Fertility of Adolescent Girls in the Manono Territory: Research of Explanatory Factors. Case of the Territory of Manono

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Abstract: *The need for a better understanding of the factors that determine the reproductive life of women has been one of the major themes of the program of action of the International Conference on Population and Development [1]. Some countries, in particular the Congo, for lack of reliable demographic data and despite their relatively high fertility level have so far been unable to carry out studies to understand procreation in the context that concerns them ; and in particular on target populations such as adolescent girls. In this work the method of descriptive statistical analysis seer was used first to end characterizing the population of adolescents who began e life faecal then we will use a method of explanatory statistical analysis that will allow us estimate the stated hypothesis. Analysis suggest that the early fertility of Congolese adolescent girls is strongly influenced by behavioural factors such as early sexuality, underutilization of contraceptive methods, early union and educational attainment ; and, to a lesser extent, par the environmental factor (religion) and family factor (standard of living swimming). Ultimately, the results of this study highlight the importance, if not urgency, of family life education and adolescent girls' access to appropriate reproductive health services.*

Keywords: Fertility, adolescent, explanatory factors

1. Introduction

"Early motherhood, Being a mother well before your girlfriends, it happens. Whether it is a surprise or a life project, a baby always upsets the everyday, especially when his own childhood is not very far.

The young population is increasing worldwide. Between 1995 and 2000, the share of young people between the ages of 15 and 24 in the world's population grew on average by 0.7 percent per year, from 1.025 billion to 1.061 billion, or 18 percent of the world's population. About 15% of these young people live in Africa [2] and they face many problems : inequalities in social, economic and political conditions ; uncertain livelihoods ; high rates of unemployment ; armed conflict and confrontation ; social exclusion ; homeless ; increasing incidence of disease, hunger and poverty ; changes in the role of the family ; inadequate opportunities for education and training. Adolescent girls (young girls aged 15-19) are an even more vulnerable group among young people because they face other additional problems such as gender discrimination and problems related to the discovery of sexuality. Unwanted pregnancies, clandestine abortions, infanticide and sexually transmitted diseases (STDs) including the HIV / AIDS pandemic. About 15 million young women aged 15 to 19 are born each year. Nearly 10% of all births worldwide are attributed to adolescent girls and 1/4 of unsafe abortions (5 million) are among adolescents aged 15 to 19 [3]. This alarming situation, although universally observed, seems particularly dramatic in Central Africa where it is estimated that one in 25 women dies as a result of pregnancy or childbirth, compared to only one woman per 10,000 in an industrialized country [4] and in the DRC the population is characterized by its extreme youth. Indeed, the proportion of people under 20 years is estimated at 61% of the total population of the country of which 52% are under 15 years of age and according to the DHS 2013-2014 the proportions of women having had their first sexual intercourse before reaching 15 exact years vary according to socio-demographic characteristics. The precocity of sexual intercourse is significantly influenced by educational attainment and marital status.

Among women in union, 29% had their first sexual intercourse before reaching the age of 15, compared to 13% for single women. Similarly, 26% of women with no education and 26% of those of primary level have had their first sexual intercourse before 15 years against 17% among those with secondary education and 4% among those with the higher level [5].

In the province of Tanganyika has itch an estimated population of 2,977,846 inhabitants in 2015 (of which 48.9 % men and 51.1 % women) this population represents almost 3% of the population of the DRC. Its density is 22 inhabitants / Km2. The Province of Tanganyika has an age pyramid of regular shape broadened at the base and tapered at the top. It has a young, high fertility, high mortality population. This situation is similar for the other three provinces (Haut Lomami, Lualaba and Haut Katanga) [6].

This study therefore proposes to contribute to the identification of the explanatory factors of the fertility precocity in the Manono Territory and to establish the relations between the traditions on the one hand and the modernity of the other, this through the global environment, the family environment, the individual characteristics of the adolescent and her sexual and reproductive behaviour. The central question in this study is: *What are the factors that contribute to the high level of adolescent fertility in the Manono Territory? "*

In answering this question, the study will thus contribute to improving the state of knowledge on the factors explaining

the fertility of adolescent girls in the Manono Territory, in order to enlighten Congolese decision-makers on the main elements to be taken. To improve and / or implement appropriate development policies and programs for adolescent girls, who are increasingly vulnerable?

