Marital Relationship Quality and Contraceptive Use in Kumasi, Ghana

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## Abstract

Researchers in the field of sexual and reproductive health have collected a wealth of information on attitudes and behaviors while overlooking the emotional aspects of what it means to individuals and couples to engage in sexual relationships. A limited amount of research, mainly in developed countries, has examined the association between relationship quality and contraceptive use. Using previously validated scales measuring different dimensions of relationship quality (commitment, trust, satisfaction and communication), we examine the association between relationship quality and contraceptive use with multinomial logistic regression. Findings show that certain dimensions of relationship quality are positively associated with use of traditional methods of family planning. No consistent pattern was found between dimensions of relationship quality and modern contraceptive use. A better understanding of how relationship quality influences contraceptive use will help inform programmatic efforts in family planning.

## **Extended Abstract**

## Background

The International Conference for Population and Development (ICPD), held in Cairo in 1994, paved the way for a new perspective on population and reproductive health based on the rights, needs and potential of individuals and couples. In the 4<sup>th</sup> principle of the program of action, which emphasizes women's empowerment, one objective is "to achieve equality and equity based on harmonious partnership between men and women and enable women to realize their full potential"<sup>1</sup> (Objective 4.3). Advancement toward gender equality and women's empowerment has been made, however, outside of research on intimate partner violence and household decision-making power, the harmony of partnerships is commonly overlooked. Throughout the ICPD program of action, emphasis is placed on improving families, especially sexual partnerships. In order to achieve the objectives set forth by the conference and to implement effective sexual and reproductive health interventions it is imperative that we have a better understanding of the emotional aspects of sexual partnerships.

Most sexual and reproductive health research has focused on individual characteristics despite the fact that most related decisions involve or at the very least impact couples. Given that sexual and reproductive decisions typically affect both partners it is likely that a person's decision to use contraception is influenced by the relationship with his or her partner, yet relationship quality has often been ignored as a key measure of how individuals and couples make decisions about family planning. Based on several qualitative studies in Africa, trust between partners appears to play a role in men and women's decisions to discuss and/or use contraception. Several studies have found that discussion and use of condoms within a marriage are believed to disrupt the relationship<sup>2, 3</sup> and imply mistrust of one's partner.<sup>4-6</sup> A lack of trust has also been found to lead some men to believe that female controlled methods of contraception encourage women to engage in promiscuous behavior.<sup>4,5</sup> Several studies in Africa suggest that as trust grows within a relationship, condom use decreases.<sup>6-8</sup> In a study in Northern Ghana, respondents reported that some women purposely avoid contraceptive discussions and/or use out of fear of how it would harm their relationship with their husband. In this same study, some men in the community were described as not caring about their wives and would therefore not provide their wives with money for family planning.<sup>5</sup> A literature review on adolescent's sexual and reproductive decisionmaking in which most of the literature was derived from Africa found that young women feel pressure to prove their ability to produce a child to convince their partner to marry them and to avoid abandonment. Young women were motivated to not use contraception in order to progress and stabilize their relationship.<sup>9</sup> There is strong evidence from these studies that certain aspects of relationship quality, such as trust, communication and stability, influence individuals' sexual and reproductive behavior.

The following study is an exploration of marital relationship quality in Kumasi, Ghana and how it relates to women's use of contraception. Ghana is a particularly interesting country in which to conduct this research given the significant decline in fertility that has been observed in the absence of a significant increase in contraceptive use. Relative to other West African nations Ghana's total fertility rate is low at 4.0, yet only about 17% of all married women are using some method of modern contraception. In fact, modern contraceptive use declined 2% from 2003 to 2008. Furthermore, 35% of women of reproductive age are classified as having an unmet need for family planning.<sup>10</sup>

# Methods

### Data Used

The data for this analysis come from the Family Health and Wealth Study. The Family Health and Wealth Study (FHWS) is a multi-country, longitudinal study that collects data from married/cohabitating couples. For this analysis, we used the baseline data from the Ghana study site (FHWS-Ghana), which is a sub-metropolitan area outside of Kumasi.

A total of 798 women of reproductive age (18-44 years of age) were surveyed about topics including general health, fertility, sex, and relationship quality. After eliminating subjects with missing values for key variables, our total sample size was 740 women.

## Key Variables

### IndependentVariables:

Our key independent variables were measures of relationship quality. We used three relationship quality scales that were included in the FHWS questionnaire and had previously been validated in developed countries: Commitment Subscale from the Sternberg Triangular Love Scale,<sup>11</sup> Dyadic Trust Scale,<sup>12</sup> Constructive Communication Subscale from the Communication Patterns Questionnaire.<sup>13, 14</sup> In a previous study (unpublished), a confirmatory factor analysis of the scales was conducted using the FHWS-Ghana data and a good fit was obtained after respecifying some of the scales. These scales were also found to be reliable with cronbach's alpha coefficients greater than 0.70 for all factors except for one factor in the Constructive Communication Subscale which was greater than 0.60. We use the respecified scales in our study. The commitment and trust scales were treated as additive scales in which some items required reverse scoring. The communication scale had two factors, constructive communication and destructive communication, of which the sum of the items for these two factors were subtracted from one another to get a total score for this scale. High scores on all four of the scales indicate a higher quality relationship. To measure relationship satisfaction we used a global satisfaction question that asked respondents to rate how happy they are in their relationship on a scale of one to six.

