

# Influence of Gender Relationships on the Non-Intention to Use Modern Contraception Among Women Aged 15 to 49 in Union in Burundi

Jean François Regis Sindayihebura <sup>1,2</sup>, Emmanuel Barankanira <sup>3</sup>,  
Désiré Manirakiza <sup>2</sup>, Didier Nganawara <sup>4</sup>, René Manirakiza <sup>2</sup>,  
Franklin Bouba Djourdebbe <sup>4</sup>

<sup>1</sup> Doctoral School of the University of Burundi

<sup>2</sup> Centre de Recherche et d'Etude sur le Développement des Sociétés en  
Reconstruction – University of Burundi

<sup>3</sup> Ecole Normale Supérieure du Burundi (ENS)

<sup>4</sup> Institut de Formation et de Recherche Démographiques (IFORD) – University of  
Yaounde II (Cameroun)

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## Abstract

**Background:** The level of intention to use modern contraception declined between 2010 and 2016-2017. **Objective:** This study analyzes the influence of gender relationships on this phenomenon. **Methodology:** Multilevel logistic regression was used to analyze data from the 2010 and 2016-2017 Demographic and Health Surveys of Burundi. **Results:** The results show that the husband's desire for children and the perceived action of being beaten for refusing sex significantly explain the non-intention to use modern contraception. Women whose husbands desired fewer children than they did were 37% (OR=0.630;  $p<0.05$ ; 95% CI: 0.413-0.961) less likely to non-intend to use modern contraception than those whose husbands desired the same number of children as they did in 2017. In addition, women who considered being beaten for refusing sex normal were 1.226 times (OR=1.226;  $p<0.05$ ; 95% CI: 1.026-1.466) more likely to non-intend to use modern contraception than those who consider it unnormal in 2010. **Conclusion:** These results show that couple relationships that promote dialogue between spouses

would contribute to reducing reluctance to use contraception. Thus, the increase in the level of contraceptive prevalence that the country needs will require an openness to a culture of discussion between spouses.

**Keywords:** gender relationships, non-intention to use modern contraception, women in union, multilevel analysis, Burundi

## 1. Introduction

While certain North American authors attributed the decline in fertility to the rise of living standards, Caldwell showed that the intergenerational flows of wealth could only explain the latter in the African context [3,5,8]. For him, Africa's high fertility was related to parents' expected benefits of large offspring. In 1994, Wakam categorically rejected the "economist" fertility thesis since most of the observed changes in fertility have occurred in the context of economic stagnation, if not recession. Thus, he recommended the mobilization of socio-cultural factors, finding that the decline observed in certain African countries resulted from women's education and openness to modernity [20].

Feminism and the gender approach are certainly placed in the continuity of the socio-cultural approaches to fertility. Indeed, with the concerns of gender equality, many authors propose to try to understand fertility through the woman's socioeconomic status [11]. Some authors attribute Africa's high fertility to gender inequalities [13,21]. Most of the gender studies assess women's ability to influence fertility. Adjamagbo and Locoh point out that the variables often brought to bear are those related to women's autonomy [1]. Surveys capture the ability of a woman to discuss with her spouse and decide on the size of the household, the number of children to be born, the use of contraception, etc. As gender affects women's socioeconomic empowerment, socioeconomic characteristics of the woman and her spouse, such as educational achievement and socio-professional occupation, are also associated [11,13].

In studies of contraceptive use intention, gender relations are also invoked to explain women's reported intentions for family planning (FP). Examples include the husband's attitude toward contraception analyzed in Ghana [9,10] and the northern Ethiopian town of Adigrat [10]. The discussion of family size between spouses is mobilized in work in Morocco [6] and Northern Ethiopia [12]. Among the variables affecting women's autonomy are women's educational level [2,6,12] and occupation [2,10,14].