2. Bibliographic Survey

The concern of scientists around early fertility is universal. Pioneering studies on this subject were carried out from the 1960s, in Western countries, particularly in the United States, where the phenomenon took on an unusually large scale with the arrival at the age of adolescence of "baby-boomer " generations. Boom, especially in the Hispanic and African-American populations: increased divorce, impoverishment of women, increased teenage pregnancies, out-of-wedlock pregnancies and abortions [7]. Adolescent fertility, described as a "social scourge ", was first analysed, very largely, as a "problem "because of the consequences on the health and well- being of mothers and children [8].]. Then by its preponderance in the African-American minority, the problem took on a political dimension of a claim to social equality. But as the problem is also increasing among white teenagers, some authors have put forward the economic cost of early pregnancy [9].

In Europe the problem seems less accentuated; but in Great Britain, where 13% of 20-year-old girls are already mothers, it is called "social suicide ". In France, where " teenagers " represent only 4% of 20-year-old girls, two researchers - Nativel and Daguerre [10] under the initiative of the National Fund for Family Allowances (CNAF) - were most interested in the " human " cost of early childbearing by asking the following questions : Who are the girls most exposed ? What reasons motivate the "personal" choice to have a child? However, faced with the prohibition of conducting surveys on ethno cultural data that prevents the identification of populations at risk in France, these authors, relying on the geography of early maternity in countries such as Italy or Canada, hypothesize that in France the phenomenon marries areas of exclusion and unemployment, especially rurality and disadvantaged suburbs. For teenagers aged 16-17, maternity would correspond to a desire to stabilize the relationship and to hope for social recognition; the absence of a biological father during early childhood would increase adolescent sexual risk behaviours and thus their propensity to become pregnant.

Using data from the World Fertility Surveys of the 1970s and 1980s, researchers began to study the fertility problems of adolescent girls in developing countries. In Africa, early fertility is the subject of a growing number of studies, research and intervention programs. Interest was first focused on early pregnancies out of wedlock or out of union, perceived as transgression of a social norm. Today, we are gradually moving to a more objective approach taking into account the health and social implications of early childbearing [11]. Indeed, since 1986 the survey's Demographic s and Health brought a renewed national statistical base, both for analysing the fertility age

and for health-related data and the delivery conditions and the health of children.

Given its magnitude and the many possible impacts it could have on society, particularly in Africa, it is important to explore further the phenomenon of widespread adolescent fertility, but a little less explored in some contexts such as in the Republic. Democratic Congo. Several avenues can therefore be envisaged to improve the state of knowledge of the phenomenon and to lead politicians to take into account in national development policies the important issue of adolescent girls' sexual and reproductive health.

3. Methods/ Approach

To achieve the specific objectives of our study, we use da ns first method of descriptive statistical analysis to characterize the population of adolescents who began e childbearing, and then the use of a method of statistical analysis per Explanatory would to test the stated hypothesis. Both methods will be accompanied with a questionnaire used to collect given are: the household questionnaire and the individual questionnaire for women aged 15-19;

1) Descriptive analysis
This phase will also be done in two stages: first we will carry out a bi-varied analysis (frequencies, cross-tabulations with application of the chi-square test) in order to assess the existence or not of relations between each of the factors with the dependent variable "Early maternity ". Then, a Factorial Analysis of Multiple Correspondences (AFCM) will be used to compare the profiles of adolescent girls in relation to early motherhood. AFCM is, in fact, a technique for analysing interdependencies between variables that we want to analyse simultaneously. The two main advantages of this method are the reduction of the information by the definition of the principal dimensions or main axes, and the possibility of graphical representation for a visualization of the "character points", or "point's individuals" and which are representations of the groups of individuals characterized by the variable. Finally, to verify the significant link between an explanatory variable and the dependent variable and to establish causal relationships, we will need to use multivariate explanatory analysis to account for the effect of the other variables and to detect possible misleading relationships.

2) Explanatory analysis
Demography offers few examples of a phenomenon that would directly "explain" another (a case that corresponds to a simple regression). More often, the phenomena examined are " explained " by the conjunction of several factors : this requires moving from a simple regression model to a " multiple regression " model, where several " explanatory " variables denoted X_1, .. ., X_p account for the variability of Y, variable " to explain ". To identify these factors, we will use **logistic regression**.

Sampling
The sample was drawn independently in each stratum. Our study focuses on young Mannoise girls aged 15-19; a representative sample at the Territorial level obtained

on the basis of the 2017 enrolment gives 1558 adolescent girls aged 15 to 19 years.

