

# Unmet Need for Family Planning in Guinea: An in-Depth Analysis based on the 2018 DHS

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**Abstract:** In Guinea, the contraceptive prevalence rate is one of the lowest in Africa. In 2018, this rate was only 11% for women in union and the level of unmet need for contraception reached 22%, representing a potential demand for FP of 33% (EDS 2018). However, it has been shown in several studies that Family Planning is one of the least expensive, cost-effective interventions and has the most lasting impact on reducing maternal, neonatal and child mortality and on the health of populations in general. Since 2000, the Government has adopted various strategies to improve the health of women and children. Family planning services are integrated throughout the health system pyramid but do not yet cover all health facilities, particularly in rural areas. FP services are now also delivered by community-based services.

The objective of this study is to highlight the determinants that have the greatest impact on the level of unmet needs for family planning in Guinea and on which action should be taken to implement the national population policy and the national reproductive health policy. The analyses were carried out using data from the demographic and health survey carried out in 2018 on fertile women in union who were likely to become pregnant at the time of the survey. The results indicate that the main determinants of unmet needs for FP are: age, level of education, number of surviving children, region of residence. However, unmet needs do not vary significantly according to the place of residence, the level of household well-being or the level of education of the spouse. The low level of demand for FP suggests that FP programs should target all women of reproductive age, by increasing awareness to generate demand and improve the supply of FP services.

**Keywords:** Guinea, Contraception, Unmet Need for Family Planning, Fertility, DHS.

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## I. INTRODUCTION

The level of fertility in Guinea remains high. The average number of children that a Guinean woman has at the end of her fertile life is approximately 4.8 children in 2018. The consequences of high fertility for a country are an acceleration of population growth, an increase in dependent populations, increased unemployment and poverty. In addition, high fertility and closely spaced births have harmful consequences on the health of mothers and their children.

According to United Nations estimates, fertility has fallen by half worldwide: in Asia, it fell from 5.67 to 2.24 children per woman between 1960 and 2010, and in Latin America from 5.95 to 2.20 during the same period. In contrast, in sub-Saharan Africa, fertility has declined only slightly, from 6.62 to 5.26 between 1960 and 2010. Africa is therefore the last continent where the fertility transition is lagging behind. The consequences of this persistent fertility are incalculable and will lead some countries to situations that are very difficult to manage (Garenne, 2017).

Access to family planning and reducing unmet need for contraception are key goals for improving reproductive health. Poor access to family planning is associated with unintended pregnancies and even poorer maternal and newborn outcomes, including abortion-related morbidity and mortality. Addressing unmet need helps increase contraceptive use and reduce unintended pregnancies, which improves health outcomes and provides broad social and economic benefits to women, their families, and society (Kulczycki, 2018).

Between 1990 and 2010, global contraceptive prevalence increased from 55% to 63% and unmet need for family planning decreased from 15% to 12%. In sub-Saharan Africa, the level of unmet need is higher (21%), and in West and Central Africa this rate reaches 25%. According to the WHO, in 2018 contraceptive use increased in Asia and Latin America, but remains low in sub-Saharan Africa. Globally, contraceptive use increased from 54% in 1990 to 57% in 2014. In Africa, it increased from 23% to 27%, i.e. just over a quarter of women of reproductive age use a modern method of contraception.

But this proportion is significantly lower in West African countries, particularly those in the Sahel (PRB, 2014).

By practicing family planning to prevent unwanted and high-risk pregnancies and by spacing births longer, women can dramatically reduce the risk of morbidity and mortality from complications of pregnancy and childbirth. When family planning services can meet the growing demand for contraception, abortion rates decline dramatically (UNFPA, 2008).

In Guinea, the results of the 2018 DHS indicate that only 11% of women in a union use contraception. This contraceptive prevalence is twice as high in urban areas (16%) as in rural areas (8%). In addition, almost all births that took place in the last five years were desired by women. Of these births, 86% took place at the desired time and for 11% of births, women would have liked them to occur later. In 3% of cases, the births were unwanted. Similarly, the percentage of women who have an unmet need for family planning would be 22%: 15% for spacing and 7% for limiting births. There is no difference between areas of residence but disparities exist between regions. Indeed, the percentage of unmet needs among women in union varies from 25% in Labé, 24% in Faranah and Mamou and 20% in Conakry and Boké. The total demand for family planning amounts to 33%, of which 24% is oriented towards spacing and 9% towards limitation. Over the last fifteen years, the total demand for FP satisfied has been practically stable, increasing from 31% to 29% between 2005 and 2012, and to 33% in 2018.

Although family planning has a central place in the national population policy, it was only later, precisely in 2000, that the first national reproductive health program was developed (for a period of 10 years) as well as the adoption of a law on reproductive health (Soura and Winner, 2014). In 2011, Guinea joined the Ouagadougou initiative on FP, and revised the strategic plan for repositioning FP. Since 2017, the State has now allocated some funding for FP. But most of the funding is provided by technical and financial partners (TFPs), mainly UNFPA.

