

Knowledge and Practice of Contraception by the Inhabitants of the Health Zone of Kansele, City of Mbujimayi, Democratic Republic of Congo

Elisee Awenze Mpela¹, Augustin Kadiata Bukasa², Marcel Tshidibi Bukasa³, Omanyondo Ohambe Marie-Claire¹, Verronique Balua Kumona¹, Agnes Tudinange Badibake¹, Alexis Nzee Bolotsi⁴, Nene Kabyahura Novi⁵, Marcel Leka Alindekane², Nzolani Mpangi Rose², Mujinga Ntumba¹

¹Midwifery Section, Higher Institute of Medical Techniques of Kinshasa, Kinshasa, Democratic Republic of Congo
 ²Nursing Section, Higher Institute of Medical Techniques of Kinshasa, Kinshasa, Democratic Republic of Congo
 ³Department of Public Health, University of Mbuji-Mayi, Kinshasa, Democratic Republic of Congo
 ⁴Department of Academic Affairs, Higher Institute of Medical Techniques of Kinshasa, Kinshasa, Kinshasa, Democratic Republic of Congo
 ⁵Faculty of Health Sciences, National Pedagogical University, Kinshasa, Democratic Republic of Congo Email: augustinkadiata@gmail.com

How to cite this paper: Mpela, E.A., Bukasa, A.K., Bukasa, M.T., Marie-Claire, O.O., Kumona, V.B., Badibake, A.T., Bolotsi, A.N., Novi, N.K., Alindekane, M.L., Rose, N.M. and Ntumba, M. (2023) Knowledge and Practice of Contraception by the Inhabitants of the Health Zone of Kansele, City of Mbujimayi, Democratic Republic of Congo. *Open Access Library Journal*, **10**: e10641. https://doi.org/10.4236/oalib.1110641

Received: August 23, 2023 Accepted: November 24, 2023 Published: November 27, 2023

Copyright © 2023 by author(s) and Open Access Library Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). http://creativecommons.org/licenses/by/4.0/

Abstract

Introduction: The family planning policy aims to bring women in sexual activity to the use of modern methods of contraception. But, despite the many initiatives aimed at this improvement, modern contraceptive prevalence is still low. The objective of this study was to evaluate the knowledge and practices of contraception by the inhabitants of Kansele Health Zone. Methods: Our study was cross-sectional with an analytical focus on 249 randomly selected subjects and over a period from July 30 to September 30, 2021. The survey method and interview technique, as well as the questionnaire as an instrument were used to collect the data. The univariate and bivariate analysis was performed and the odds ratios with their 95% CIs were calculated. The significance level was set at p < 0.05. **Results:** The majority of respondents were in the age group of 21 to 26 years (38.55%). The female sex was predominant (87.95%); there were many participants with good knowledge (92.37%), but only half of the respondents, *i.e.* 51.30%, had used contraceptive methods during the last 12 months. The following variables were associated with low contraceptive use: occupation (OR = 2.6633, IC [1.4240; 4.7100], p = 0.0421); the level of study (OR = 2.4922, IC [1.4672; 4.2673], p = 0.0003) and the desired inter-birth interval (OR = 2.0221, IC [1.321; 4.147], p = 0.0386). Conclusion: Improvement in modern contraceptive practice in the Kansele health zone (city of Mbujimayi) must necessarily go through an ambitious and well-coordinated program. This program should focus on raising awareness, coupled with offering a wide range of contraceptive products at affordable costs.

Subject Areas

Public Health

Keywords

Knowledge, Practice, Contraception, Associated Factors, Health Zone

1. Introduction

It is recognized that for the improvement of the health of mothers and children, it is necessary to avoid births that are too close together, but rather to give birth with a spacing of two years [1]. Many studies have found that children born before this interval do not have a high chance of surviving [2].

The experience of many countries in Latin America and Asia (South Korea, China, Singapore, Indonesia, etc.) shows that the first step towards a demographic dividend is the gradual and rapid decline in fertility through investments in family planning, child health and girls' education [3]. Guaranteeing access for all populations to preferred methods of contraception makes it possible to strengthen several human rights such as the right to life and liberty, freedom of opinion and expression and the right to work and employment education, while bringing other important benefits in health, and in other areas. The use of contraception protects women, especially adolescent girls, from risky pregnancies that pregnancies can represent for their health and when births are spaced less than two years apart, the infant mortality rate is 45% higher than the mortality rate when births are 2 to 3 years apart, and 60% higher than the mortality rate when they are four years or more apart [4]. Contraception offers a range of potential benefits in areas other than health, ranging from expanded opportunities for women's education and empowerment, to sustainable population growth and the economic development of countries [5].

