clinic
3. **At the woman's home** if she did not answer the phone

Empirical Framework

$$Y_i = \alpha + \beta_S \cdot Short_i + \mathbf{X_i}\gamma + \varepsilon_i \tag{1}$$

$$Y_i = \alpha + \beta_H \cdot Husb_i + \mathbf{X_i}\gamma + \varepsilon_i \tag{2}$$

where:

- Y_i: Outcome variables of interest
- $Short_i$: Short tailored counseling
- $Husb_i$: Husband invitation to counseling
- $\mathbf{X_i}$: Vector of baseline control variables including: women's age, contraceptive use, chosen method attribute, total number of children, working status, ethnicity (Chewa or others)
- Analyses include area fixed effects and heteroskedastic-robust SEs

Key Outcomes

- Key outcomes (binary) are defined as follows:
  1. **Changes in ideal method:** if ideal method before counseling differs from ideal method at follow-up
  2. **Changes in method use:** if method use at counseling differs from method use at follow-up
  3. **Uptake of ideal method:** If post-counseling ideal method differs from method use at follow-up
  4. **Concordance of method at follow-up:** if method use at follow-up differs from stated ideal method at follow-up

Changes in Ideal, Current Methods Over Time

Change in Ideal Method over Time:

	Baseline	Pre-Counseling	Post-Counseling	Follow-up Sessions
Baseline				
Pre-Counseling	43.69% (301/689)			
Post-Counseling	45.28% (312/689)	17.19% (121/704)		
Follow-up Sessions	55.41% (369/666)	45.63% (287/629)	42.77% (269/629)	

Change in Method Use over Time:

	Baseline	Counseling	Follow-up Sessions
Baseline			
Counseling	17.65% (120/680)		
Follow-up Sessions	22.83% (155/679)	14.96% (86/575)	

Results: Short, Tailored Counseling

- Women who were assigned to short, tailored counseling were:
  - Slightly (but not significantly more likely) to change their stated ideal method from counseling to follow-up by 7.7 percent ▸ Change in Ideal Method
  - **Not more likely** to switch from their currently used method to another method from counseling to follow-up ▸ Change in Method Use
  - **Less likely** to be using their stated ideal method at follow-up by 16.9 percent ▸ Uptake of Ideal Method
  - **More likely to be discordant** in their stated ideal method and method use at follow-up by 12.0 percent
    - Highlights relative inability to act on change in preferences in spite of increased access to services ▸ Discordance in Ideal and Stated Method

Results: Husband / Partner Invitation

- Women who were assigned to the husband / partner invitation group were:
  - **Less likely** to change their ideal method from counseling to follow-up by 15 percent ▸ Change in Ideal Method
  - **Marginally more likely** to switch from their currently used method to another method from counseling to follow-up by 26.0 percent ▸ Change in Method Use
  - **More likely** to be using their stated ideal method at follow-up by 17.1 percent, but were **no more likely to show concordance** between stated ideal method and method use at follow-up ▸ Uptake of Ideal Method ▸ Discordance in Ideal and Stated Method

Selection into Treatment

- Which type of women invited their husbands to counseling? Those women who: ▸ Husband Group Compliers ▸ Partner Participation
  - Cohabited with their husbands at a younger age
- Which women visited a clinic? Those women who: ▸ Visits to Clinics
  - Cohabited with husband at a younger age
  - More likely to be using a FP method at baseline
  - More likely to want to switch methods
- Which women were available for the counseling session? Those women who: ▸ Counseling Availability
  - Had an intention to switch methods
  - Had more supportive husbands / partners in terms of FP use

Discussion

- Both interventions speak to user-centered approach to counseling
- Both seek to prioritize women's preferences and move closer towards goal of "informed choice"
- **But neither approach seems to be giving a strictly preferred outcome**
- In particular, short, tailored counseling:
  - Encouraged women to (some degree) more freely express and change their preferences over time
  - But preferences were not more likely to be realized - evident in higher discordance

Discussion

On the other hand, encouraging women to invite their husbands:

- Translated to higher likelihood of realizing their stated preferences
- But potentially may have "crowded out" woman's expression of her own preferences
  - A woman's stated preferences, conditional on inviting her husband, would internalize husband's preferences
  - Potentially implies that woman changed her mind because of her husband's presence
  - Was this change of preference wanted? Is this a "good outcome"?
  - If not, leads to a deviation of stated ideal method from personal preferred method

