

Knowledge and Practices of Family Planning among Adolescents in the Sahelian Environment of Mali

Sidibe Drissa Mansa^{1,5}, Traore Ousmane^{2,5*}, Diakité Siaka², Tembiné Intibeye³, N'Diaye Mamadou⁴, Dembélé Mamadou⁵, Sidibé Souleymane⁶, Goita Issa Souleymane¹, Diarra Ouncoumba⁵, Traoré Pierre Rodrigue⁵, Dicko Fatoumata¹, Keita Adama Diaman²

¹Department of Family Medicine Community Medicine, Faculty of Medicine and Odontostomatology (FMOS) of the University of Sciences, Techniques and Technology of Bamako (USTTB), Mali

²Department of Radiology and Medical Imaging at Point "G" University Hospital Center Bamako-Mali

³Regional Health Directorate of Mopti, Mali

⁴Radiology Department of the Military Health Center of Bamako-Mali

⁵Lecturer and Researcher at the Faculty of Medicine and Odontostomatology of the University of Sciences, Techniques and Technologies of Bamako-Mali

⁶Banconi Community and University Health Center, Bamako, Mali

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*Corresponding author: Traore Ousmane

Department of Radiology and Medical Imaging at Point "G" University Hospital Center Bamako-Mali

Abstract

Original Research Article

Introduction: Family planning is a "way of spending and living, in order to improve the health of the family. It saves the lives of adolescents. In this work, the authors studied the knowledge and practices of adolescents in relation to family planning in five health areas in Mali in 2022, the objective of which was to describe the knowledge and practices of adolescents in relation to family planning. **Methodology:** This was a cross-sectional, quantitative study, the survey of which was conducted between March and April 2022 in five health areas in Mali and targeted single adolescents aged 15 to 19. We used a structured questionnaire administered in individual interviews, the data of which were collected using KoboCollect. The analysis was done with SPSS 22 software. **Results:** During our survey, 1,404 young adolescents were targeted. We recorded a participation rate of 92% of cases (n= 1287). Although an equal distribution between girls and boys was planned for the present survey, boys were more numerous than girls (51.7% vs 48.3%). Except for the male condom, all other family planning methods were better known by girls than boys. Indeed, 29% of girls said they did not know any family planning method compared to 37% of boys. Despite good knowledge of family planning methods, more than 77% of girls and boys did not use any family planning method. Boys used condoms more (21.4%) due to ease of access (47%), lower cost (44%) and no need for assistance in its administration (18%). They mainly obtained their supplies from pharmacies (52%); from shops (40%) and only 10% obtained their supplies from the health center. As for girls, they used implants more (15.1%) because of their longer duration in (30%) and their availability (17%). **Conclusion:** Despite the good knowledge of family planning methods by adolescents in Mali, more than 77% of girls and boys did not use any family planning method. If they managed to use it, boys preferred condoms and girls implants (15.1%).

Keywords: Knowledge, Practice, Adolescents, Sahelian Environment, Mali.

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INTRODUCTION

Family planning is a "way of spending and living, which individuals and couples adopt of their free will based on precise knowledge, attitudes and thoughtful decisions, in order to improve the health and well-being of the family group and therefore, to contribute effectively to the social development of a country" [1]. With an average of 5.1 children per woman, sub-Saharan Africa has one of the highest fertility rates

and the fastest population growth in the world [2]. This has resulted in a mismatch between available resources and the population, leading to cases of famine in these countries in the grip of the global economic crisis [2]. Mali quadrupled its population between 1960 and 2020. This demographic growth implies needs for access to health, education and employment for new arrivals [3]. Adolescents (15-19 years) represented 33% of the population of Mali with a fertility rate of 165/1000 [4]. There is currently a decrease in the fertility rate in many

countries, but teenage pregnancy is increasing every year and is a concern in many countries [5]. These teenage pregnancies pose health risks not only for babies, but also for young mothers, mainly linked to the immaturity of the mother's body and also to her lack of psychological maturity in relation to the care of the child [6, 5]. Family planning saves the lives of adolescents by helping them avoid pregnancies during this high-risk period and by reducing deaths attributable to AIDS [7]. In this work, the authors studied the knowledge and practices of adolescents in relation to family planning in five health areas in Mali in 2022 with the aim of describing the knowledge and practices of adolescent girls in relation to family planning.