4. Results / Discussion

Data evaluation on feature common adolescent

Table 1: Number of teenage girls and response rates of the different variables

Variables	Number of teenage girls	Response rate (%)
Religion	1555	99.81
Gender of the head of household	1558	100
Level of education	1558	100
Knowledge of contraceptive methods	1558	100
Age at first intercourse	1556	99.9
Current use of contraceptive methods	1558	100
Age at first marriage	313	100

✶Evaluation of age data of adolescent girls
Age is a fundamental variable in demographic analysis. But often, its observation poses many problems because of the malfunctions of the systems of civil status spread in the countries of the Third World, in particular of sub-Saharan Africa. Also in the DHS, two questions are often asked to capture the age of the respondents: *"In what month and in what year were you born?"* And *"How old were you at your last birthday? »*. These two questions make it possible to check the reliability and the validity of the age declared by the respondent. Table 1 show the distribution of adolescent girls by age at the time of the survey. The result is a fairly normal variation in the population aged 15 to 19 years. And, a slight weakness in numbers at age 16 and at age 19, which could be explained by attractions for ages 18 years (age of the civil majority) and 20 years (round figure) respectively.

Table 2: Age distribution of adolescent girls (15-19 years)

Age	Effective	Proportion (%)
15	360	23.11
16	292	18.74
17	315	20.22
18	318	20.41
19	273	17.52
Total	1558	100

✶Evaluation of age data at first intercourse
During the survey, the following question was used to capture age at first sexual intercourse: "How *old were you when you had your first sexual intercourse (if you had one)?* The results in Table 3 show that, in general, the majority of adolescent girls in Mannoise had their first sexual intercourse before the sixteenth birthday (44.36%). The low proportion of "not reported" (0.13%) indicates a relatively good age at first intercourse, despite some attraction at age 15. However, this "good declaration "of the entry into sex life could include some errors mainly due to the sociocultural values that prohibit the sexual activity of girls especially outside of a formal union. This could lead some sexually active girls to declare that they are still inactive, hence the relatively high level (34.27%) of those who have not yet had sex. According to Kuate-Defo, young girls who are sexually precocious have a higher risk of knowing their first birth before the end of their

adolescence; the timing of intercourse is considered in most studies of adolescent fertility as the second factor explaining this phenomenon [12]. In the DRC context, Kibali et *al* conclude that *"age at first intercourse determines risky sexual behaviour" [13].*

Table 3: Distribution of teenage girls by age at first intercourse

Age	Effective	Proportion (%)
Have not had sex yet	534	34.27
10	7	0.45
11	4	0.26
12	35	2.25
13	77	4.94
14	237	15.21
15	331	21.25
16	216	13.86
17	81	5.20
18	30	1.93
19	4	0.26
Total	1558	100

✶Evaluation of data on age at first marriage
The distribution of teenage girls by age at first marriage (Table 3) shows that almost 80 % (79.91 %) of Mannoise girls are single or have not yet experienced the "first marriage" event. . . However, for those who have experienced this event, 81, 47% (or 255 out of 313) were before their 18 [th] birthday against 18.53% only (that is to say 58 out of 313) who 'experienced in the 18 [th] or 19 [th.] The analysis of data from the demography and Health I and II surveys shows that the prevalence of early marriages among women aged 18-49 has remained relatively stable in the DRC between 2007 (41.1%) and 2013 -2014 (40.7%).

Table 4: Distribution of Adolescent Girls by Age at First Marriage

Age	Effective	Frequency (%)
11	1	0.06
12	10	0.64
13	18	1.16
14	29	1.86
15	62	3.98
16	77	4.94
17	58	3.72
18	43	2.76
19	15	0.96
Never been married	1245	79.91
Total	1558	100

✶ Distribution of the variables of the family environment

Gender of the head of household
The gender distribution of the head of the household shows that 73.7 per cent of Congolese adolescent girls lived in male-headed households, while 26.3 per cent belonged to female-headed households.

The standard of living
The breakdown by standard of living of the household shows that at the time of the survey, 30.9% of Congolese teenagers resided in households with a low standard of living, compared to 21.1% in those with average standard of living. , 1% in those with high standard of living. As a result, adolescents' sexual behaviour and fertility would be

influenced, on the one hand, by a rational concern for meeting existential needs or expanding their social capital and, on the other hand, by the economic incapacity of parents. To meet these needs.