Facing an apparent decline in the intention to use modern contraception from 66% to 53% in a context that requires increasing contraceptive prevalence, this study analyzes the role of gender relations. In fact, by studying the factors of non-intentional use of contraception, we are trying to verify whether this increasing non-intentional use of contraception is not due to gender relations that are unfavorable to women's freedom of choice. The husband's desire for children and his appreciation of the action of beating his wife when she refuses to have sex are taken as operational variables of gender relations. In addition, the woman's level of edu-

cation and occupation, which contribute to her autonomy, are also taken into account. It is assumed that women whose husbands want more children than they do are more likely to be unwilling to use modern contraception than those whose husbands wish to have as many or fewer children as they do. In addition, women who find the action of beating their wives when they refuse sex to be justified are more likely than their counterparts to be unintentional users of modern contraception. Finally, women with no education, those who are not in the labor force, and women who are farmers are more likely than others not to intend to use contraception.

## 2. Materials and methods

**Data and target population:** This study performs the necessary analyses on two pooled samples of 4225 and 6990 women in union, non-users of modern contraception, extracted from the databases of the Burundi Demographic and Health Surveys that took place in 2010 and 2016-2017, respectively.

**Study variables:** Twenty-eight variables were selected for their relevance. The dependent variable concerns the declared intention to use contraception in the future. It is coded 1 if the woman has no such intention and 0 if the woman has expressed it positively. The operational variables of gender relations are the husband's desire for children (values: 1= Desires the same number of children as the wife; 2= Desires more children than the wife and 3= Desires fewer children than the wife), appreciation of the action of being beaten when she refuses sex (values: 1= Normal; 2= Unnormal), the woman's level of education (values: 1= No education; 2= Primary; 3= Secondary and above), and the woman's occupation (values: 1= Not in the labor force; 2= Farmer; 3= Business/Other informal sector; 4= Managerial; 5= Other activities). Other variables are the socio-demographic, economic, and cultural characteristics of the woman, her household, or her community [17].

**Data quality:** Reference to standards for non-response rate, age, and number of children ever born reporting bias shows that the data are of good quality. In addition, testing for multi-collinearity and solubility of the regression equations shows that the data are better suited for analysis [17,7,18].

**Analysis method and data adjustment:** Given the dependent variable, the binary qualitative, and the other independent variables are qualitative, the analysis of the effect of gender relations is logistic regression [19]. Classifying the independent variables by individual, household, and community level, the analysis is done in a multilevel approach [4,15]. This modeling is validated by the significance of Wald Chi-square and likelihood ratios tests at the 1% threshold [17].

## 3. Findings

The results show that in 2010, there was no significant difference between women whose husbands wanted the same number of children as them and those whose husbands wanted more children (OR=1.267;  $p>0.05$ ; 95% CI: 0.992-1.617) or

fewer (OR=1.014;  $p>0.05$ ; 95% CI: 0.774-1.329) than them in terms of not intending to use modern contraception. In 2016-2017, was also no difference between women whose husbands wanted the same number of children as them and those whose husbands wanted more children (OR=0.937;  $p>0.05$ ; 95% CI: 0.632-1.389) concerning the same non-intention. However, women whose husbands wanted fewer children than they did were 37% (OR=0.630;  $p<0.05$ ; 95% CI: 0.413-0.961) less likely to non-intend to use modern contraception than those whose husbands wanted the same number of children as they did (Table 1). As for appreciation of the action of beating one's wife when she refuses sex, women who found this action to be normal were 1.226 times (OR=1.226;  $p<0.05$ ; 95% CI: 1.026-1.466) more likely to non-intend to use modern contraception than those who found it unnormal in 2010. However, the association had lost significance by 2017, and no significant difference was observed between the two categories of women (OR=0.868;  $p>0.05$ ; 95% CI: 0.633-1.191) (Table 1). Regarding the variables related to women's empowerment, the results show no significant difference between women with no education and those with primary or secondary/plus education in 2010 and 2016-2017 ( $p>0.05$ ) in contraceptive non-intention. Regarding the socio-professional occupation of the woman, there seems to be no significant difference between women of different socio-professional categories in contraceptive non-intention ( $p>0.05$ ). Only in 2010, women who were not in the labor force were shown to be 41.5% (OR=0.868;  $p>0.01$ ; 95% CI: 0.398-0.862) less likely not to intend to use modern contraception than women farmers and others (Table 1).