Conclusions / Next Steps

- Need to further explore the **trade-off** women face between:
  1. **Making independent choices** to reflect their individual preferences (but potentially less able to act on them), and
  2. **Incorporating partner's preferences** to make "jointly / socially better-off," but not necessarily "individually better off" decisions

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Reasons for Discontinuation: Malawi DHS 2015-16

Percent distribution of discontinuations of contraceptive methods in the 5 years before the survey by main reason stated for discontinuation, according to specific method, Malawi DHS 2015-16

Reason	IUD	Injectables	Implants	Pill	Male condom	Rhythm	Withdrawal	Other	All methods
Became pregnant while using	1.0	2.9	2.8	5.0	3.3	13.3	13.9	20.1	3.7
Wanted to become pregnant	30.6	29.1	26.0	18.8	14.4	24.6	27.2	20.7	26.3
Husband/partner disapproved	0.3	2.6	3.5	1.9	9.2	0.0	9.2	2.4	3.4
Wanted a more effective method	3.0	6.6	2.6	13.2	23.6	29.4	28.3	17.7	9.3
Side effects/health concerns	44.0	28.5	45.2	29.6	3.6	2.7	0.6	4.4	26.4
Lack of access/too far	0.0	7.5	2.0	5.9	3.0	0.0	0.2	2.9	6.2
Cost too much	0.0	0.5	0.2	0.4	1.9	0.0	0.0	0.0	0.6
Inconvenient to use	0.0	3.0	2.2	4.5	4.3	7.6	1.3	4.4	3.2
Up to God/fatalistic	0.0	0.9	0.6	0.8	0.7	0.5	1.9	3.1	0.9
Difficult to get pregnant/ menopausal	0.0	0.4	0.1	0.4	0.1	0.0	2.6	1.1	0.4
Infrequent sex/husband away	10.8	8.3	4.4	9.4	24.7	7.0	9.2	9.1	9.8
Marital dissolution/separation	0.5	2.2	0.6	2.4	3.0	0.0	1.9	1.6	2.2
Other	9.8	5.4	8.2	5.7	5.4	6.4	3.0	8.6	5.6
Don't know	0.0	1.9	1.7	1.9	3.0	8.4	0.8	4.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	66	6,943	759	834	1,005	52	237	138	10,033

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Related Literature

- **Family Planning Counseling**
  - Ali, Cleland, and Shah (2012), Kim, Kole, and Mucheke (1998), Simmons, Baqee, Koenig, and Phillips (1988), Sultan, Cleland, Ali (2002), Douthwaite and Ward (2005), Barber (2007), Ceylan, Ertem, Saka, and Akdeniz (2009), Lee, Parisi, Akers, Borrerro, and Schwarz (2011), Weaver, Frankenberg, Fried, Thomas,Wheeler, and Paul (2013)
  - We conduct a randomized controlled trial to understand factors that affect concordance between women's preferences and choices.

- **Cognitive overload, attribute salience, the Paradox of Choice**
  - Hensher (2006), Hogarth and Einhorn (1992), Deck and Jahedi (2015), Bordalo, Gennaioli, and Shleifer (2012), Thaler, Sunstein, and Balz (2010), Delavande (2008)
  - We provide evidence on the role of attribute salience on decision-making in the context of family planning.
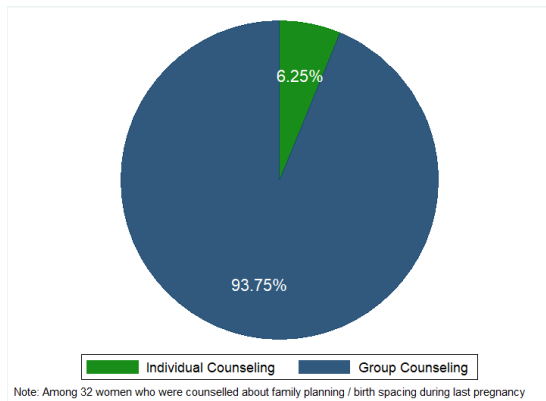
Related Literature

