

Family Planning Knowledge and Practices among Reproductive Age Women in Widou Thiengoly, Louga Region, Senegal

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Abstract

Family planning is an effective intervention to improve the health of the mother, newborn and child. It was introduced in Senegal in the 1960s. Significant disparities were noted between urban and rural areas. This research aimed at measuring family planning methods knowledge and practices among reproductive age women (RAW) in the village of Widou Thiengoly, Louga region, Senegal. A descriptive and analytical cross-sectional study was carried out from 12 to 20 August 2016 and involved 150 RAW with an average age of 29.34 years. They were mostly married (98%), with a fertility rate of 3.22 children/woman. 67.3% of RAW knew at least one FP method and the contraceptive prevalence was 40.7%. Birth spacing is the main reason or utilization for more than half of users, while for non-users, more than half were ignorant of FP. Knowledge and practices of contraception were not related to the age of WCA, or the number of children. Fears or experiences of side effects were barriers to initiation and continuous use of FP methods, hence the importance of focusing awareness campaigns on alleviating fears about side effects.

Keywords

Knowledge, Practices, Family Planning, Widou Thiengoly-Senegal

1. Introduction

Sexual and reproductive health is a human right that assumes that people have the freedom to choose to have children as they wish and want, with access to adequate health services [1].

Among these health services, family planning (FP) is recognized as one of the most effective interventions to improve maternal, newborn and child health through reduction of morbidity and mortality in these categories, as well as the elimination of vertical transmission of HIV/AIDS [2]. Thus, it offers the possibility of having a responsible, satisfying and safe sexuality.

Still called “planning familial” in Senegal, FP is consisted of contraception and sterilization. Contraception refers only to reversible means that is to say, *i.e.* those making temporarily infertile, as for sterilization is composed of permanent and irreversible methods [3].

Methods to control births had been adopted long ago by communities, for example women who introduced stones as far as possible into their genital organ (in Mesopotamia, 1600 B.C.) or a sponge called “moukh” (Aramaeans, 2nd century A.D.) so as not to get pregnant [3].

In the nineteenth century, from the observation that population growth far exceeds that of resources, the economist Thomas Malthus advocated for the reduction of rapid growth of the population, which would not prevent the continuation of sex life [3].

From the writings of several authors, the FP formally originated in the United States in 1952 thanks to a nurse named Margaret Sanger, with the aim of saving women from multiple pregnancies and at risk, especially in disadvantaged areas [4]. From 1911, Margaret Sanger embarked on the fight for contraception by publishing series of articles, books, congresses and conferences on birth control. In 1921, she founded the American Birth Control League, which in 1942 became family planning. After long years of fighting, it was not until 1951 that Margaret Sanger invited Gregory Pincus for the development of oral contraception. It took almost ten years of research sponsored by Katharine McCormick so that the first oral contraceptive “Enovid”, called “the pill” in 1960, was put on the market [5].

It was around 1964 that FP was introduced in Senegal by the private clinic Croix Bleue [6]. It was the first FP center in Dakar but also in Senegal, followed by the clinic of the Senegalese Association for Family Welfare (ASBEF) in 1975 [7]. Since then, there has been an increase in FP interventions correlated with a plethora of private structures and international organizations working in this area.

Contraceptive practice worldwide was 57.4% in 2014 with large regional disparities, Africa had a contraceptive prevalence rate (CPR) of 27.6%, compared with 61% in Asia and 67% in Latin America and in the Caribbean [8].

In Senegal, the use of modern contraceptive methods by women in union increased between 1993 and 2015 from 5% to 21% (23% for all methods) [9]. With a fertility rate of 4.9 children per woman, which is higher in rural areas, the use of contraceptive methods is twice higher in urban areas (30%) than in rural areas

(15%) [9]. As for Louga region, its CPR was 12% in 2015 while the national average is 23% [10].

In Widou area, despite the existence of a functional FP center offering a wide range of modern contraceptive methods to the WCA, there was no official information on contraception. Our reference situation, which covers the administrative coverage in family planning provided by the Nurse Head of Health Post (NHHP), would be 43.2% in 2016.