Table 5: Distribution of Teens by Family Characteristics

Variables and modalities	Effective	Frequency (%)
Gender of the head of household		
Male	1148	73.7
Feminine	410	26.3
Household standard of living		
Low	482	30.9
Way	327	21.0
Student	749	48.1

✶ **Distribution of variables of the individual characteristics of the adolescent**

Level of education
By level of education, adolescent girls with no level represent only 3.5 % of the total sample compared to 36.4 % at the primary level and 60.1 % at the secondary level or above. Numerous studies have already shown the role of women's educational level as an explanatory factor for reproductive behaviour, particularly the negative relationship between education and female fertility ; the most educated women have fewer children than those with little or no instruction at all [14], [15] .

Knowledge of contraceptive methods
The distribution of adolescent girls according to their knowledge of contraceptive methods shows that 5.5 % did not know any contraceptive method; while 3.2 % knew at least one traditional method compared to 91.3% who knew modern contraceptive methods.

Table 6: Distribution of adolescent girls by their individual characteristics

Variables and modalities	Effective	Frequency (%)
Level of education		
No level	54	3.5
Primary	567	36.4
Secondary or higher	937	60.1
Knowledge of contraceptive methods		
Any	86	5.5
traditional	50	3.2
Modern	1422	91.3

Differential Aspects from Age to the First Sexual Reports
As we have said above, the age at first intercourse directly affects the fertility of adolescent girls; its extent in some adolescent groups needs to be understood to better understand their exposure to fertility.

✶ **Socio-cultural and / or socio-economic environment and first sexual activity of the adolescent.**

Religion and adolescent sexuality
The first sexual activity is not associated (at the 10 % threshold) with religious affiliation. However, the age at first intercourse varies from one religion to another: it is among teenagers who do not belong to any religious family that we find the highest proportion of early sexual intercourse (76.5 %) and to the extreme this proportion is

relatively low among other Christians (53.1 %); between these two groups are teenagers from traditional religions (70.7 %), traditional Christian women (69.9 %) and other religions (67.0 %). Kuate-Defo, in a study of Cameroonian teenagers, reveals that compared to Muslim women and those of traditional religions, Christian girls are at least 40 % more likely to have their first sexual intercourse out of wedlock before age 20 and they among married women before this age, 22 % more likely to have a first child after marriage, and these results are robust after controlling for both socio-economic, measured and unmeasured differences between women (respectively p <.01 and p <.05).

✶ **Family environment and adolescent sexuality**

Household standard of living and adolescent sexuality
The results in Table 7 show that the first sexual activity is not associated with the standard of living of the household. On the other hand, the age at first intercourse varies according to the standard of living of the household to which the adolescent belongs and, it is in the households of low standard of living and average level (respectively 74.0 % and 73.1%). %) that there are the highest proportions of sexually advanced adolescent girls, while this proportion is relatively lower in households with a high standard of living (62.6 %). We note here a negative relationship between the age at first sexual intercourse and the standard of living of the adolescent, that is to say that the higher the standard of living increases less early are the first sexual intercourse.

Gender of the head of household and adolescent sexuality
The sex of the head of the household is neither associated with the entry into sexual life nor with the age at the first sexual intercourse, whatever the threshold retained; which means that the first sexual activity and the age at first sexual intercourse do not vary according to whether the household to which the adolescent belongs is headed by a man or a woman. Evina [15] has come up with the results according to which: "Separation of parents by break-up seems to increase the propensity of adolescent girls to first sexual intercourse and subsequently their risk of teenage pregnancy" and "life on the family's roof. The teenager with her parents greatly reduces her risk of early pregnancy. If we consider unmarried parents, the proportion of teenagers who have already started their fertile lives and who do not live with their parents is 2.5 times higher than that of teenagers living with their parents.

✶ **Individual characteristics and sexuality of adolescent girls**

Level of education and sexuality of adolescent girls
The first sexual activity is not significantly associated with the adolescent's level of education (Table 7). On the other hand, the age at first intercourse varies according to the level of education of the adolescent girl, and it is for teenagers at the primary level that we find the highest proportion (75.8 %) of sexually precocious compared to a relatively small proportion for those in high school or higher (64.6 %); Adolescent girls with no education are at an intermediate level (68.1 %). This implies that the effect of educational attainment on adolescent sexuality is not

continuous. According to one study, adolescent sexual education supports equitable attitudes among boys, including a sense of shared responsibility for preventing early and unwanted pregnancies (Trivedi et al, 2009).