- **Male Involvement in Family Planning Counseling**
  - El- Khoury et al. (2016), Wang et al. (1998), Terefe and Larson (1993), Shattuck et al. (2011), Ashraf et al. (2014), and McCarthy (2015)
  - Rather than requiring couples to receive counseling jointly, it is the woman's choice as to whether she invites her husband to participate in counseling.
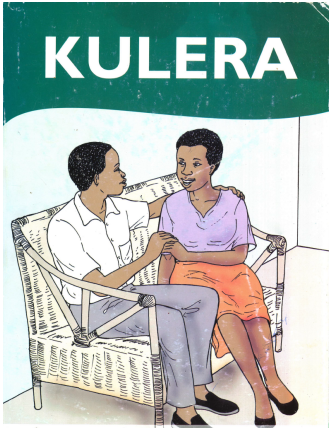
- **Choice range and switching intention**
  - Curtis and Blanc (1997), Steele and Chloe (1997), Ali, Cleland, and Shah (2012)
  - We investigate two channels through which an intervention may affect concordance between stated and revealed preferences, male involvement and tailored counseling.

Counseling Practice in Malawi

Individual Counseling 6.25%

Group Counseling 93.75%

Note: Among 32 women who were counselled about family planning / birth spacing during last pregnancy

The Recommended FP Counseling Practice

KULERA

- MOH, RHD
- Counselors introduce all 13 methods following the order in the flip chart
  - Male/Female Sterilization
  - IUD
  - Implants
  - Injectables
  - Pills/ECP
  - Male/Female Condoms
  - Standard Days Method
  - Two-Day Method
  - Rhythm Method
  - LAM

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Survey: Eliciting Top Method Attribute

In choosing a contraceptive method, what feature(s) would be most important to you? CHOOSE ALL THAT APPLY.

EFFECTIVE AT PREVENTING PREGNANCY
CAN BE USED WITHOUT ANYONE ELSE KNOWING
PROTECTS AGAINST STI/HIV
DURATION OF EFFECT / LASTS LONG
NO RISK OF HARMING HEALTH
NO EFFECT ON REGULAR MONTHLY BLEEDING
NO UNPLEASANT SIDE EFFECTS
SHOULD NOT BE HORMONAL
LOW COST
EASILY AVAILABLE AT THE CLNIC
CAN BE USED FOR A LONG TIME WITHOUT NEED TO VISIT CLINIC OR RE-SUPPLY
WILL BE ABLE TO GET PREGNANT WHEN I WANT
NO NEED TO GO TO A CLINIC TO OBTAIN THE METHOD
NO RISK OF INFERTILITY
NO NEED TO REMEMBER USING THE METHOD
WANT TO TRY SOMETHING NEW / TIRED OF OLD METHOD
MY DOCTOR RECOMMENDED IT TO ME
MY HUSBAND WANTED ME TO USE THIS METHOD
OTHER WOMEN IN MY FAMILY HAVE USED THIS METHOD
FRIENDS HAVE USED THIS METHOD
DOES NOT INTERRUPT SEX
OTHER
DON'T KNOW
REFUSED

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Eligibility Criteria for Recruitment

We recruited 782 women who, at the time of the baseline:

1. were married
2. were between the ages of 18 and 35
3. lived in the city of Lilongwe (permanent residents)
4. were currently not pregnant and did not give birth in the 6 months prior to the initial screening
5. had neither been sterilized nor have had a hysterectomy
6. had given birth to at least one child in their lifetime
7. lived with their husbands at the time of the screening