It is in this sense that we have carried out a more in-depth study by looking at the use of these FP methods and any other method with a contraceptive effect by the WCA, under the control of the Tessekere Human-Environments Observatory.

Thus, the general objective of this study was to evaluate the knowledge and practices of WCA of Widou Thiengoly Village about family planning methods.

The specific objectives were to:

- 1) Determine the sociodemographic characteristics of the WCA of the village of Widou Thiengoly;
- 2) Determine the proportion of WCA who knew at least one family planning method in the village of Widou Thiengoly;
- 3) Estimate the proportion of WCA using family planning methods;
- 4) Analyze the determinants of family planning in WCA.

2. Methodology

2.1. Framework of the Study

The village of Widou Thiengoly is located in Ferlo, north of Senegal, in the region of Louga, Linguère department. Its access is very difficult. It has a population of 5192 inhabitants, mainly Fulani, with breeding as the dominant activity for both men and women.

The village of Widou Thiengoly has a health post that polarizes about 36 sub-villages and three (03) functional health huts. The services offered at the post level are Primary Healing Consultations, FP, Prenatal Consultations (PNC), Post-natal Consultations (PONC), Childbirth, Expanded Program on Immunization (EPI) and management of malnutrition. There are also preventive and promotional health activities. The reference is most often to the health center of Dahra. This health post is the only source of supplies for modern FP methods in the village; there is a wide range of choices for women (seven methods): Pill, Emergency Contraception (EC), Implant, Intra-Uterine Device (IUD), injectables, collar and female condoms.

2.2. The Type of Study

This was a descriptive and analytical cross-sectional study, conducted in August 2016.

2.3. The Study Population

The WCA of the village of Widou Thiengoly who were received at the health

post during the medical campaign organized by the Great Green Wall in the period from 12 to 20 August 2016 constituted the study population.

The statistical unit corresponded to every woman in the village of Widou Thiengoly aged between 15 and 49 years old and received at the health post during the medical campaign.

2.3.1. Inclusion Criteria

Every woman from the village of Widou Thiengoly aged between 15 and 49 years old and received at the health post as part of the medical campaign in the period from 12 to 20 August 2016 was eligible for the study.

2.3.2. Criteria of Non-Inclusion

Any woman between the ages of 15 and 49 years from the village of Widou Thiengoly received at the health post as part of the medical campaign in the period from 12 to 20 August 2016 and:

- not being able to be interviewed (for example, suffering),
- being unavailable,
- or refusing to be interviewed.

2.4. The Sample

This was a comprehensive study including all women meeting the selection criteria.

2.5. The Tool and Method of Data Collection

A questionnaire was used as a data collection tool. It was designed by the research team and comprised two parts, the first part concerned the socio-demographic characteristics and the second part was devoted to the management of births, that is, knowledge of family planning methods, their use and perception.

Individual interview with the target population was the main data collection strategy. The questionnaire was tested and validated by the research team.

2.6. The Course of the Study

The data collection took place in 9 days at the Widou Thiengoly health post according to the medical campaign schedule, from 9am until around 2pm. Interviews were conducted by a student in master 2 monitoring-evaluation sometimes assisted by a local translator. To reach the maximum of our target, the women were interviewed after being received in a service or at the moment of waiting.

A total of 150 interviews were conducted.

2.7. Data Entry and Analysis

After collection, the data was entered and analyzed using the Epi info 2000 software. The data was also exported to Stata for optimal analysis.

The qualitative variables were presented as a proportion with their confidence interval and the quantitative variables as an average with the standard deviation, the median with the quartiles.

In accordance with the specific objectives, the following analysis plan was used:

- Socio-demographic characteristics of the respondents;
- Knowledge of FP methods: participants were ranked according to the number of known methods;
- Use of FP methods;
- Determinants of FP.

2.8. Ethical Considerations

The study is part of the overall framework of health research carried out by the National Center of Scientific Research (NCSR) of France at the green wall. The director of the center had authorized it and validated the methodology. The questionnaire was also amended by teachers researchers from UADB.

Before starting the interview with the WCA, the subject on which the interview will be held was explained to them as well as the interest.

Thus, the realization of this interview with the WCA required their prior informed consent, they had full right to refuse the interview which would not affect the satisfaction of their request for the services of the medical campaign. Anonymity was also respected.