Table 7: Differential analysis of first sexual activity

Variables and modalities	Intensity of first sexual activity			Age at first intercourse		
	inactive	active	Total	precocious	Not early	Total
Religion	ns			*		
Traditional Christians	35.1	64.9	100	69.9	30.1	100
Other Christians	36.9	63.1	100	53.1	46.9	100
traditional	35.7	64.3	100	70.7	29.3	100
Other religions	36.9	63.1	100	67.0	33.0	100
Without religion	36.4	63.6	100	76.5	23.5	100
Household standard of living	ns			***		
Low	34.5	65.5	100	74.0	26.0	100
Way	35.7	64.3	100	73.1	26.9	100
Student	36.8	63.2	100	62.6	37.4	100
Level of education	ns			***		
No level	31.0	69.0	100	68.1	31.9	100
Primary	36.9	63.1	100	75.8	24.2	100
Secondary or higher	35.4	64.6	100	64.6	35.4	100
Together	35.8	64.2	100	68.9	31.1	100
*** Significant at the 1% threshold; ** Significant at the 5% threshold; * Significant at the 10% threshold; ns = not significant						

Differential Aspects from Age to First Marriage
Like age at first intercourse, age at first marriage directly affects adolescent fertility; its extent in some adolescent groups also helps to better understand their exposure to fertility.

✶ Socio-cultural / socio-economic environment and first marriage of adolescent girls
Results from Table 8 shows that, in general, 1 9.7 % of male-female adolescents were already married (or in union) at the time of the survey, and 78 % of these adolescents

Religion and nuptiality of adolescent girls
On the religious level, Table 8 shows that, firstly, the marital status of the adolescent is not a function of her religion (result not significant at the 10 % threshold). On the other hand, the age at first marriage varies from one religion to another, and it is among the "other Christians" that virtually all teenage girls in a union have been at an early age (99.7 %). Opposite are teenagers of traditional religions (65.8 %). Between these two groups, we find the "other religions" (84.4%), the "without religion" and the traditional Christians (respectively 76.4% and 76.2%). Data from the Demography and S ante Surveys highlight a causal relationship between religious affiliation and early marriage, which appears to be stronger in 2013-2014 than in 2007. It shows that early marriages are less frequent among Catholic women than among followers of other religious denominations. Apart from Catholics, there is not much difference in the behaviour of other Christian women (including Protestants) in terms of early marriage in both 2007 and 2013-2014. On the other hand, non-Christians are relatively more likely to marry at a young age.

✶ Family environment and nuptiality of adolescent girls

Household standard of living and nuptiality of adolescent girls
The standard of living is strongly correlated with the marital status of the adolescent, but not with age at first marriage. The proportion of teenagers who have already experienced e first marriage at the time of the survey is higher in households of low living standards (23.6 %) than in those of high standard of living (15.4 %); households with average standard of living are at an intermediate level (22.3%). Here too, a little like for sexuality, there is a negative relation between the standard of living and the marital status of the teenager, that is, the higher the standard of living, the more the unions become less frequent.

Gender of head of household and nuptiality of teenage girls
Table 8 shows that the adolescent's marital status is strongly correlated (1 % threshold) with the sex of the household head to which she belongs, and it is in male-headed households that found the highest proportion of teenage girls in union (22.6 %) compared to only 12.1 % for female-headed households. But the age at first marriage is not associated with the sex of the head of the household: this implies that the earliness of the first union does not vary according to whether the adolescent lives in a household where the head is male or female.

✶ Individual characteristics and nuptiality of adolescent girls

Level of education and nuptiality of adolescent girls
The educational level is associated with the marital status of the teenager at the 5 % threshold. The highest proportion of adolescent girls already married, at the time of the survey, is among girls with no education (31.6 %), while this proportion is lower among secondary school or higher (17.5 %). Teenagers at the primary level are at an intermediate level (21.9 %). The relationship between marital status and the level of education of adolescent girls is continuous. Age at first marriage is not associated with the adolescent's level of education, that is, the earliness of the first union remains unchanged regardless of the adolescent's level of education.

✶ **Age at first sexual intercourse and nuptials of teenage girls**

Early sexual intercourse is strongly associated with marital status and age at first marriage (5 % and 1 %, respectively). The proportion of adolescent girls who are already married is higher among sexually advanced teenagers (32.9 %) than among those who had their first sexual intercourse at a relatively early age (26.0 %). With regard to age at first marriage, the highest proportion of first-time child marriage (86 %) is among sexually-advanced teenagers, compared to 58.3 % for those who first had sex at a relatively young age. less early.