METHODOLOGY

This was a quantitative and cross-sectional study conducted in a participatory manner with adolescents over a period of 2 months (March-April) 2022. The survey was carried out in five health areas of Mali comprising three urban areas, two rural areas in the regions of Sikasso, Koulikoro, Ségou, Kayes and the district of Bamako respectively. The survey was conducted among adolescents in the villages/neighborhoods of the health areas. The survey unit was the household and the participants were the targeted persons identified within the households. The team consisted of interviewers, interviewers and supervisors who had undergone training before their deployment in the field. The inclusion criteria were

adolescents (girls and boys aged 15 to 19 who were single). The sample size was calculated by area based on the total number of households in the health areas, but also on the size of the population targeted by the survey. A structured questionnaire was developed and administered in individual interviews. Data were collected and entered on tablets/smartphones using the KoboCollect application. It was calculated using Epi Info7 software. And analyzed using Excel and SPSS 22 software. The free and informed consent of participation of all targets was requested at the beginning of the survey and all individuals were informed of their right to refuse to participate, to withdraw at any time or not to answer certain questions, without justification or any prejudice.

RESULTS: During our survey, 1404 young adolescents were targeted. We recorded a participation rate of 92% (n= 1287)

Sociodemographic Characteristics of Adolescents

There was an active participation of girls between 15-17 years old with a rate of 61.7% of cases (**Table I**). Secondary school students were the most participatory level of education with 30.70% of cases followed by secondary school students (high school and/or vocational) with 29.44% of cases. The male gender was the most represented with 30.71% of cases at the secondary level and the female gender with 33.93% of cases at the second cycle level (**Table II**).

Table 1: Distribution of participants by age category and gender

Age category (%)	Gender P value		P value <0,001
	Female (n=618)	Male (n=665)	
15- 17 years old	61,7	38,3	
18 and over	42,0	58,0	

Table 2: Distribution of participants by level of education and gender

	Female (n=616)	Male (n=661)	Total (n=1277)	P- value
Level of education (%)				0,304
1st cycle	14,12	16,19	15,19	
2nd cycle	33,93	27,69	30,70	
Literate	1,30	0,91	1,10	
None	10,88	8,32	9,55	
Koranic	8,77	13,62	11,28	
Secondary (high school/vocational)	28,08	30,71	29,44	
Higher education	2,92	2,57	2,74	

Adolescents' Knowledge of Family Planning Methods

In our study, all family planning methods were better known by girls than boys except the condom. The most known family planning method among boys was

the male condom, i.e. 44.7% of cases. Adolescent girls were especially aware of the implant in 59.6% of cases (Figure 1).

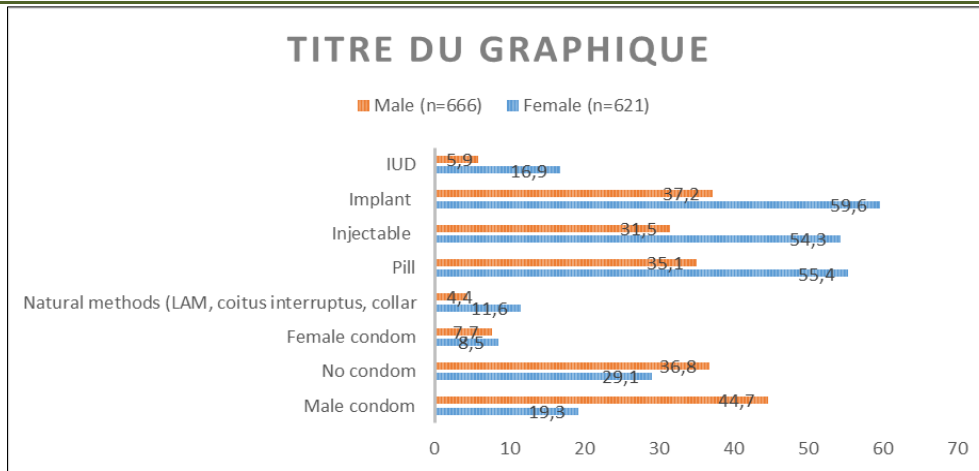


Figure 1: Distribution of participants according to their knowledge of family planning methods and sex.