3. Results

The average age of the participants was 29.34 ± 7.81 years (min: 18 years and max: 45 years). The median was 28 with an Inter Quartile Interval (IIQ) of 23 - 36. The age distribution in categories showed that 25 - 34 years old were more numerous with a proportion equal to 40%. The majority of respondents were married (98%) and their number of children ranged from 1 to 8 children with an average fertility rate of 3.22 children. The dominant professional activity remained breeding (61.3%) and 40.7% were nomadic (**Table 1**).

Of the 150 women surveyed, 67.3% knew at least one family planning method with an average number of family planning methods known per woman of 2.1 for a standard deviation of 0.9. The median was equal to mode (2), for an IIQ of 1 - 3.

Knowledge of family planning methods among respondents is as follows: two methods were more frequent (37.6%), followed by those with three methods (30.7%), and one method (28.7%); a very small minority (3%) know more than 3 methods (**Figure 1**). It has been observed that among modern methods, injectables are the best known (57.3%), followed by the pill (52.7%) and implants (28%). The Intra-Uterine Device (IUD) and methods based on knowledge of fertility (calendar methods) are known respectively at proportions of 2% and 1.3%. Custom-based methods are poorly known: talisman (2%) and herbal teas (0.7%) (**Figure 2**).

Table 1. Sociodemographic characteristics of surveyed WCA (n = 150).

Sociodemographic characteristics	Number	Percentage
Age		
15 - 24 years	47	31.3%
25 - 34 years	60	40.0%
35 - 49 years	43	28.7%
Marital status		
Married	147	98.0%
Divorced	2	1.3%
Single	1	0.7%
Number of children		
0	6	4.0 %
1 - 2	46	30.7%
3 - 4	69	40.6%
5 and more	29	19.3%
Profession		
Breeder	92	61.3%
Housewife	37	24.7%
Tradeswoman	16	10.7%
Other	5	3.3%
Mobility		
Sedentary	89	59.3%
Nomadic	61	40.7%

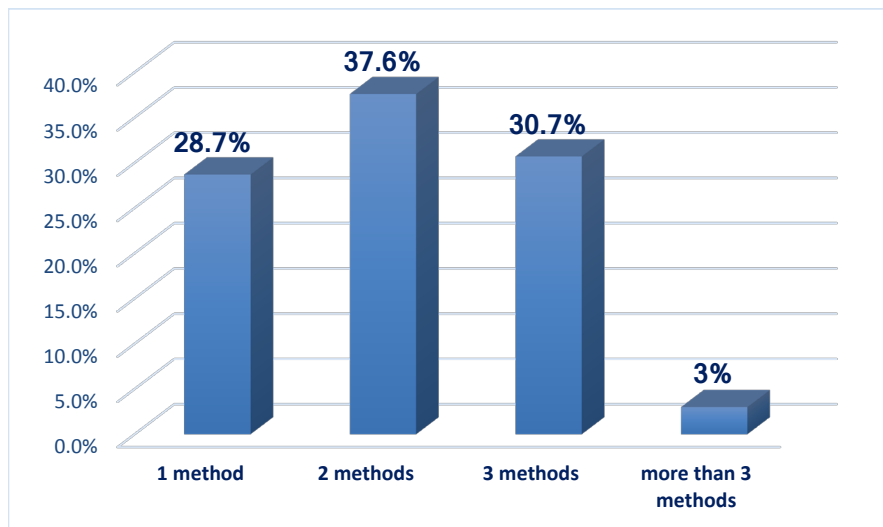


Figure 1. Number of known family planning methods (n = 101).

As for use, 40.7% reported using a contraceptive method. Thus, the most frequently used modern methods are injectable (26%), the pill (13.3%) and implants (9.3%); the IUD is very poorly used (0.7%). The main custom-based method used is talisman (1.3%) (**Figure 3**).

The desire to space births is at the forefront among the factors justifying the use of FP methods (70.5%). And for the non-users, the majority stated that they ignored FP methods (**Table 2**).

It was found that knowledge of FP did not depend on WCA age, with P value 0.93 (**Table 3**). Similarly, the use of FP was not related to the age of the WCA, nor to their number of living children with P values of 0.29 and 0.1 respectively (**Table 4**).