Eliciting Top Attribute

- Eliciting women's most valued attribute about contraceptive methods

    - 20 Counters to be allocated across at most 3 attributes

Short Counseling: Attribute-Method Assignment

FLIP CHARTS - ATTRIBUTES AND METHODS

FLIP CHART COLOUR	METHODS	ATTRIBUTES
BLUE	1. Sterilization 2. IUD 3. Implants 4. Injectables 5. Pill	Effective at preventing pregnancy Duration of effect/lasts long
PURPLE	1. LAM 2. Two-day method 3. Rhythm Method 4. Standard Days Method 5. Condoms	No risk of harming health No effect on monthly bleeding No unpleasant side effects Low-cost No risk of infertility Non-hormonal No need to go to the clinic to obtain
PINK	1. Condoms 2. Two-day method 3. Rhythm Method 4. Standard Days Method 5. IUD	Immediate return to fertility
YELLOW	condoms	Protects against HIV/STI
GRAY	1. IUD 2. Implants 3. Sterilization 4. Pills 5. Injectables	WANT TO TRY SOMETHING NEW / TIRED OF OLD M MY DOCTOR RECOMMENDED IT TO ME MY HUSBAND WANTED ME TO USE THIS METHOD OTHER WOMEN IN MY FAMILY HAVE USED THIS M FRIENDS HAVE USED THIS METHOD EASILY AVAILABLE AT CLINIC
ORANGE	1. Sterilization 2. IUD 3. Implants 4. Injectables	No need to remember to use

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Summary Statistics

Summary statistics

	Mean	N	Std. Dev.
Age	26.1	781	4.51
Total number of children	2.1	777	1.07
Desired Num. of Children	3.5	775	.85
Education	1.34	781	.53
Currently working	.56	781	.5
First cohabitation age	18.04	755	2.67
Lived w/ men once or more	.83	775	.38
Current/Ever Contraceptive usage	.99	777	.11
Current Use	.87	777	.33
Top 1 Attribute	.53	777	.5
Weight to top 1 attribute	16.54	777	4.42
Intention to switch methods	.37	679	.48
Husband Supportiveness towards Contraception	1.4	774	.91

Note: Currently working refers to women's working status at baseline. Top attribute refers to whether the top method attribute is effectiveness or not. Weight to top attribute refers to the number of beans (out of 20 beans) the woman assigned to their top method attribute. Intention to switch is woman's answer to the question, "if you had the choice to switch to another method, would you like to switch?" Husband approval refers to the question, "on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods?"

Balance Table: Short Counseling

	All	Short	Long	Difference
Age	26.10	26.11	26.08	-0.03
Total No. of Children at BL	2.10	2.06	2.15	0.08
Desired number of children	3.50	3.49	3.50	0.01
Education	1.34	1.33	1.37	0.04
Currently working	0.56	0.57	0.56	-0.02
First cohabitation age	18.04	18.05	18.01	-0.04
Lived w/ men once or more	0.83	0.82	0.83	0.01
Current/Ever use of FP	0.99	0.99	0.99	0.00
Current use of FP	0.87	0.88	0.87	-0.00
Top attribute is effectiveness	0.53	0.53	0.53	0.00
Weight to top attribute	16.54	16.59	16.46	-0.13
Intention to switch methods	0.37	0.38	0.34	-0.04
Husband supports FP	1.40	1.42	1.38	-0.04
Observations	**782**	**451**	**331**	**782**

Note: Currently working refers to women's working status at the baseline. First cohabitation age refers to the age at which women started to live with her (first) husband. Top attribute refers to whether the top method attribute is effectiveness or not. Weight to top attribute refers to the number of beans (out of 20 beans) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question, "if you had the choice to switch to another method, would you like to switch?" Husband approval towards contraception refers to the question, "on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods?"

Balance Table: Husband Invitation

	All	Husband	No Husband	Difference
Age	26.10	26.22	25.93	-0.30
Total No. of Children at BL	2.10	2.14	2.04	-0.10
Desired number of children	3.50	3.47	3.54	0.07
Education	1.34	1.35	1.34	-0.01
Currently working	0.56	0.56	0.57	0.02
First cohabitation age	18.04	18.05	18.02	-0.03
Lived w/ men once or more	0.83	0.84	0.81	-0.03
Current/Ever use of FP	0.99	0.99	0.98	-0.01
Current use of FP	0.87	0.87	0.88	0.00
Top attribute is effectiveness	0.53	0.53	0.53	0.00
Weight to top attribute	16.54	16.61	16.44	-0.17
Intention to switch methods	0.37	0.35	0.39	0.05
Husband supports FP	1.40	1.40	1.40	0.00
Observations	**782**	**450**	**332**	**782**

Short Counseling: Ten Flipcharts

- All flipcharts corresponding to all "top attributes"

MBBS

Name:

ID:

Phone:

Date Issued: Date Expiry:

		0994-321-890
		0888-688-500
	Ms. Violet Chitsulo	
	Mr. MacDonald Salamu	0888-633-681
		0999-093-508
	Dr. Bagrey Ngwira	0999-554-003
		0888-554-003
	Mr. Patrick Baxter	0996-536-998

Figure 1: Women's ID cards for picking up services

Private Taxi

The Good Health Kauma Clinic

The Good Health Kauma Clinic

Short Counseling: Change in Ideal Method

- Women who received short, tailored counseling are slightly (N.S.) more likely to change their stated ideal method from counseling to follow-up by 7.7 percent

	(1)	(2)	(3)	(4)
A: Change in Stated Ideal Method from Pre-Counseling to Follow-up				
Short, Tailored Counseling	0.032	0.032	0.030	0.034
	[0.040]	[0.040]	[0.041]	[0.041]
N	629	629	628	627
Control mean	0.44	0.44	0.44	0.44
Balancing controls		x	x	x
Area FE			x	x
Other BL covariates				x

Short Counseling: Change in Method Use

- Women who received short, tailored counseling were no more likely to change method use from counseling to follow-up

	(1)	(2)	(3)	(4)
B: Change in Method Use between Counseling and Follow-up				
Short, Tailored Counseling	0.000	-0.002	-0.003	-0.003
	[0.031]	[0.030]	[0.030]	[0.031]
N	637	637	636	635
Control mean	0.18	0.18	0.18	0.18
Balancing controls		x	x	x
Area FE			x	x
Other BL covariates				x

Short Counseling: Post-Counseling Ideal Method and FUP Method Use

- Women who received short, tailored counseling are less likely to be using their stated ideal method at follow-up by 16.9 percent

	(1)	(2)	(3)	(4)
C: Discordance between Post-Counseling Ideal Method and Follow-up Method Use				
Short, Tailored Counseling	0.089**	0.086**	0.082**	0.071**
	[0.040]	[0.039]	[0.039]	[0.039]
N	639	639	638	637
Control mean	0.42	0.42	0.42	0.42
Balancing controls		x	x	x
Area FE			x	x
Other BL covariates				x

Short Counseling: Discordance at Follow-Up

- Women who received short, tailored counseling were more likely to be discordant in their stated ideal method and method use at follow-up by 12.0 percent

	(1)	(2)	(3)	(4)
D: Discordance between Stated Ideal Method and Method Use at Follow-up				
Short, Tailored Counseling	0.075**	0.076**	0.067**	0.067**
	[0.039]	[0.039]	[0.038]	[0.039]
N	637	637	636	634
Control mean	0.56	0.56	0.56	0.56
Balancing controls		x	x	x
Area FE			x	x
Other BL covariates				x

Husband Invitation: Change in Ideal Method

- Women who were encouraged to invite their husbands were less likely to change their ideal method from counseling to follow-up by 15 percent

	(1) ITT	(2) 2SLS	(3) ITT	(4) 2SLS	(5) ITT	(6) 2SLS	(7) ITT	(8) 2SLS
A: Change in Stated Ideal Method from Pre-Counseling to Follow-up								
Partner Invitation	-0.071** [0.040]		-0.072** [0.040]		-0.077** [0.040]		-0.074** [0.041]	
Partner Invitation		-0.245** [0.141]		-0.248** [0.141]		-0.264** [0.140]		-0.253** [0.139]
N	629	629	629	629	628	628	627	627
Control mean	0.50	0.45	0.50	0.45	0.50	0.45	0.50	0.45
First Stage F		.		143.51		142.44		142.34
Balancing controls			x	x	x	x	x	x
Area FE					x	x	x	x
Other BL covariates							x	x

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Husband Invitation: Change in Method Use

- Women who were encouraged to invite their husbands were marginally more likely to switch from their method use to another method from counseling to follow-up by 26.0 percent