The objective of this study is to determine the characteristics of Guinean women with an unmet need for family planning, that is, who intend to space and/or limit future births. In other words, it aims to determine the profile of women with an unmet need for FP. Indicators of unmet need help FP programs target their activities by identifying women who are at greatest risk of unplanned pregnancy and who are more likely to adopt a method than other non-users (UNFPA, 2008).

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<sup>1</sup>This is law L/10/2000/AN of 10 July 2000, which stipulates that "couples and individuals have the right to decide freely and with discernment on matters relating to reproductive health, in compliance with the laws in force, public order and good morals. They can decide on the number of their children, their births, have information and the right to access the best reproductive health care services."

The paper is divided into four sections. The first section deals with the data and methodology of the study. The analysis of levels and trends of unmet needs is discussed in the second section. The third section is devoted to the study of the determinants of needs. The last part is related to the conclusion.

## II. METHODOLOGY

### A. Data Source

This article uses data from the Demographic and Health Surveys (DHS) conducted in Guinea, mainly the latest DHS in 2018. Demographic and health surveys are conducted in almost all developing countries under the coordination of ICF International. Their objective is to collect, analyze and disseminate demographic data, particularly on fertility, family planning and maternal and child health, child mortality, etc. Information on family planning concerns knowledge and use (previous and current) of contraception. For trend analysis, the results of the DHS of 1999, 2005, 2012 and 2018 are examined. The samples of these surveys are representative at the national level and at the level of administrative and natural regions and of the two residential environments (urban and rural).

### B. Definition of the Concept of Unmet Need in Family Planning

The definition of women with an unmet need for family planning used in this study is that used in demographic and health surveys; which states that women with an unmet need for FP is the proportion of women who (1) are not pregnant and not in postpartum amenorrhea and who are considered fertile and who want to delay the arrival of the next child by 2 years or more or who do not want any more children but who are not using a contraceptive method, or (2) whose current pregnancy was poorly planned or unwanted, or (3) who are in postpartum amenorrhea and whose last birth in the last 2 years was poorly planned or unwanted (DHS 2018). This definition now includes all women, such as those who are not in a union, those using ineffective methods, women whose last pregnancy was the result of method failure, and those who use abortion to prevent an unwanted pregnancy (Mariko et al, 2009).

The analysis of the potential demand for FP makes it possible to account for the level of demand for contraception among women of childbearing age. It highlights the needs for FP expressed by the population on the one hand, and the elements likely to promote its increase on the other hand (Akoto et al., 2002).

According to Amadou Sanni (2011), increasing urbanization and schooling, as well as exposure to the media, are promoting the gradual decline of traditional norms of sexuality, nuptiality and fertility. Sexual and marital practices are diversifying; and the obligation or importance of virginity at the time of entering into fertile life has disappeared, hence the importance of including all women in the estimation of the potential demand for FP.

However, in regions where marriage or union <sup>2</sup>is the only framework for procreation, there will be no major difference between the estimates made from the old definition, which only focused on women in union, and the new one, which takes into account all women.

### C. Target Population

The target population of this study consists of women aged 15-49 in a union. These are women who are currently in a union, sexually active and at risk of pregnancy. The choice of this population is justified by the fact that in Guinea, fertility mainly occurs within unions. In 2018, more than seven out of ten women were in a union. The average age of entering into a union was 18.5 years. Fertility outside of a union is very reliable in Guinea. Indeed, the average number of children per woman is respectively 0.97 for women never in a union; 5.82 for those in a union and 2.67 for women in a broken union (see table 1 in the appendix).

## III. MAIN RESULTS

This section examines the characteristics of women that affect the level of unmet needs for family planning, whether to space or limit births among Guinean women. First, we study the level and variations of unmet needs for FP according to the different characteristics of women and their spouses, and secondly, we conduct multivariate analysis using logistic regression to identify the main determinants of unmet needs. The aim is to identify what differentiates women with unmet needs from those whose need for FP is satisfied.

### A. Evolution of Unmet Needs for Family Planning in Guinea 1999 to 2018

Figure 1 shows the evolution of contraceptive prevalence and unmet needs among women in union from 1999 to 2018. The results show a slight improvement in contraceptive prevalence and a rather stable situation regarding unmet needs. Indeed, the current contraceptive use rate increased from 4% in 1999 to 11% in 2018. During this time, the percentage of unmet need decreased by 25% in 1999, 24% in 2012 and 22% in 2018. This confirms the low use of contraceptive methods by women in union.

