Dissecting the association between spousal communication and family planning use in Nigeria

Introduction

Research on family planning use in low family planning use contexts has consistently uncovered a strong association between self report of spousal family planning communication and family planning use (Casterline, Perez, and Biddlecom 1997; Becker and Costenbader 2001; Bawah 2002). For example, wives and husbands in Ghana who report discussing family planning with their partners are greater than two times more likely to use contraceptives than those persons reporting no family planning discussion with their spouse (Oheneba-Sakyi and Takyi 1997). Furthermore, the consistent, strong association of spousal family planning communication on family planning use, even after control variables are included in the analysis, has led to recommendations for interventions that promote spousal communication on reproductive health (Ngom 1997).

Despite the positive associations between self reported discussion of family planning and family planning use (DeRose and Ezeh 2005), there is a discrepancy in report of family planning discussion and attitudes toward family planning. A woman is more likely to correctly report her spouse's positive attitude toward family planning when she reports discussing family planning; however, she is also more likely to report her spouse's positive attitude when her spouse truly has a negative attitude toward family planning, when reporting discussing family planning issues (DeRose et al. 2004). This discrepancy indicates that self report of discussion may not actually improve a couple's understanding of each partner's fertility and family planning preferences. It also highlights the difficulty in trying to capture the complex relationship between individuals in partnerships, partnerships, and family planning use with survey questions. This paper explores the association between personal attributes of individuals in relationships and the association with family planning use, and spousal communication about family planning, in more detail.

Why is there such a strong association between spousal communication and family planning use? Three possible explanations surface, (1) women and men in egalitarian relationships are more likely to communicate with each other and work together to achieve their fertility preferences via family planning, (2) men who are willing to communicate with their wives about family planning are also more likely to advocate for its use, and (3) women with a sense of entitlement are more likely to communicate with their partners about family planning and have the self-efficacy to use family planning regardless of their spouse's desires to use family planning or not. In this paper we delve into the third possibility – exploring whether individual attributes of the women in unions moderate the relationship between spousal communication and family planning use.

Methods

A household-based survey among a representative sample of 10,181 women currently in union in six Nigerian cities (Abuja, Benin City, Ibadan, Ilorin, Kaduna and Zaria) was conducted between October 2010 and March 2011. In addition to measures of contraceptive use, the survey contained questions on demographics, spousal communication about family planning, and personal attitudes toward covert contraceptive use.

In this analysis we use women's positive attitudes toward covert contraceptive use as a proxy for women's self-efficacy to use family planning. The survey instrument included items that measured whether the respondent feels covert use is acceptable in four specific situations, they are: the wife wants to use family planning despite her partner's resistance, the couple has many children, the husband is violent towards the wife or children, and the family is under financial constraints. These four items are summed together to create the Attitudes toward Covert Family Planning Use Index (Covert Use Index).

The dependent variable is current contraceptive use – measured at three levels as (1) not currently using a contraceptive method, (2) using a potentially covert method, and (3) using a method both individuals in the relationship are likely to know about. Potentially covert methods include injectable, pill, EC, and IUD use. Couple awareness methods are defined here as sterilization, natural methods, condoms, diaphragm, and implant.

Multinomial logistic regression is used to assess the unadjusted and adjusted associations between demographic variables, spousal communication about family planning, and the Covert Use Index. To tease out whether individual attitudes toward covert use moderate the association between spousal communication block modeling is utilized – where all demographics are entered simultaneously into the equation first (Model I), followed by the addition of spousal communication to the equation (Model II), and finally the addition of the covert index (Model III).

Results

The characteristics of the sample by current family planning use status are displayed in Table 1. Women who are currently using a method score higher on the Covert Use Index than women who are not currently using family planning. It is interesting that women in all three

current use categories are most likely to be in favor of covert use when the couple has many children or the family suffers from financial constraints – as opposed to the issue of incongruent family planning desires among individuals in a partnership and violence. Women currently using family planning are also significantly more likely to indicate they have communicated with their spouse about family planning than women who are not currently using family planning.