Adolescent Family Planning Practice

In our series, more than 77% of girls and boys did not use any family planning method. There was no

statistically significant difference between girls and boys in the use of any family planning method (Figure 2).

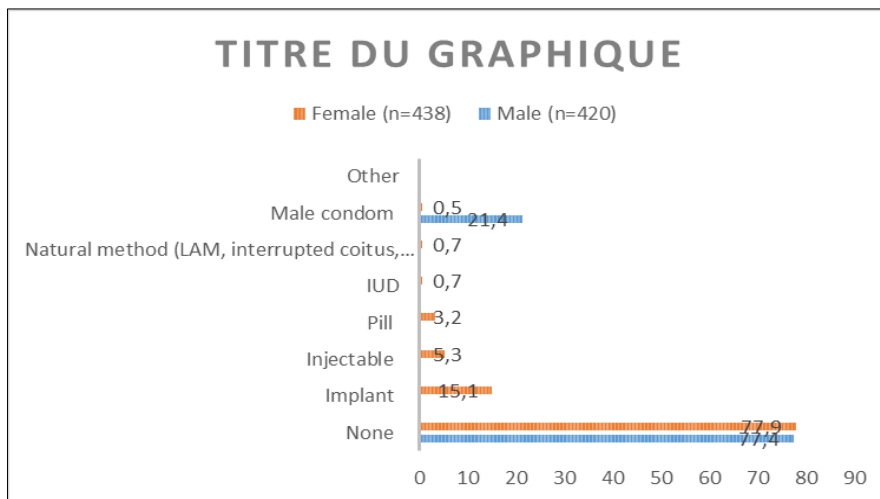


Figure 2: Distribution of participants by use of family planning methods and gender

Boys used condoms more due to ease of access in 47% of cases, lower cost in 44% of cases and no need for assistance in its administration in 18% (Figure 3).

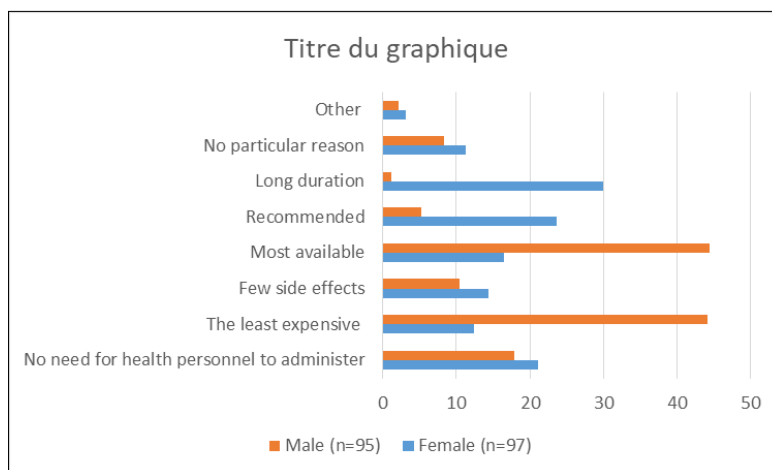


Figure 3: Distribution of participants according to reasons for using a family planning method and gender

Boys mainly obtained their supplies from pharmacies in 52% of cases; from shops in 40% of cases and only 10% from the health center. Girls used implants more because of their longer duration in 30% of cases,

while using a planning method based on recommendations from a third party in 24% of cases and its availability in 17% of cases (Figure 4).