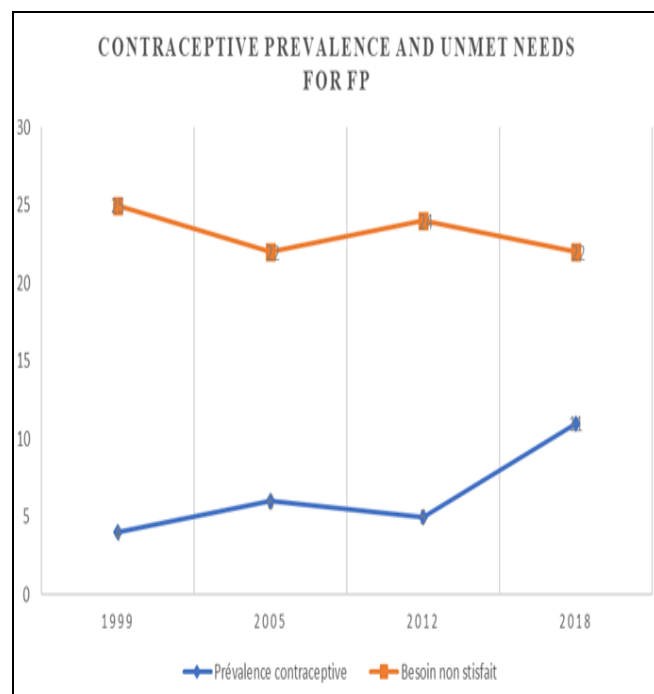


Fig 1: Trend in Contraceptive Prevalence and Unmet Need for FP, Guinea 1999-2018

The Total Fertility Rate (TFR) or average number of children per woman has slightly decreased in Guinea over the past 20 years, from 5.5 children per woman in 1999 to 4.8 in 2018. Over the same period, the Desired Total Fertility Rate (DTR) also decreased, from 5.0 to 4.3. The gap between the TFR and DTR has remained stable over time at an average of 0.5 children per woman. In other words, if all unwanted births had been avoided, the average number of children per woman would be 4.3 instead of 4.8.

<sup>2</sup>In the EDS, all women who have ever lived or are living maritally with a partner are considered to have been in a union, whether this union is legal or not, formal or informal. Thus, marriages civil, religious or customary and free unions are part of unions.

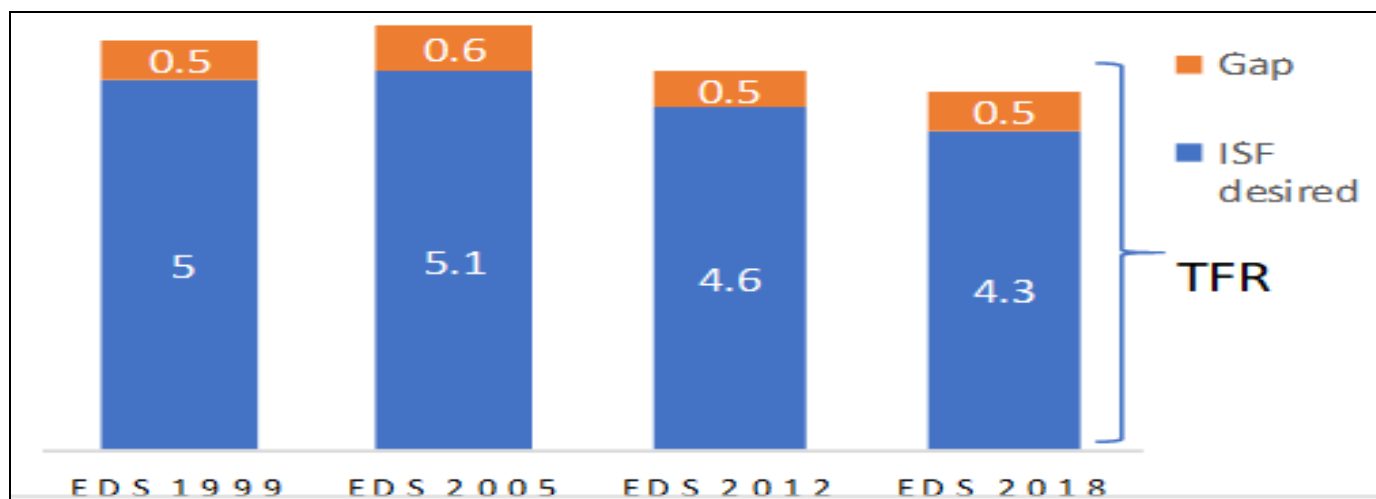


Fig 2: Trend in Desired Fertility and Current Fertility, Guinea 1999-2018

### B. Sociodemographic Characteristics of Women and Potential Demand for FP

#### ➤ Sociodemographic Characteristics of Women

Table 1 presents the socio-demographic characteristics of the population covered by this study. The first column presents the characteristics of the sample for all women aged 15 to 49 (n=10,874). The results show that 37% of women live in urban areas and 63% in rural areas. The age structure of the population highlights the youth of the Guinean population: a quarter of women (24%) are under 15, 40% are under 25. People aged 65 or over represent 4% of the population. Overall, 69% have received no education, 12% have only attended primary school and 19% have attended secondary or higher education. Almost seven out of ten women are in a union (71%), 24% of

women have never been in a union. Almost one in four women is under 20. Furthermore, just under three in ten women have not had any live-born children; nearly one in four women has at least five live-born children. Finally, nearly 19% are in the poorest quintile compared to 23% in the highest.