	(1) ITT	(2) 2SLS	(3) ITT	(4) 2SLS	(5) ITT	(6) 2SLS	(7) ITT	(8) 2SLS
B: Change in Method Use between Counseling and Follow-up								
Partner Invitation	0.044* [0.030]		0.042* [0.030]		0.043* [0.030]		0.039 [0.030]	
Partner Invitation		0.152* [0.103]		0.145* [0.101]		0.146* [0.101]		0.130* [0.100]
N	637	637	637	637	636	636	635	635
Control mean	0.15	0.16	0.15	0.16	0.15	0.16	0.15	0.16
First Stage F		.		149.31		148.17		147.54
Balancing controls			x	x	x	x	x	x
Area FE					x	x	x	x
Other BL covariates							x	x

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Husband Invitation: Post-Counseling Ideal Method and FUP Method Use

- Women who were encouraged to invite their husbands were more likely to be using their stated ideal method at follow-up by 17.1 percent

	(1) ITT	(2) 2SLS	(3) ITT	(4) 2SLS	(5) ITT	(6) 2SLS	(7) ITT	(8) 2SLS
C: Discordance between Post-Counseling Ideal Method and Follow-up Method Use								
Partner Invitation	-0.086**		-0.093***		-0.088**		-0.089**	
	[0.040]		[0.039]		[0.039]		[0.039]	
Partner Invitation		-0.297**		-0.321***		-0.302**		-0.301**
		[0.138]		[0.135]		[0.134]		[0.133]
N	639	639	639	639	638	638	637	637
Control mean	0.52	0.49	0.52	0.49	0.52	0.49	0.52	0.49
First Stage F		150.39		149.20		147.89		147.33
Balancing controls			x	x	x	x	x	x
Area FE					x	x	x	x
Other BL covariates							x	x

Husband Invitation: Discordance at Follow-Up

- Women who were encouraged to invite their husbands were no more likely to show concordance between stated ideal method and method use at follow-up

	(1) ITT	(2) 2SLS	(3) ITT	(4) 2SLS	(5) ITT	(6) 2SLS	(7) ITT	(8) 2SLS
D: Discordance between Stated Ideal Method and Method Use at Follow-up								
Partner Invitation	-0.027		-0.035		-0.032		-0.028	
	[0.039]		[0.038]		[0.038]		[0.039]	
Partner Invitation		-0.102		-0.128		-0.118		-0.104
		[0.146]		[0.142]		[0.140]		[0.140]
N	637	637	637	637	636	636	634	634
Control mean	0.62	0.60	0.62	0.60	0.62	0.60	0.62	0.60
First Stage F		.		133.12		131.85		130.27
Balancing controls			x	x	x	x	x	x
Area FE					x	x	x	x
Other BL covariates							x	x

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Which women invited their husbands?

	All	Compliers	Non-Compliers	Difference
Age	26.29	25.68	26.53	0.85
Total No. of Children at BL	2.15	1.99	2.22	0.22
Desired number of children	3.47	3.47	3.47	-0.00
Education	1.34	1.30	1.36	0.06
Currently working	0.57	0.57	0.57	-0.00
First cohabitation age	18.02	17.57	18.19	0.62*
Lived w/ men once or more	0.84	0.81	0.86	0.04
Current/Ever use of FP	0.99	0.98	0.99	0.01
Current Use of FP	0.87	0.88	0.86	-0.02
BL curr: IUD/Injectables/Implants	0.87	0.86	0.88	0.01
Top attribute is effectiveness	0.52	0.48	0.53	0.05
Weight to top 1 attribute	16.52	16.12	16.68	0.56
Intention to switch methods	0.32	0.33	0.32	-0.01
Husband Supports FP	1.39	1.46	1.36	-0.10
Using a Long-Acting Method	0.76	0.76	0.75	-0.01
Observations	401	113	288	401

Which husbands participated in counseling?