Table 1. Individual, relationship, and sociodemographic characteristics by current family planning use status among women in union, Nigeria 2011

	Not Currently Using Family Planning	Potentially Covert Method Use	Couple Awareness Method Use	Total
	(n = 7,033)	(n = 1,380)	(n = 1,768)	(n = 10,181)
Individual Characteristics				
Attitude Toward Covert Family Planning Use, %				
Partner is against family planning use	19.6	37.2	27.1	23.5
The couple has many children	49.1	75.6	67.0	56.2
Partner is violent toward wife and/or children	40.3	59.2	51.7	45.2
Financial constraints	49.2	75.5	67.7	56.4
Covert Use Index, range (0-4), mean (SD)	1.5 (1.6)	2.5 (1.4)	2.2 (1.5)	1.8 (1.6)
Relationship Characteristics				
Ever Communicated with Spouse about Family Planning, %	26.3	83.6	66.0	42.0
Sociodemographic Characteristics				
Age (years), range (15-49), mean (SD)***	32.0 (8.0)	35.3 (6.7)	33.1 (6.9)	32.7 (7.7)
Parity, range (0-18), mean (SD)	3.5 (2.7)	4.1 (1.8)	3.3 (1.8)	3.6 (2.5)
Education, %				
None	15.9	8.0	4.9	12.7
Quarnic	5.5	1.3	0.7	4.0
Primary	20.2	19.6	16.5	19.4
JSS	9.7	10.0	8.2	9.5
SSS	30.2	34.6	37.4	32.2
Higher	18.5	26.7	32.4	22.2
Religion, %				
Christian	37.3	55.1	61.2	44.3
Muslim	61.6	44.1	38.3	54.8
Other	1.1	0.9	0.5	0.9
Wealth, %				
Poor	20.8	12.0	11.3	17.8
Mid-Poor	21.7	18.7	18.9	20.8
Middle	20.8	21.2	22.3	21.2
Mid-Wealthy	18.9	24.9	23.8	20.7
Wealthy	17.7	23.2	23.7	19.6
City, %				
Abuja	11.1	16.5	17.7	13.1
Benin City	9.6	10.3	14.6	10.7
Ibadan	17.2	29.3	29.9	21.3
Ilorin	16.1	20.5	16.0	16.7
Kaduna	26.8	19.4	18.8	24.3
Zaria	19.1	4.0	3.0	14.0

The unadjusted relative risk ratios from the analysis can be found in Table 2. Both the Covert Use Index and spousal communication about family planning are strongly associated with current method use.

Table 2. Unadjusted relative risk ratios from multinomial logistic regression assessing the association between individual, relationship, and sociodemographic characteristics and current family planning use status (not currently using is the comparison) among women currently in union, Nigeria 2011

	Potential Covert Method RRR (n = 10,181)	Couple Awareness Method RRR (n = 10,181)
Individual Characteristics		
Covert Use Index	1.47***	1.26***
Relationship Characteristics		
Ever Communicated with Spouse about Family Planning	14.27***	5.42***
Sociodemographic Characteristics		
Age	1.05***	1.02***
Parity	1.10***	0.98
Education		
None	1.00	1.00
Quarnic	0.46**	0.44*
Primary	1.92***	2.68***
JSS	2.05***	2.78***
SSS	2.28***	4.07***
Higher	2.86***	5.75***
Religion		
Christian	1.00	1.00
Muslim	0.49***	0.38***
Other	0.54	0.28**
Wealth		
Poor	1.00	1.00
Mid-Poor	1.49**	1.61***
Middle	1.76***	1.98***
Mid-Wealthy	2.28***	2.33***
Wealthy	2.27***	2.47***
City		
Abuja	1.00	1.00
Benin City	0.72**	0.95
Ibadan	1.14	1.09
Ilorin	0.86	0.62***
Kaduna	0.49***	0.44***
Zaria	0.14***	0.10***