As for the subsample of women in union (n=7727), the results indicate that 30% of women in union live in urban areas compared to 70% in rural areas. About 10% belong to the 15-19 age group. Women in union are mostly illiterate, nearly eight out of ten women (79%). In addition, the majority of women in union live in poor households. As for the unmet need for family planning, it is 18% for all women and 22% for women in union.

Table 1: Sociodemographic Characteristics of Women

Variables	Percentage	All women	Percentage	Women in Union
<b>Place of residence</b>				
Urban	37.2	4,042	30.2	2,333
Rural	62.8	6,832	69.8	5,394
<b>Region</b>				
Boke	13.7	1,488	10.7	8,232
Conakry	13.5	1,470	13.1	1,009
Faranah	12.1	1,317	9.8	756
Kankan	11.5	1,257	14.8	1,140
Kindia	13.0	1,415	15.3	1,181
Labe	10.6	1,153	11.3	873
Mom	11.6	1,261	9.5	732
Nzerekore	13.9	1,517	15.7	1,213
<b>Age group of women</b>				
< 20 years old	23.5	2,561	9.5	733
20-29 years old	33.1	3,602	36.4	2,812
30-39 years old	25.6	2,785	32.5	210
40-49 years old	17.7	1,926	21.7	1,673
<b>Marital status</b>				
Not in union	24.3	2,645	0	-
In union	71.8	7,812	0	-
More in union	3.8	417	0	-
<b>Number of children born</b>				

0	28.2	3,072	9.5	734
1-3	38.2	4 154	46.7	3,610
4-5	18.8	2,045	24.6	1,900
6 +	14.7	1,603	19.2	1,483
<b>Women's education</b>				
None	69.3	7,532	79.1	6 111
Primary	11.7	1,272	9.4	726
Secondary or higher	19.0	2,070	11.5	891
<b>Spouse's instruction</b>				
None	72.8	5,689	71.9	5,562
Primary	6.9	535	6.8	524
Secondary or higher	11.8	924	12.4	9,545
Superior	7.2	560	7.6	589
NSP/ND	1.3	104	1.3	97
<b>Ethnicity of the woman</b>				
Sousou	19.6	2 133	19.3	1,489
Fulani	40.02	4,352	38.6	2,984
Malinke	27.7	3,013	28.7	2,213
Kissi	5.3	577	4.9	378
Toma	1.4	150	1.1	85
Guerze	5.5	605	7.1	550
Others/Foreign	0.4	44	0.3	26
<b>Religion</b>				
Muslim	85.9	9,343	87.8	6,785
Christian	12.5	1,358	10.6	820
Animist/No religion	1.6	173	1.6	123
<b>Quintiles of economic well-being</b>				
The lowest	19.9	2,167	21.9	1,689
Second	19.1	2,067	21.7	1,676
AVERAGE	18.5	2 015	20.5	1,580
Fourth	21.2	2,305	19.2	1,487
The highest	21.3	2,320	16.8	1,296
<b>Unmet need for FP</b>				
None	81.8	8,899	77.9	6,023
To space out	13.1	1,423	15.4	1,193
To limit	5.1	552	6.6	511
<b>Together</b>	<b>100.0</b>	<b>10,874</b>	<b>100.0</b>	<b>7,727</b>

➤ *Levels and Variations in Potential Demand (Unmet Needs) for FP*

Table 2 presents the proportions of all women aged 15-49 and those in a union with unmet needs for family planning, whether for spacing or limiting births, according to certain characteristics of the women.

The level of unmet needs for family planning for women in union varies significantly depending on the characteristics of the women. First, depending on the region, it is noted that it is among women in the regions of Labé (26%), Faranah (24%), Mamou (24%) and Kankan (23%) that the needs for family planning are the highest. These needs are essentially oriented towards birth spacing.

99\*According to age, there is an increase in this proportion between 15 and 40 years, rising from 20% to 26%. Approximately one in four women aged 30-39 (26%) compared to one in five in the age groups below 30 and one in six in the older group (40-49) have an unmet need for FP, particularly for spacing. However, for women aged

over 40, the needs for birth control are greater than for spacing. The level of unmet needs for family planning increases with the number of surviving children, rising from 7% among nulliparous women to 33% among those with at least five children. Among the latter women, the needs are, in the majority, oriented towards limitation (19%).

The level of education of the woman, like the level of education of the spouse, does not seem to significantly affect the level of unmet needs for family planning. Figure 2 shows that unmet needs for FP increase with the level of education in rural areas, while in urban areas, the opposite is observed. Rural women without education have less access to sources of information and FP services, are more likely to have unmet needs for FP. The low demand for FP among women without education compared to those with a secondary education and above in rural areas could also be explained by a greater attachment of these women to traditional pro-natalist reproductive norms which do not encourage the use of contraception (Akoto et al., 2002).