#### 4. Discussion

Facing a context of low contraceptive prevalence and a decline in the level of intention to use contraception, this research aims to test whether gender relationships are not at the root of this non-intention. To achieve this objective, data from the 2010 and 2016-2017 DHSBs are mined using multilevel logistic regression taking into account the polling weight.

The results show that the husband's desire for children was not associated with non-intention to use modern contraception in Burundi in 2010 at the 5% threshold. However, in 2016-2017, this factor was significantly different among women according to their husband's desire for children. Women whose husbands wanted fewer children were 37% less likely not to intend to use modern contraception than those whose husbands wanted the same number of children or more.

These results validate our original hypothesis about this variable and corroborate those of other studies. Indeed, suppose we consider that, for husbands, wanting fewer children than their wives constitutes approval of contraceptive practice than their wives. In that case, these results converge with those of Ahuja and colleagues [2] who, in studying the risk and factors of intention to use contraception among women in Ghana, showed that women whose husbands opposed contraception were 2.19 times more likely to have this intention than those whose husbands did not oppose it.

**Table 1: Influence of gender variables on non-intentional use of modern contraception**

Variables et values	2010		2016-2017	
	OR	95% CI	OR	95% CI
<b>Husband's desire for children</b>	ns		*	
Desires the same number of children as the wife	Ref		Ref	
Desires more children than the wife	1.267ns	0.992 - 1.617	0.937ns	0.632 - 1.389
Desires fewer children than the wife	1.014ns	0.774 - 1.329	0.630*	0.413 - 0.961
<b>Appreciation of the action of being beaten when she refuses sex</b>	*		ns	
Normal	1.226*	1.026 - 1.466	0.868ns	0.633 - 1.191
Unnormal	Ref		Ref	
<b>Woman's level of education</b>	ns		ns	
No education	Ref		Ref	
Primary	1.038ns	0.847 - 1.271	0.799ns	0.566 - 1.130
Secondary and above	0.857ns	0.485 - 0.515	0.595ns	0.286 - 1.237
<b>Socio-professional woman's occupation</b>	**		ns	
Not in the labor force	0.585**	0.398 - 0.862	1.333ns	0.657 - 2.702
Farmer	Ref		Ref	
Business/Other informal sector	0.728ns	0.372 - 1.424	0.769ns	0.321 - 1.844
Managerial	1.355ns	0.707 - 2.596	1.072ns	0.511 - 2.251
Other activities	1.176ns	0.049 - 28.522	1.281ns	0.165 - 9.939
** : $p < 0.01$ ; * : $p < 0.05$ ; ns : non-significant ; $p$ : p-value				

Also, Eliason and colleagues [9], in studying factors influencing rural Ghanaian women's intention to adopt postpartum FP, found that women whose partners approved of FP were 3.2 times more likely to have the intention studied than those whose partners were against it. In the town of Adigrat (Tigray, Northern Ethiopia), Gebremariam and Addissie [10] also found that women whose husbands disapproved of permanent and long-acting methods (LAPMs) were 80% less likely to intend to use them than those whose husbands approved. All of these findings suggest that approval of contraception by spouses/sexual partners gives women the flexibility to want to use it.

As for women's appreciation of wife beating when she refuses sex, the results show that women who found this action normal were 1.226 times more likely to intend to use contraception than those who found it to be unnormal at the 5% threshold in 2010. However, the relationship had lost significance by 2016-2017. Comparable results are not found in the literature. Still, let's consider the action of beating one's wife when she refuses sex as evidence of a lack of discussion between spouses/partners about sex and FP. These results corroborate studies conducted in Morocco and southern Ethiopia. Indeed, Moroccan women who had the latitude to discuss family size with their husbands were 1.45 times more likely to intend to use contraception than those who did not [6]. Also, in a study conducted on factors affecting women's intention to use permanent and long-acting methods in the Wolaita Zone of southern Ethiopia, women who lived in households where the decision about the number of children was made between spouses were 2.22 times

more likely to intend to use modern contraception than those living in households where the decision was made unilaterally by the husband [12]. In terms of gender relations, these results show that cohabitation in a relationship that gives the woman a choice gives her the latitude to want to use contraception. The relationship that inhibits the woman's freedom has the opposite effect.