Table 8: Differential analysis of first marriage

Variables and modalities	Marital status			Age at first marriage		
	Single	Married	Total	precocious	Not early	Total
Religion	N s			*		
Traditional Christians	81.5	18.5	100	76.2	23.8	100
Other Christians	84.0	16.0	100	99.7	0.3	100
traditional	73.3	26.7	100	65.8	34.2	100
Other religions	78.4	21.6	100	84.4	15.6	100
Without religion	79.5	20.5	100	76.4	23.6	100
Gender of the head of household	***			ns		
Male	77.4	22.6	100	77.4	22.6	100
Feminine	87.9	12.1	100	86.3	13.7	100
Household standard of living	***			ns		
Low	76.4	23.6	100	81.4	18.6	100
Way	77.7	22.3	100	78.3	21.7	100
Student	84.6	15.4	100	76.2	23.8	100
Level of education	***			ns		
No level	68.4	31.6	100	92.0	8.0	100
Primary	78.1	21.9	100	75.7	24.3	100
Secondary or higher	82.5	17.5	100	79.7	20.3	100
Age at first intercourse	**			***		
10 - 15 years	67.1	32.9	100	86.0	14.0	100
16 years old and over	74.0	26.0	100	58.3	41.7	100
Together	**80.3**	**19.7**	**100**	**78.8**	**21.2**	**100**
*** Significant at the 1% threshold; ** Significant at the 5% threshold; * Significant at the 10% threshold; ns = not significant						

Differential Aspects of Contraceptive Practice

Table 9 gives the results of differential analyses of the use of contraceptive methods. Overall, it appears that at the time of the survey, 10.5 % of adolescent girls used modern contraceptive methods compared to 61.6 % of those who did not use any method ; while the prevalence of traditional contraceptive methods was 27.9 %.

✶ **Socio-cultural / socio-economic environment and contraceptive practice of adolescent girls.**

The first part of Table 9 deals with socio-cultural and / or socio-economic variables. Of all these variables, only religion is not associated with the use of contraceptive methods.

Religion and contraceptive practice of adolescent girls

It resort the results of Table 9 that contraceptive use is not associated with the religion of the teenager, that is to say that the contraceptive behaviour is virtually identical regardless of what religion of the teenager.

✶ **Family environment and contraceptive practice of adolescent girls**

Of the three variables in the family environment only regular monitoring of TV is not associated with the use of contraceptive methods (at the 10% level) ; the other variables (gender of the household head and standard of living of the household) are associated with the 1% threshold.

Household standard of living and contraceptive practice of adolescent girls

The highest proportion (13.1%) of adolescent girls who use modern contraceptive methods is in households with a high standard of living, while the lowest proportion (6.1 %) is for households with a low standard of living. life; adolescents with average standard of living occupy an intermediate position (9.8 %).

Gender of the head of household and contraceptive practice of teenage girls

There is differential behaviour between adolescent girls in households headed by men and those in households headed by women. The latter are those who use the most modern contraceptive methods (15.9 %) than those in households headed by men (8.5 %).

✶ **Individual characteristics and contraceptive practice of adolescent girls**

All variables relating to adolescent characteristics (level of education, knowledge of contraceptive methods and knowledge of the ovulatory cycle) are associated with the use of contraceptive methods at the 1 % level, with the exception of marital status which is not associated with it even at the 10 % threshold.

Level of education and contraceptive practice of adolescent girls

The proportion of adolescent girls who use modern contraceptive methods is higher among girls at secondary level or higher (14.3 %) than among women without education (0.9 %); teenagers at the primary level occupy an intermediate position (5.9 %). An analysis of studies conducted in Nigeria, Mexico, the United States, and Europe has shown that the combination of education and promotion of contraception reduces the risk of early or unwanted childhood in adolescents [17].

A large study conducted in Bangladesh showed that when teachers give students directly for information on health services, adolescent girls are 3.7 times more likely to use these services and the observed higher rates of use of condoms [18].

Knowledge of contraceptive methods and practices of adolescent girls

The results in Table 9 show that the use of modern contraceptive methods largely depends on the adolescent's knowledge of these methods. At the time of the survey, only adolescents who knew modern contraceptive methods used them (11.6 %), while this proportion was nil in the others (0.0%). The fact that adolescent girls have received education courses sex at least once per week and the advice of a qualified professional increases 40% chances of not becoming pregnant at an early age or con be and 30% of those graduating from secondary school (Coalition for Evidence based Policy, 2015).