The results according to the ethnicity of the woman show a higher level of unmet needs among Soussou, Peul and Malinke women (about a quarter of women). In the majority of cases, these women have needs in terms of family planning to space births. According to religion, it is

among animist (31%) and Muslim (22%) women that we note the highest percentages in terms of family planning. The level of economic well-being does not seem to discriminate against women in the demand for FP.

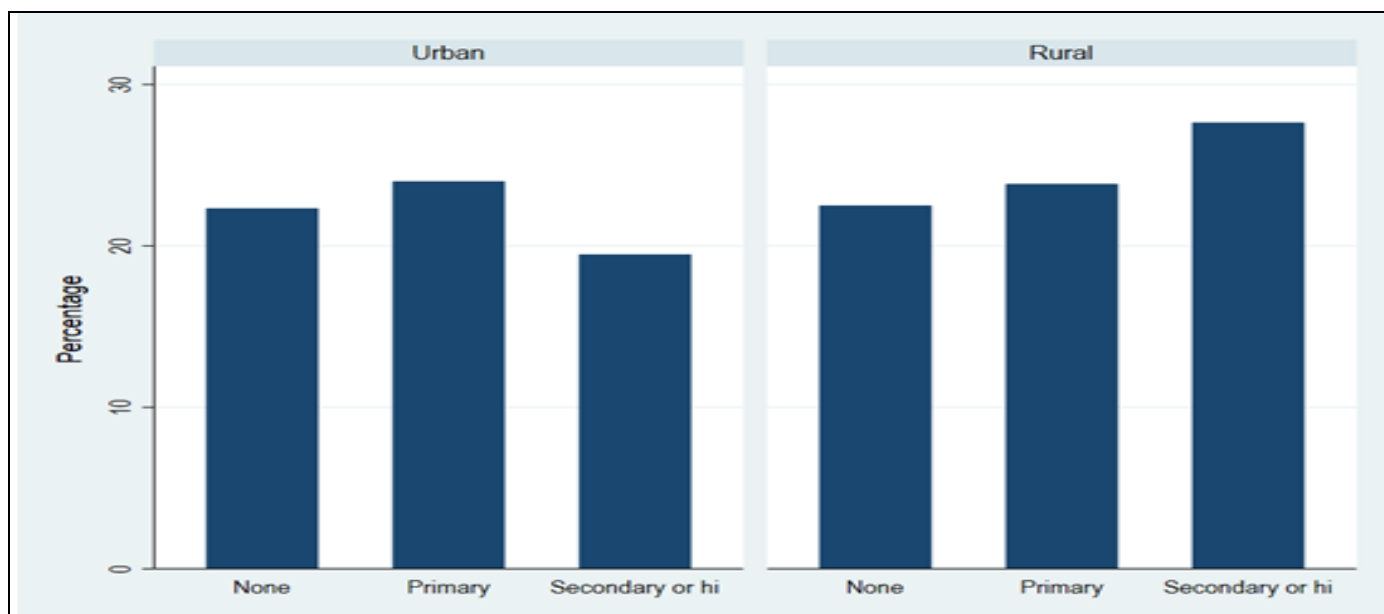


Fig 3: Total Demand for Family Planning by Place of Residence and Level of Education of the Woman, Guinea, DHS 2018

In summary, the descriptive analysis carried out above indicates that unmet needs in FP are associated with the majority of the variables retained. The associations are significant at the 10% threshold for the variables: region, age, education of the woman, number of living children,

ethnicity, religion. Only the variables environment of residence, quintile of economic well-being and education of the spouse are not significantly associated with unmet needs in FP.

Table 2: Unmet Needs for Family Planning According to Certain Characteristics of Women Aged 15-49, Guinea, DHS 2018

Variables	All women				Women in union			
	Together	To Space	To Limit	Chi2 Probability	Together	To Space	To Limit	Chi2 Probability
<b>Place of residence</b>				0.000				0.231
Urban	14.8	11.4	3.4		21.3	15.6	5.7	
Rural	19.4	13.7	5.7		22.4	15.4	7.0	
<b>Region</b>				0.000				0.008
Boke	17.5	11.3	6.2		20.2	12.2	8.0	
Conakry	13.2	10.3	2.9		20.0	14.7	5.3	
Faranah	19.3	13.1	6.2		24.4	16.2	8.2	
Kankan	19.4	12.5	6.9		23.2	14.7	8.5	
Kindia	17.3	13.2	4.1		20.5	15.3	5.2	
Labe	22.1	15.2	6.9		25.6	17.2	8.4	
Mom	19.6	14.3	5.3		23.5	16.9	6.6	
Nzerekore	16.9	14.0	2.9		20.6	16.5	4.1	
<b>Age group of women</b>				0.000				0.000
15-19 years old	9.0	8.4	0.6		20.1	18.3	1.9	
20-24 years old	17.0	15.8	1.2		20.0	18.5	1.5	
25-29 years old	20.0	18.4	1.6		22.5	19.7	2.9	
30-34 years old	24.9	18.2	6.7		26.1	18.9	7.2	
35-39 years old	24.5	14.4	10.1		26.3	15.5	10.8	
40-44 years old	22.0	8.1	13.9		23.3	8.1	15.1	
45-49 years old	11.2	2.2	9.0		11.7	2.1	9.6	
<b>Number of surviving children</b>				0.000				