Among the variables contributing to women's empowerment, women's level of education was not shown to explain contraceptive intentions in either 2010 or 2016-2017. Only socio-professional occupation was associated with non-intention to use contraception in 2010. Women not in the labor force were 41.5% less likely to have contraceptive non-intention than farmers and other socio-professional categories.

These results diverge from most studies that include socio-professional occupation as a factor in contraceptive intentions. Indeed, the latter converge in showing that women in the labor force, with paid/remunerative employment, are those who are more likely to intend to use modern contraception and that, in contrast, women not in the labor force are the most likely to have no contraceptive intention [2,10,14]. In Burundi, one would think that women not in the labor force would not be reluctant to use contraception because they understand the burden of having a child, especially in the context of unemployment and poverty. Economic constraints would lead them to embrace contraception, as the fertility economics thesis states [3,8]. However, the non-significance of the standard of living in explaining contraceptive non-intention and the null effect of socio-professional occupation as a source of lower contraceptive intention prevent this assertion from being held [17,16]. Moreover, the loss of significance of the influence of socio-professional occupation in 2016-2017 shows that it would be too pretentious to hold firmly to it. Although a woman's high level of education is a stimulating factor for contraceptive intentions [2,6,12], the results of this study do not support the conclusion that attending school would lead to a woman's intention to use contraception.

However, analysis of the results shows that the space given to the woman to discuss contraceptive use and decide on sexual intercourse and the number of children would make her most likely to want to use modern FP methods. The women's level of education or socio-professional occupation would not make her the freest to choose to use contraception. Moreover, the country's patriarchal system, coupled with the tradition that gives the husband the role of leader, still does not provide woman enough freedom when there is no good practice of consent between spouses. In the gender relationships between the woman and her husband, it would be a good understanding between the two that would give a chance to adopt contraception. In the normative system of Burundian society, it would be a question of openness to modernity and values that give women freedom of choice beyond education and employment.

## **5. Conclusion and recommendations**

The objective of this study was to show the influence of gender relations on non-intentional use of modern contraception, which increased by 13% among women aged 15-49 in union between 2010 and 2016-2017. Analysis of data from the Demo-

graphic and Health Surveys of Burundi using multilevel logistic regression shows that when husbands desire fewer children than their wives, they are less likely to be non-intentional users of modern contraception. In addition, when women are in a relationship where they consider being beaten by their husbands for refusing sex to be justified, they are more likely than those who consider it to be unprovoked to withhold contraception. The effects of the other variables were controlled and discussed, there is no significant influence of the woman's level of education or her socio-professional occupation.

These results show that the non-intention of women in union in Burundi to use modern contraception is influenced by gender relations that give them less freedom. From this gender perspective, women's non-intention to use contraception is sustained by couple relationships that do not give women the freedom to discuss the number of children to be born and to plan sexual relations.

These findings suggest that couples are open to relationships that emphasize agreement about sex and family planning. Awareness campaigns for family planning would therefore target women and their spouses.

**Limitations:** The main limitation of this study is the absence of variables related to the discussion between spouses regarding family size, Family Planning, use of household goods, and money earned by the husband and/or wife. They are best known for their influence on woman's participation in the socio-economic life of the household, whose influence on the intention to use modern contraception is undeniable. Future studies will be interested in integrating them. Surveys would want to capture them for all women sampled. The qualitative approach would be the most appropriate in this context, where a woman's public expression of her life as a couple appears to be an unveiling of the secret.

**Competing interests' declaration.** No competing interests

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