*$p<0.05$; **$p<0.01$; ***$p<0.001$

The three adjusted models are shown in Table 3. In Model I, Christian women, women living in Ibadan, and women with more children, education, and wealth are more likely to currently use family planning – whether those methods are potentially covert methods or couple awareness methods. Model II shows the strong association between spousal communication and current contraceptive use and the slight attenuation of the associations between religion, education and wealth and current family planning use with the addition of spousal communication into the model. In Model III a strong association is observed between the Covert Use Index and current family planning use, especially potentially covert family planning use. Only a minor attenuation of the spousal communication association is observed – indicating that our proxy for self-efficacy is only a partial moderator of the association between spousal communication and current family planning use.

Finally, there is a further attenuation of the association between religion, education, and wealth and current family planning use – especially for the potentially covert family planning method users, with the addition of the Covert Use Index to the model.

Table 3. Adjusted relative risk ratios from multinomial logistic regression assessing the association between individual, relationship, and sociodemographic characteristics and current family planning use status (not currently using is the comparison) among women in union, Nigeria 2011

	Model I		Model II		Model III	
	Covert	**Couple**	**Covert**	**Couple**	**Covert**	**Couple**
	RRR		**RRR**		**RRR**	
	(n = 10,181)		(n = 10,181)		(n = 10,181)	
Individual Characteristics						
Covert Use Index	--	--	--	--	1.22***	1.05*
Relationship Characteristics						
Ever Communicated with Spouse about Family Planning	--	--	11.24***	3.84***	10.20***	3.73***
Sociodemographic Characteristics						
Age	1.00	0.97***	1.00	0.97***	1.01	0.97***
Parity	1.32***	1.25***	1.22***	1.17***	1.23***	1.18***
Education						
None	1.00	1.00	1.00	1.00	1.00	1.00
Quarnic	0.85	0.83	0.96	0.87	0.93	0.87
Primary	1.95***	2.31***	1.35	1.86***	1.29	1.83***
JSS	2.54***	2.41***	1.64**	1.88**	1.50*	1.83**
SSS	2.57***	3.40***	1.56**	2.51***	1.48*	2.46***
Higher	3.04***	5.20***	1.56*	3.43***	1.50*	3.37***
Religion						
Christian	1.00	1.00	1.00	1.00	1.00	1.00
Muslim	0.58***	0.56***	0.81*	0.69***	0.86	0.70***
Other	0.81	0.47	1.04	0.55	1.12	0.56
Wealth						
Low	1.00	1.00	1.00	1.00	1.00	1.00
Mid-Low	1.20	1.19	1.06	1.12	1.05	1.11
Middle	1.35*	1.36**	1.16	1.26	1.15	1.26
Mid-High	1.60***	1.42**	1.40*	1.32*	1.36*	1.31*
High	1.54**	1.36*	1.19	1.16	1.20	1.16
City						
Abuja	1.00	1.00	1.00	1.00	1.00	1.00
Benin City	0.65**	0.98	0.76	1.08	0.80	1.09
Ibadan	1.38**	1.41***	1.41**	1.42**	1.56***	1.44***
Ilorin	1.06	0.86	1.15	0.91	1.10	0.89
Kaduna	0.46***	0.50***	0.53***	0.52***	0.58***	0.54***
Zaria	0.14***	0.14***	0.22***	0.17***	0.24***	0.17***

*p<0.05; **p<0.01; ***p<0.001

Conclusion

The individual self-efficacy of women in unions to use family planning, as measured using the proxy - Covert Use Index, only partially moderates the strong association between spousal communication about family planning and current family planning use. The findings here point to the need for future research to examine the association between other proxy measures of woman's self-efficacy to use family planning

and family planning use as well as the other potential explanations for the strong association between spousal communication about family planning and family planning use: relationship equity and individual male attributes.

Future Analysis

Future analysis plans include exploring the moderating effect of individual male attributes on the association between spousal family planning communication and family planning use using the individual male sample.