0	5.3	5.1	0.2		6.5	5.8	0.7	0.000
1-3	15.9	15.7	0.2		18.1	15.8	2.3	
4-5	25.8	18.7	7.1		26.7	19.5	7.2	
6 +	32.3	13.6	18.7		33.4	14.1	19.3	
<b>Women's education</b>				0.000				
None	19.3	13.1	6.2		21.8	14.5	7.3	0.000
Primary	17.0	14.1	2.9		24.4	19.6	4.8	
Secondary or higher	12.5	11.1	1.4		21.4	18.1	3.3	
<b>Spouse's instruction</b>				0.000				
None	22.1	15.0	7.1		22.1	15.0	7.1	0.133
Primary	23.6	19.3	4.3		23.6	19.3	4.3	
Secondary or higher	21.6	15.3	6.3		21.6	15.3	6.3	
Superior	20.1	15.6	4.5		20.5	15.6	4.9	
NSP/ND	23.7	19.4	4.3		23.7	19.4	4.3	
<b>Ethnicity of the woman</b>								
Sousou	16.5	11.9	4.6	0.003	20.5	13.7	6.8	0.002
Fulani	18.3	13.3	5.0		22.3	16.0	6.3	
Malinke	18.4	12.5	5.9		23.5	15.5	8.0	
Kissi	13.6	10.5	3.1		16.9	11.9	5.0	
Toma	13.9	11.9	2.0		14.7	11.9	2.8	
Guerze	19.0	16.3	2.7		23.6	20.0	3.6	
Others	13.0	6.1	6.9		8.8	1.9	6.9	
<b>Religion of women</b>				0.000				0.000
Muslim	17.9	12.7	5.2		22.3	15.3	7.0	
Christian	15.2	12.9	2.3		18.6	15.3	3.3	
Animist/No religion	23.8	17.6	6.2		31.2	23.4	7.8	
<b>Quintiles of economic well-being</b>				0.000				0.345
The lowest	20.5	14.9	5.6		22.7	15.9	6.8	
Second	18.4	12.5	5.9		21.5	14.3	7.2	
AVERAGE	19.6	13.9	5.7		23.0	15.9	7.1	
Fourth	17.9	13.3	4.6		23.3	16.8	6.5	
The highest	12.7	9.9	2.8		19.3	14.2	5.1	
<b>Together</b>	<b>17.7</b>	<b>12.8</b>	<b>4.9</b>		<b>22.0</b>	<b>15.4</b>	<b>6.6</b>	
<b>Effective</b>	<b>10,874</b>				<b>7,727</b>			

### C. Explanatory Factors for Unmet Needs in Family Planning

To identify factors likely to influence the level of potential demand (unmet needs) for family planning in Guinea, the analysis is restricted to women aged 15-49 in a union.

Table 5 presents the results of the multivariate analysis (logistic regression) of the factors associated with unmet needs for FP among women aged 15-49 in a union and sexually active. To better understand the phenomenon, we conducted three regression models. The first relates all needs to women's characteristics; the second, the need for birth spacing; and the third, the need for limitation. Since the dependent variables are dichotomous, logistic regression is used to estimate the associations between unmet needs and sociodemographic, economic and cultural factors. Calculations are made using the STATA 15.1 software package.

Examination of relative risks (RR) for spacing and for limiting births makes it possible to identify variables significant at the 10% threshold.

The region of residence is significantly associated with the risk of having unmet needs for family planning, particularly for birth spacing. Compared with women in the Boké region, who constitute the reference category, women in the Labé and Mamou regions are more likely to have unmet needs for FP. These needs are mainly intended for birth spacing. Indeed, women in the Labé and Mamou regions are 45% and 43% more likely to have unmet needs for FP than those in Boké, respectively. The differences between Boké and the other regions are not significant, which means that women in the other regions express the same needs as those in the reference region.

Analysis by age group of women shows that, compared to young women aged 15-19, older women are two to nine times less likely to have unmet needs for family planning. For example, women aged 15-19 are twice as likely to have unmet needs as those aged 30-34; and those aged 40-44 are 68% less likely to have unmet needs than those in the reference group. Unmet needs for FP are therefore higher among young women. In other words, the older women are, the less likely they are to have needs for family planning to space or limit their births. The trend observed at the overall level is the same as for birth

spacing. However, with regard to limitation, no clear trend emerges according to the age of women. However, it is noted that the risk of having unmet needs to limit births is twice as high among women aged 40-44 compared to the group of women taken as a reference (15-19 years).