4. Discussion

4.1. Knowledge and Use of FP

Knowledge of family planning and especially methods is essential for their use.

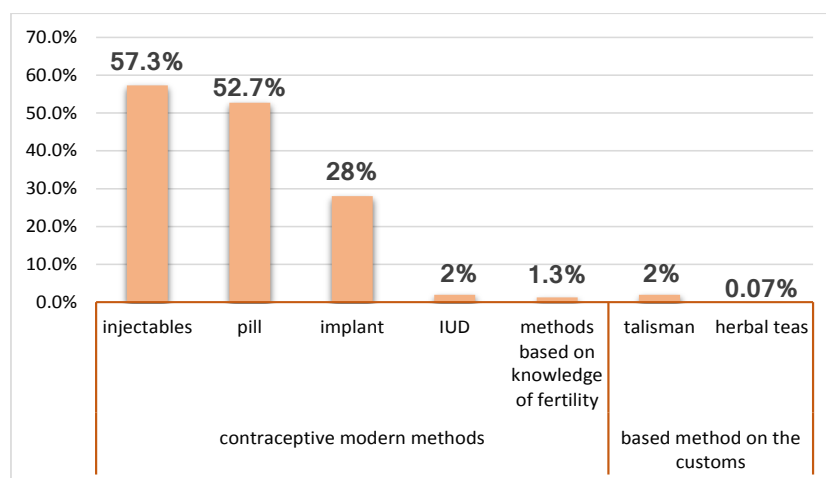


Figure 2. Types of known family planning methods (n = 150).

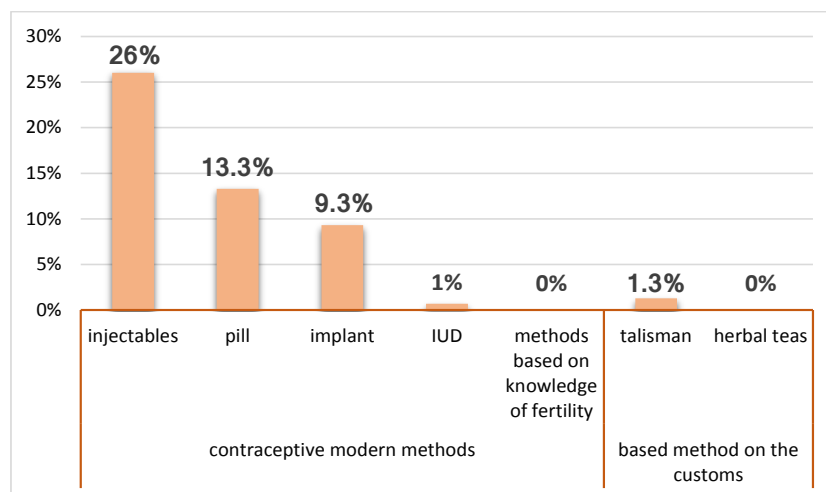


Figure 3. Types of family planning methods used (n = 150).

Table 2. Determinants of family planning (n = 150).

Determinants	Number	Percentage
Reasons for use (n = 61)		
Spacing of births	43	70.5%
Health reasons	14	22.9%
others	4	6.5%
Reasons for not using (n = 89)		
Lack of knowledge about family planning methods	49	55.1%
Do not like	27	30.3%
Desire to have children	4	4.5%
Husband's disagreement	4	4.5%
Others	5	5.5%

Table 3. Distribution of respondents according to age and knowledge of FP.

Age	Knowledge of FP method(s)	Percentage	Value P
15 - 24 years (n = 47)	32	68.1%	
25 - 34 years (n = 60)	41	68.3%	0.93
35 - 49 years (n = 43)	28	65.1%	

Table 4. Distribution of respondents according to the number of children and the use of FP.