We also included other independent variables in our analysis that are commonly believed to influence contraceptive use. We included the following socio-demographic variables: age, education, religion, and employment of the respondent and her partner. We the following fertility-related variables were included: number of children, attitude toward contraception, and perceived inconvenience of having another child. We also included the following couple characteristics: difference in age and education between the respondent's partner and the respondent and marital type (monogamous or polygynous).

## Dependent Variable:

Our dependent variable of interest is women's report of contraceptive use. We categorized responses into three categories: no use, traditional method use, and modern method use. Traditional methods include periodic abstinence, withdrawal, and other. Modern methods include injectable, pill, IUD, condom, implants, diaphragm, spermicide, and sterilization.

#### Analysis

Exploratory data analyses were first conducted to examine the data for frequencies, distributions and missing variables. Bivariate analyses were then conducted to examine the unadjusted associations between contraceptive use and independent variables of interest. Due to the categorical nature of the outcome variable, multinomial logistic regression was utilized for the multivariate analysis.

## Results

Table 1 shows the characteristics of our study sample by contraceptive use: non-users, traditional method users, and modern methods users. The mean relationship quality scores were all moderately high across the three sub-groups of contraceptive users. Mean age of the study sample was above 30 years for each sub-group. Traditional and modern method users had higher mean levels of education than women who were non-users. Mean number of children was similar across all three sub-groups with a mean of around three children. Attitudes towards contraception were more favorable among women who reported using contraception; these women were also more likely to perceive having another child as inconvenient than women using traditional methods or no method.

Table 2 shows the results of the unadjusted and adjusted multinomial logistic regression analyses. The findings suggest that relationship quality is more highly associated with traditional method use than non-use. As levels of commitment, communication and satisfaction increased, women were more likely to use traditional methods than no method in the unadjusted analysis. These relationships were slightly attenuated in the adjusted analysis, however, commitment and satisfaction levels remained significantly associated with traditional method use. We found no relationship between relationship quality and modern method use in both the unadjusted and adjusted analyses.

## **Key Findings**

In this analysis, we used measures of relationship quality to predict contraceptive use among women in a sub-metropolitan community outside of Kumasi, Ghana. To our knowledge, this is one of the first studies in Africa to investigate the association between these four dimensions of relationship quality (commitment, trust, communication, and satisfaction) and contraceptive use.

Our findings suggest that relationship quality is more strongly associated with traditional method use than modern method use compared to no use. Traditional methods such as withdrawal and periodic abstinence typically require both partners' knowledge and cooperation, which possibly explains why we found a significant association between relationship quality and traditional method use.

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		Contraceptive Us	<u>e</u>
	Non-Users (n=586)	Traditional Method Users (n=66)	Modern Method Use (n=88)
OUTCOME VARIABLE			
Contraceptive Use (Percent)	79.19	8.92	11.
PREDICTOR VARIABLES			
Relationship Quality			
Commitment Scale	35.97	38.5	36
(Possible Range: 5-45)			
Trust Scale	25.48	25.12	25.
(Possible Range: 5-35)			
Communication Scale	14.48	16.68	13.
(Possible Range: -37 - 26)			
Relationship Satisfaction	4.5	4.95	4.4
(Possible Range: 1-6)			
Socio-Demographic			
Age (Mean)	33.83	31.76	32.
Education (Mean in Years)	5.85	6.8	e
Religion (Percent):			
Christian	47.78	57.58	67.
Muslim	48.46	40.91	30.
Other	3.75	1.52	2.
Employed (Percent)	86.01	89.39	92.
Partner Employed (Percent)	96.25	98.48	96.
Fertility-Related			
Number of Children (Mean)	3.12	3	3.
It is wrong to use contraception (Percent):			
Strongly Agree	12.8	7.58	3
Agree	26.62	12.12	14.
Neutral	26.28	33.33	7.
Disagree	16.55	22.73	32.
Strongly Disagree	17.75	24.24	40.
Having a child now would be	11.10	221	.0.
inconvenient (Percent)	48.81	54.55	61.
Couple Variables			
Age difference (Mean)	7.55	7.36	6.
Education Difference (Mean)	0.82	0.98	0. 0.
Marital Type- Percent in	0.82	0.98	0.
	8.7	1.52	2
Polygynous Union	0./	1.32	3.

Table 1: Characteristics of Study Sample by Contraceptive Use

	Unadjusted RRR	Adjusted RRR
Commitment Score		
No Use (Reference)	1	1
Traditional Use	1.04*	1.04†
Modern Use	1.01	1
Trust Score		
No Use (Reference)	1	1
Traditional Use	0.98	0.96
Modern Use	1.01	1
Communication Score		
No Use (Reference)	1	1
Traditional Use	1.03†	1.03
Modern Use	0.99	0.98
Relationship Satisfaction		
No Use (Reference)	1	1
Traditional Use	1.39**	1.38*
Modern Use	0.98	0.92
Number of Respondents	740	740

Table 2: Unadjusted and Adjusted Relative Risk Ratios (RRR) of Contraceptive Use

 $\frac{1}{2} + p \le 0.001, + p \le 0.01, + p \le 0.05, + p \le 0.10$