In terms of the number of surviving children, unmet needs increase significantly with the number of surviving children. Indeed, women with 1 to 3 children are four times more likely to have unmet needs than women who are childless. Women with 4 to 5 children express eight times more unmet needs than women with no children, whether for spacing or limiting births. For women with six or more children, unmet needs are even greater: they are nine times more likely to have unmet needs for spacing and 22 times more likely to have unmet needs for limiting.

The level of education of the woman is a determining factor in increasing the risk of having unmet needs in FP. Indeed, the risk of having unmet needs for birth spacing is: 25% and 32% higher for women with a primary education

level or a secondary education level or more than those without education. For unmet needs for birth control, the differences are not significant.

For the ethnic group of the woman, the analysis shows a significant association between the risk of having unmet needs for spacing only for the Guerzé and Other ethnic groups. Guerzé women would have 76% more risk of having unmet needs for spacing births than Soussou women. However, those of foreign ethnic groups would have less risk of having unmet needs than Soussou women.

In summary, it is noted that among the characteristics of women that significantly influence the unmet needs of women in Guinea, whether to space or limit births, we can retain the age of the woman, the number of living children, the level of education and the region. The variables environment of residence, level of education of the spouse, religion, ethnic group and level of economic well-being of the household do not significantly influence the unmet needs in FP.

Table 3: Relative Risk of Unmet Needs for Family Planning by Component and Significance Threshold According to Certain Characteristics of Women Aged 15-49 in Union, Guinea, DHS 2018

Variables	Total Need		Need to space		Need to limit	
	Odds ratio	Probability P>  t	Odds ratio	Probability P>  t	Odds ratio	Probability P>  t
<b>Place of residence</b>						
Urban (Ref.)	1.00	-	1.00	-	1.00	-
Rural	0.92	ns	0.95	ns	0.87	ns
<b>Region</b>						
Boké (Ref.)	1.00	-	1.00	-	1.00	-
Conakry	1.03	ns	1.17	ns	0.83	ns
Faranah	1.15	ns	1.29	ns	0.91	ns
Kankan	0.87	ns	0.94	ns	0.82	ns
Kindia	0.97	ns	1.25	ns	0.60	**
Labe	1.45	**	1.44	**	1.37	ns
Mom	1.43	**	1.65	***	1.02	ns
Nzerekore	0.99	ns	1.29	ns	0.60	ns
<b>Age group of women</b>						
15-19 years (Ref.)	1.00	-	1.00	-	1.00	-
20-24 years old	0.71	**	0.74	**	0.60	ns
25-29 years old	0.62	***	0.62	***	0.79	ns
30-34 years old	0.54	***	0.47	***	1.35	ns
35-39 years old	0.43	***	0.31	***	1.59	ns
40-44 years old	0.32	***	0.14	***	2.06	*
45-49 years old	0.13	***	0.03	***	1.14	ns
<b>Number of surviving children</b>						
0 (Ref.)	1.00	-	1.00	-	1.00	-
1-3	3.92	***	3.91	***	3.25	ns
4-5	8.92	***	7.93	***	8.81	***
6 +	17.19	***	9.15	***	22.80	***
<b>Women's education</b>						
None (Ref.)	1.00	-	1.00	-	1.00	-
Primary	1.22	*	1.25	*	1.00	ns
Secondary or higher	1.23	*	1.32	**	0.88	ns
<b>Spouse's instruction</b>						
None (Ref.)	1.00	-	1.00	-	1.00	-
Primary	1.10	ns	1.23	ns	0.75	ns



Secondary	1.04	ns	0.94	ns	1.35	*
Superior	1.15	ns	1.1	ns	1.27	ns
NSP/ND	1.05	ns	1.22	ns	0.66	ns
<b>Ethnicity of the woman</b>						
Soussou (Ref.)	1.00	-	1.00	-	1.00	-
Fulani	0.99	ns	1.13	ns	0.74	ns
Malinke	1.21	ns	1.18	ns	1.15	ns
Kissi	1.05	ns	1.01	ns	1.05	ns
Toma	1.06	ns	1.1	ns	0.76	ns
Guerze	1.62	ns	1.76	*	0.81	ns
Others	0.46	ns	0.16	*	1.03	ns
<b>Religion of women</b>						
Muslim (Ref.)	1.00	-	1.00	-	1.00	-
Christian	0.77	ns	0.8	ns	0.76	ns
Animist/None	1.20	ns	1.07	ns	1.82	ns
<b>Quintiles of economic well-being</b>						
Lowest (Ref.)	1.00	-	1.00	-	1.00	-
Second	0.91	ns	0.85	ns	1.08	ns
Average	1.00	ns	0.97	ns	1.06	ns
Fourth	1.06	ns	1.05	ns	1.03	ns
The highest	0.90	ns	0.92	ns	0.87	ns
Constant	0.08	***	0.06	***	0.01	***
Effective			<b>7727</b>			
<b>Significance threshold:</b> ***= significant at 1%; **= significant at 5%; *= significant at 10%, ns = not significant						

#### IV. CONCLUSION

The objective of this study was to assess the main determinants and explanatory factors of the unmet needs of women in union in Guinea; ultimately to provide elements to strengthen the actions of FP programs in order to increase the chances of achieving the contraceptive prevalence rate targeted by the United Nations by 2030 through the Sustainable Development Goals. The study was conducted using data from the 2018 Demographic and Health Survey. The results show that the potential demand for FP is still low in Guinea, it barely exceeds 33% of women of childbearing age: 11% use FP methods and 22% express an unmet need to space or limit births. Multivariate analysis indicates that women who have an unmet need for FP are relatively young (under 35 years old), they have not reached the desired final fertility, they are found much more among educated women, and among women from the Labé and Mamou regions.