	With Partner Invitation					No Partner Invitation	
	(1)	(2)	(3)	(4)	(5) (4)-(3)	(6)	(7) (6)-(3)
Age	25.68	25.64	25.59	26.52	0.93**	25.29	-0.30
Total number of children	1.99	2.00	2.01	2.20	0.19*	1.88	-0.13
Desired Num. of Children	3.47	3.48	3.41	3.48	0.07	3.65	0.24
Education	1.30	1.29	1.30	1.36	0.06	1.47	0.17*
Currently working	0.57	0.56	0.57	0.56	-0.01	0.41	-0.16
First cohabitation age	17.57	17.56	17.53	18.18	0.65**	17.94	0.41
Lived w/ men once or more	0.81	0.81	0.81	0.86	0.05	0.94	0.13*
Current/Ever Contraception usage	0.98	0.98	0.98	0.99	0.01	1.00	0.02
Current Use	0.88	0.88	0.87	0.87	0.00	0.88	0.01
Top 1 Attribute	0.48	0.48	0.49	0.52	0.03	0.59	0.10
Weight to top 1 attribute	16.12	16.15	16.15	16.64	0.49	15.35	-0.80
Intention to switch methods	0.33	0.32	0.31	0.33	0.02	0.47	0.16
Husband Supportiveness	1.46	1.43	1.45	1.36	-0.09	1.31	-0.14
Using a Long-Acting Method	0.76	0.77	0.77	0.75	-0.02	0.82	0.05
Observations	113	112	100	302	402	17	117
Women invited partner	x						
Woman invited + Partner cons.		x					
Partner were present			x			x	
Partner not present				x			

Which women visited the Kauma Clinic?

	All	Yes	No	Difference
Visited the Good Health Kauma Clinic?				
Age	26.21	25.69	26.27	0.58
Total No. of Children at BL	2.11	2.12	2.11	-0.01
Desired number of children	3.50	3.49	3.50	0.01
Education	1.34	1.34	1.34	-0.00
Currently working	0.57	0.61	0.57	-0.04
First cohabitation age	18.05	17.44	18.11	0.67*
Lived w/ men once or more	0.84	0.85	0.84	-0.02
Current/Ever use of FP	0.99	1.00	0.98	-0.02
Current Use of FP	0.87	0.99	0.86	-0.13**
BL curr: IUD/Injectables/Implants	0.87	0.80	0.87	0.07
Top attribute is effectiveness	0.53	0.58	0.52	-0.06
Weight to top 1 attribute	16.46	16.18	16.49	0.31
Intention to switch methods	0.35	0.39	0.34	-0.05
Husband Supports FP	1.38	1.33	1.39	0.06
Using a Long-Acting Method	0.75	0.79	0.75	-0.04
Observations	701	67	634	701

Which women visited any clinic?

Visited Any Clinic?				
Age	26.25	26.03	26.33	0.30
Total No. of Children at BL	2.12	2.15	2.11	-0.04
Desired number of children	3.49	3.49	3.49	-0.00
Education	1.35	1.38	1.33	-0.05
Currently working	0.57	0.54	0.59	0.04
First cohabitation age	18.05	17.86	18.12	0.26
Lived w/ men once or more	0.84	0.88	0.82	-0.06
Current/Ever use of FP	0.99	0.99	0.98	-0.01
Current Use of FP	0.88	0.94	0.85	-0.08**
BL curr: IUD/Injectables/Implants	0.87	0.83	0.88	0.05
Top attribute is effectiveness	0.53	0.59	0.51	-0.08
Weight to top 1 attribute	16.45	17.00	16.24	-0.76*
Intention to switch methods	0.35	0.44	0.31	-0.13**
Husband Supports FP	1.37	1.37	1.36	-0.01
Using a Long-Acting Method	0.76	0.78	0.75	-0.03
Observations	682	187	495	682

Which women were available for counseling?

	All	Counselled	Not Counselled	Difference
Age	26.12	26.21	25.20	-1.01
Total No. of Children at BL	2.10	2.11	1.94	-0.17
Desired number of children	3.50	3.50	3.50	0.00
Education	1.34	1.34	1.32	-0.02
Currently working	0.57	0.57	0.49	-0.08
First cohabitation age	18.05	18.05	18.05	-0.00
Lived w/ men once or more	0.83	0.84	0.75	-0.09
Current/Ever use of FP	0.99	0.99	1.00	0.01
Current Use of FP	0.87	0.87	0.90	0.03
BL curr: IUD/Injectables/Implants	0.87	0.87	0.87	0.00
Top attribute is effectiveness	0.53	0.53	0.57	0.05
Weight to top 1 attribute	16.54	16.46	17.40	0.94
Intention to switch methods	0.37	0.35	0.52	0.17**
Husband Supports FP	1.41	1.38	1.66	0.28*
Using a Long-Acting Method	0.75	0.75	0.77	0.01
Observations	770	701	69	770