Age	Use of PF method	Percentage	Value P
15 - 24 years (n = 47)	17	36.2%	
25 - 34 years (n = 60)	29	48.3%	0.29
35 - 49 years (n = 43)	15	34.9%	
Number of living children			
0 (n = 6)	2	33.4%	
1 - 2 (n = 46)	13	28.3%	
3 - 4 (n = 69)	32	46.4%	0.1
5 ou plus (n = 29)	14	48.3%	

Our study found that more than the majority of the surveyed WCA (67.3%) knew at least one contraceptive method. This proportion was lower than that reported in Louga region (89.1%) [11]. It was also less than the proportion observed in a study conducted in Congo that revealed that out of 500 women interviewed, 91% knew FP methods [12].

Modern methods were better known (97% of respondents) than those based on custom. This result was close to the one noted in Louga region in 2013 (88.6%) [11].

The proportion of women on contraception observed in this study (40.7%) was almost identical to the administrative coverage of FP at Widou village level in 2016 (43.2%) but far exceeds the contraceptive prevalence at Louga region (12%) [10] and at national level (23%) [9]. This difference could be explained by the variations in the use of different contraceptive methods.

The information gathered has shown that the use of a family planning method increases steadily with knowledge. Two studies support our results: a study conducted in Mauritania, in Aïoun town [13], and another conducted in the health district of Mbacke [14] show that the use of modern contraception was associated with the fact of being informed about contraception.

The different modern methods used were among those offered by the village health post. This is because the health post is the only source of supply for modern family planning methods in the village of Widou. The different modern methods most used are, according to a descending ranking: injectable, pills, implants and IUDs. These results are the same as those recorded nationwide [9]. The first place of injectable among the modern methods used is still supported by the study done in the health district of Mbacke [14], showing that the choice of women of childbearing age has favored injectable over other contraceptive products.

Our results showed that the WCA preferred modern FP methods (40.7%) than those based on custom. A similar profile situation was observed at the national level, which recorded 21% of WCA using a modern method against 2% using custom-based methods [9].

The frequent use of contraception in this study (40.7) could explain the fertility rate of 3.22 children per woman, lower than that of the national level of 6.1 [9].

4.2. The Determinants of FP

The knowledge of at least one contraceptive method and the existence of a supplying center are essential to the use of these methods, then follow the other determinants. Birth spacing ranked highest among reasons for use with 70.5%.

For the 59.3% of the surveyed WCA who did not use family planning methods, the majority of stated reasons were demonstrated by studies.

In a study, Leke R [15] showed that lack of awareness and education is constraints related to FP in Africa, especially in rural areas where 60% - 70% of the population lives. Our results showed that ignorance is the first factor of non-use (55.1%).

In her final dissertation on the determinants of contraceptive methods in the Katuba (Congo) health zone, Shay NUMBI MULANGI BITOTO showed that the opposition of family members was a factor in the non-use of family planning methods [16]; that result was noted in this study, as 4.5% of the respondents did not use FP products because of the spouse's disagreement.

Other women did not use FP methods for fear of side effects, as highlighted in

a 2015 WHO publication according to which; unmet need in FP around the world are linked to a fear or experience of side effects [8].

4.3. Limits of the Study

The weakness of our study was the lack of information about the level of education of the WCA and their spouse, which is a crucial information that can justify the level of knowledge and use of family planning methods. In addition, the target was restricted because the study enlisted only the WCA received at the health post level and the duration of the study (9 days) was short.

5. Conclusions

This work focused on the knowledge and practices of WCA related to family planning methods in the village of Widou Thiengoly.

In total, 150 WCA participated in the study. The analysis of the results showed that 67.3% of the respondents knew at least one method of FP and the utilization rate was 40.7%, far exceeding that national (23% in 2015). Despite these results, efforts shall need to be made to improve the level of knowledge about contraception, FP methods and possible side effects. It will also be relevant to involve spouses in communication for a change of behavior. Such a strategy could give hope of reaching the objective of a contraceptive prevalence rate at 45% by 2020.

The low fertility index observed in Widou compared to the national one deserves to further realize studies in order to elucidate this situation favorable to the demographic dividend in a zone of poverty.

Competing Interests

The authors declare no competing interests.

Authors' Contributions

Ndiaye Abdoul Aziz, Niang Aminata, Tall Alioune Badara and Diop-Ba Awa: design, data collection, statistical analysis and manuscript review. Other authors: design, and manuscript review. All the authors have read and approved the final version of the manuscript.

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