Indeed, the higher the parity of women, the more they express an unmet need for family planning. Women who have reached a parity of 6 children or more would be more likely to have an unmet need than those who have had fewer children. Women from the younger generations (15-34) have a greater unmet need than older women. These results suggest that there is a change in the pro-natalist mentality of Guinean women. Women under 35, who are more educated and more "modern", would be more willing to space and/or limit births than their older counterparts.

Unmet needs do not vary significantly depending on the place of residence or the spouse's level of education. This result would reflect the attachment of Guinean women to pro-natalist values. Indeed, several studies conducted in Africa have shown that the use of contraception and unmet needs

vary significantly depending on the place of residence. The fact of pursuing studies up to secondary level, and of residing in the city influence the pro-natalist behaviors of women.

In addition, the results of the 2018 DHS indicate that if all needs had been met, the total fertility rate (TFR) would drop from 4.8 to 4.3 children per woman. There is an urgent need to strengthen actions undertaken to increase the use of contraception and reduce unmet needs. Priority actions would be:

- Strengthen existing reproductive health programs, with particular emphasis on raising awareness about FP and increasing the supply of services.
- Target all women of reproductive age by integrating family planning into various health services (antenatal consultations, postnatal care, abortion care) and extending FP services through Community-Based Services.
- Target each region based on the level of demand for family planning (current contraceptive use and unmet need);
- Ensuring the security of family planning commodities taking into account the potential unmet demand and the increasing trend in FP use.
- Strengthen communication programs for behavior change, particularly for the reduction or abandonment of child or early marriages;
- Continue training and development of health professionals to provide quality services to counter fear of side effects and opposition to the use of contraceptive methods;
- Improve monitoring of family planning service delivery and conduct targeted operational research to understand the complex nature of unmet and met needs both quantitatively and qualitatively.

**REFERENCES**

- [1]. Akoto Eliwo, Tambashe B., Amouzou Agbessi, Djangone Anne-Marie Rachel (2002): “*Unmet needs in family planning and contraceptive transition in Burkina Faso, Cameroon and Ivory Coast*”
- [2]. Amadou Sanni M., 1995 - "Levels and trends in unmet needs for family planning in Benin: Explanatory factors and changes over time in Benin ", African Population Studies Vol 25, December 2, 2011, 109 p.
- [3]. Garenne, Michelle. (2017). Family planning and fertility in Africa: Developments from 1950 to 2010. Ferdi WP n°194
- [4]. National Institute of Statistics (INS) and ICF. 2019. *2018 Demographic and Health Survey (DHS)* . Rockville, Maryland, USA: INS and ICF.
- [5]. Kulczycki, Andrzej (2018): “ *Overcoming Family Planning Challenges in Africa: Towards Meeting Unmet Need and Increasing Service Delivery* ” in African Journal of Reproductive Health March 2018.
- [6]. Mariko, Soumaila, Mohamed Ayad, Rathavuth Hong, Oumou Keita, and Mamadou Diop. 2009. *Contraceptive Use and Unmet Need for Family Planning in Mali, 1995–2006: In-Depth Analyses of the Mali Demographic and Health Surveys, 1995–1996, 2001, and 2006*. DHS In-Depth Analysis Reports No. 69. Calverton, Maryland, USA: CPS/DNSI and ICF Macro.
- [7]. Mboup, Gora and Nicaise Kodjogbé 1999. *Perspectives on family planning and reproductive health in Benin*. Calverton, Maryland USA: National Institute of Statistics and Economic Analysis and Macro International Inc.
- [8]. WHO: <https://www.who.int/fr/news-room/fact-sheets/detail/family-planning-contraception>
- [9]. Population Reference Bureau (2014). Sub-Saharan African women's growing desire to limit the number of pregnancies: meeting the challenge.
- [10]. Soura, Abdramane B., and Michelle Winner, 2014. *Trends in Family Planning and Age at First Union Among Women in Guinea: An In-Depth Analysis of the 2012 Demographic and Health Survey*. DHS In-Depth Analysis Reports No. 94. Rockville, Maryland, USA: ICF International.
- [11]. UNFPA. (2008). Reducing unmet need for family planning: evidence-based strategies and approaches. *Outlook No. 01* .
- [12]. Machiyama, K. and Cleland, J. 2013. “Unmet Needs Analysis in Senegal,” *STEP UP Research Report*. London: London School of Hygiene & Tropical Medicine.