Table 9: Differential Analysis of the Use of Contraceptive Methods

Variables and modalities	Use of contraceptive methods			
	Any	traditional	Modern	Total
Religion	N s			
Traditional Christians	61.4	27.8	10.8	100
Other Christians	60.6	29.7	9.7	100
traditional	65.7	29.5	4.8	100
Other religions	62.4	27.3	10.3	100
Without religion	57.6	28.1	14.3	100
Gender of the head of household	***			
Male	63.5	28.0	8.5	100
Feminine	56.8	27.3	15.9	100
Household standard of living	***			
Low	63.8	26.4	9.8	100
Way	67.3	26.6	6.1	100
Student	57.2	29.7	13.1	100
Level of education	***			
No level	67.5	31.6	0.9	100
Primary	66.0	28.1	5.9	100
Secondary or higher	58.3	27.4	14.3	100
Knowledge of contraceptive methods	***			
Any	100.0	0.0	0.0	100
traditional	73.5	26.5	0.0	100
Modern	58.4	30.0	11.6	100
Age at first intercourse	N s			
10 - 15 years	43.9	39.8	16.3	100
16 years old and	40.5	42.6	16.9	100

over				
Marital status	N s			
Single	62.3	28.0	9.7	100
In union	59.2	27.3	13.5	100
Age at first marriage	N s			
11 - 17 years	57.7	27.7	14.6	100
18 years old and over	63.3	26.4	10.3	100
Together	**61.6**	**27.9**	**10.5**	**100**
*** Significant at the 1% threshold; ** Significant at the 5% threshold; * Significant at the 10% threshold; ns = not significant				

Differential Aspects of Fertility P RECOCE Adolescents in the Territory of MANONO

This section presents the variations in the fertility of adolescent girls in the Manono Territory, thus highlighting the variations in the extent of the phenomenon between the categories of adolescent girls, according to the characteristics retained in the study. In general, it appears that at the time of the survey, 20.8 % of adolescent girls had had early maternity.

✦ Socio-cultural / socio-economic environment and early motherhood

Table 10 shows associations between environmental variables and adolescent fertility; it thus gives the levels of the phenomenon in each: ethnic group, religion, socialization environment and place of residence.

Religion and early motherhood

Religion is associated with early childbearing at the 5 % threshold, and teenage followers of traditional religions have the highest proportion of early motherhood (31.6 %), unlike non-religious adolescents who have the lowest proportion (14.4 %). "Other Christians " and " other religions" have relatively similar proportions (respectively 24.9 % and 23.6 %), whereas teenagers of traditional Christian religions have a relatively small proportion (19.1 %).

Table 10: Socio-cultural / socio-economic environment of adolescent girl and early motherhood

Variables and modalities	Early motherhood		
	YES	NO	TOTAL
Religion	**		
Traditional Christians	19.1	80.9	100
Other Christians	24.9	75.1	100
traditional	31.6	68.4	100
Other religions	23.6	76.4	100
Without religion	14.4	85.6	100
Together	20.8	79.2	100
*** Significant at the 1% threshold; ** Significant at the 5% threshold; * Significant at the 10% threshold; ns = not significant			

✦ Family environment and early maternity

Associations between early motherhood and the family environment of the adolescent presented in Table 11.

Head of household sex and early motherhood

Early maternity does not vary with the sex of the head of the household to which the teenager belongs, the other variables.

Household standard of living and early maternity

The proportion of adolescent mothers who are mothers at an early age is higher in households with average living standards (29.0%), and much lower in households with a high standard of living (14.6%); low-income households are relatively in a high position.

Empirical studies have shown that within the same country, adolescent girls from the richest families have the lowest fertility [20]. This link is achieved by increasing the financial and material resources it receives ; the quality of education it can receive, the use of contraceptive methods and a certain change in attitudes. Here, we can think that the fact that teenage girls live in a household where wealth allows these factors to play separately or together can help them better control their fertility.

Table 11: Teenage family environment and early motherhood

Variables and modalities	Early motherhood		
	Yes	No	Total
Gender of the head of household	ns		
Male	21.8	78.2	100
Feminine	18.3	81.7	100
Household standard of living	***		
Low	23.8	76.2	100
Way	29.0	71.0	100
Student	14.6	85.4	100
*** Significant at the 1% threshold; ** Significant at the 5% threshold; * Significant at the 10% threshold; ns = not significant			

✶ **Individual characteristics of the teenager and early motherhood**

All variables related to adolescent characteristics are associated with early pregnancy at 1 % (Table 12).