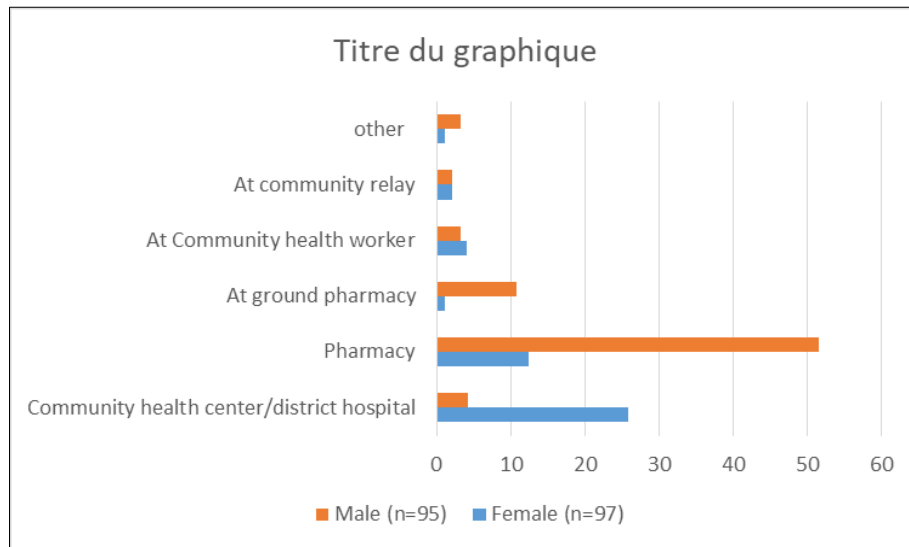


Figure 4: Distribution of participants according to family planning method supply locations and gender.

DISCUSSIONS

During our survey, 1404 young adolescents were targeted. We recorded a participation rate of 92% of cases, i.e. 1287 participants. The main reasons given for not reaching the targets were the difficulty of reaching adolescents due to the survey period coinciding with that of the rural exodus of young people (girls and boys) to large cities, the “unmarried” eligibility criterion limiting the reach of girls since early marriage exists in all these localities.

Socio-Demographic Characteristics of Adolescents

Although an equal distribution between girls and boys was planned in the present survey, boys were more numerous than girls (51.7% vs 48.3%) for different reasons: girls marry young while the eligibility criterion for adolescents was that they were not married. In terms of educational level, there was no significant difference between girls and boys ($p=0.304$). The girls surveyed were younger (between 15 and 17 years) than the boys (61.7 vs 38.3%) ($p<0.001$). These results could be explained by the fact that the majority of girls from 18 years were already married.

Adolescents' Knowledge of Family Planning

Except for the male condom, all other family planning methods were better known by girls than boys, which could indicate a lack of involvement of boys in community awareness activities on family planning. The most known family planning method among boys was the male condom in 44.7% of cases. This observation was made by Diarra. S in 2014 who found 97.9% of cases [8]. In our study, adolescents were mainly aware of the implant in 59.6% of cases compared to the pill in 72.4% of cases in the study by Diarra.S [8]. Indeed, 29% of girls

said they did not know any method compared to 37% of boys (statistically significant difference, $p=0.004$).

Adolescent Family Planning Practice

Despite good knowledge of family planning methods, more than 77% of girls and boys did not use any family planning method; which could expose them not only to unwanted and early pregnancies, but also to sexually transmitted diseases. No statistically significant difference was found between girls and boys in the use of a family planning method. This result was higher than that of Justin Dansou, Charles Houton, Labaly Touré in 2023, who found an overall contraceptive prevalence of 23% of cases [9]. Indeed, boys used condoms more in 21.4% of cases due to ease of access in 47% of cases, lower cost in 44% of cases and the absence of a need for assistance in its administration in 18% of cases. They mainly get their supplies from pharmacies in 52% of cases; from shops in 40% of cases and only 10% of cases get their supplies from the health center. As for girls, they used implants more in 15.1% of cases because of their longer duration in 30% of cases, while using a planning method based on recommendations from a third party in 24% of cases and its availability in 17% of cases. Dieudonné Mukendi Mpunga found in the Democratic Republic of Congo in 2018 that adolescent girls were in favor of using natural methods such as periodic abstinence, fearing the side effects and adolescents the male condom [10].

CONCLUSION

Our work shows that despite adolescents' good knowledge of family planning methods, most girls and boys did not use any family planning method. If they were able to use it; boys preferred condoms more

because of their ease of access, lower cost and the absence of a need to be assisted in its administration. Girls preferred implants more because of their longer availability. It is necessary to set up a real communication strategy by the Ministry of Health and Public Hygiene of Mali through family doctors/community doctors with adolescents for an effective change in behavior.

Conflict of Interest: The authors declare that they have no conflict of interest concerning this work.

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