Level of education of the adolescent girl and early motherhood

Regarding the relationship between the adolescent's level of education and early childbearing, we observe a differential behaviour between the different modalities, that is to say that adolescents without education have the best known Early maternity (29.8 %), while those at the secondary level or higher are lower (18.0 %) experiencing this event. Adolescent girls at the primary level (24.2 %) are, to some extent, at an intermediate position. However , the UNFPA study [21] on different African countries south of the Sahara shows that in Burundi the proportion of adolescent girls already entering into fertile life increases with the level of education ; while in Ghana and Gabon, the effect of educational attainment on adolescent fertility is not continuous.

Knowledge of contraceptive methods and early maternity

The results in Table 12 show that, at the time of the survey, the highest proportion (22.6 %) of adolescent mothers who are mothers at an early age are found among girls who were aware of modern contraceptive methods, while the lowest proportion (2.0 %) is for those who did not know any method; teenagers with traditional methods occupy an intermediate position (11.0 %).

Marital status and early maternity

With regard to marital status, single teenagers are significantly less likely (10.6%) than those in union (61.7%) to have early maternity. In a study on Cameroon, Calvès [22] shows that for unmarried adolescents, poor girls use pregnancy as a means to benefit from the financial and material support of a richer partner.

Table 20: Characteristics of the teenager and early motherhood

Variables and modalities	Early motherhood		
	Yes	No	Total
Level of education	***		
No level	29.8	70.2	100
Primary	24.2	75.8	100
Secondary or higher	18.0	82.0	100
Knowledge of contraceptive methods	***		
Any	2.0	98.0	100
traditional	11.0	89.0	100
Modern	22.6	77.4	100
Marital status	***		
Single	10.6	89.4	100
In union	61.7	38.3	100
*** Significant at the 1% threshold; ** Significant at the 5% threshold; * Significant at the 10% threshold; ns = not significant			

5. Conclusion

This study aims to contribute to improving the state of knowledge on the factors explaining the fertility of adolescent girls in the Manono Territory, in order to enlighten Congolese decision-makers on the main elements to be taken into account. To improve and / or implement appropriate development policies and programs for adolescent girls. More specifically, she sought to:
- Describe the changes in adolescent fertility;
- To profile adolescent girls most at risk of early childbearing;
- Identify explanatory factors for early fertility.

In order to achieve our objectives, we have resorted to methods of statistical descriptive and explanatory analysis.

Thus, some interesting results emerge from this study, and should be reviewed to make some recommendations for all practical purposes.

In the bi-varied descriptive analysis, it was found that: is religion, the middle of socialisation, the standard of living of the household and level of education are discriminating factors of precocious sexuality of adolescents in the territory of Manono. With regard to first marriage, it appears that religion and age at first intercourse are significant differentiators of early marriage among Congolese adolescent girls. A significant differentiation of adolescents regarding contraceptive use is through known factors: The middle of socialisations, gender of the household head, household standard of living, level of education, and knowledge of s contraceptive methods. Finally, early fertility Congolese adolescents is highly differentiated by factors : is religion, the middle of socialization , household living standards, education level, knowledge of contraceptive

methods, marital status , age at first intercourse and age at first marriage.

The Multiple Correspondence Factor Analysis (AFCM) identified two groups of adolescent girls. On the one hand, adolescent girls most at risk of early motherhood (Group1), these have the following characteristics : most are followers of traditional churches, socialized, households to which they belong have a relatively low standard of living ; most of them have no level of education except the primary level, already in union and whose first sexual intercourse was early.

On the other hand, those who are less exposed to the risk of early motherhood (Group 2) and who have the following characteristics : many practice traditional Christian (or other Christian) religions, socialized, they belong to households of average standard of living ; they have the secondary education level or more, mostly single and their first sexual intercourse has been less precocious.

6. Future Scope

In view of all the above, we consider that this study has reached its goal of providing a relative answer to the factors explaining the fertility of adolescent girls in the Manono Territory. However, this study is not free of limits. The first limitation comes from the fact that it is fundamentally based on a quantitative approach; whereas the combination of this one with qualitative data of the sociological, anthropological or even psychological kind would be more useful for an optimal understanding of the phenomenon. The second limitation comes from the lack of some information in our database ; Indeed, the absence of certain variables and the fact that the discussion of family planning with parents, the age at puberty and, above all, the variables relating to the institutional environment, made it impossible to measure their effects considered relevant in Literature. The next data collection operations in Tanganyika Province and specifically in the Manono Territory, and elsewhere, should take into account these aspects to improve the quality of information.

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