In addition, contraception could prevent approximately 104,000 maternal deaths each year, a reduction of 29% [6]. It can reduce child mortality by almost 10%, if it is available to us who need it [7] (UNFPA and the Population Reference Bureau, 2014). The maternal ratio is estimated at 549 per 100,000 live births; therefore one woman in 29 is at risk of dying from maternal causes during childbearing ages [8]. Recent figures on police infant deaths were 97 deaths per 1000 live births; the same report gives the infant and child death rate of 158 per 1000 live births. The total fertility rate is 6.6 children per woman for rural areas and 5.4 children in urban areas [7].

In 2019, out of 1.9 billion women of reproductive age (15 - 49 years) in the world, 1.1 billion need family planning; of these, 842 million use contraceptive methods, and 270 million do not have access to the contraception they need [9] [10]. The proportion of women of reproductive age (15 - 49) using modern methods of family planning—Sustainable Development Goal indicator 3.7.1—was 75.7% globally in 2019; however, less than half of family planning needs were being met in Central and West Africa [9].

A single contraceptive method, condoms, can both prevent pregnancy and the transmission of sexually transmitted infections, including HIV. Contraception strengthens the rights of people to choose the number of children they wish to have and to determine the spacing of births [5].

Among married women of childbearing age, the prevalence of modern methods of contraception increased worldwide between 2000 and 2019 by 2.1 percentage points, from 55.0% (95% CI: 53.7% - 56.3%) to 57.1% (95% CI: 54.6% -59.5%) [9]. Despite all these progressions, a slow increase is observed, and this can be explained, among other things, by: the limited choice of methods; limited access to services, especially for young people, poorer populations and unmarried people; fear or experience of side effects; cultural or religious barriers; the poor quality of the services available; biased opinions of users and providers against certain methods; and gender-related barriers in accessing services [5].

Moreover, scientific work has shown that age, religion, level of education, spouse's authorization and place of residence [11], being a woman with decision-making power, having knowledge about modern contraception, having an income-generating activity and satisfaction with the quality of contraceptive services had an influence on the use of modern contraception [12].

Nowadays, any family planning policy aims to bring needy women to use modern methods of contraception [3]. Despite the many initiatives to improve the use of family planning (FP) such as subsidies and community-based distribution of contraceptive products across Africa, modern contraceptive prevalence in 2016 was 13% in Africa West against 46% and 59% respectively in North Africa and South Africa. In Burkina Faso, this prevalence was 20% for the same year [13]. For example, Guinea is still one of the countries where the rate of use of modern contraception is the lowest in sub-Saharan Africa (11%1 in 2018). However, the country adopted a national population policy in 1992, revised in 1996 and in 2018, which has been implementing several programs in the field of family planning for years [3].

Since 1970, the DR Congo has been characterized by one of the highest growth rates in the world, more than 3% [7]. Rapid population growth (>2%) and high fertility are a threat to the well-being of the poorest individuals and so-cieties in developing countries [14].

In DR Congo, seven out of ten households are poor. Modern contraceptive prevalence was 5.4% in 2010. The results of the 2013 demographic and health surveys show a prevalence of 8% across the country, and 15% in urban areas

compared to 5% in rural areas [15].

Due to high levels of maternal mortality and rapid population growth, the government has identified family planning as one of six interventions in its plan to accelerate progress towards achieving Millennium Development Goals 4 and 5. Recent surveys show that the fertility rate is 6.3; a quarter of women in the population of the DRC do not wish to become pregnant but do not use contraception, which led to the establishment of a strategic plan, developed over a period of 12 months in order to increase modern contraceptive prevalence from its current level estimated at 6.5% to 19% by 2020.

Currently, access to family planning services is limited, particularly in rural areas. Of the 516 health zones, only less than half of the health zones (46 percent) have family planning services. Although part of the minimum package of basic health services activities are integrated, family planning is often a neglected component [16] [17].

In the province of Kongo Central, especially in the arearural health center of Gombe Matadi, the modern contraceptive prevalence in 2019 is considered very low at 29%. The male condom remains themethod best known and used by the women surveyed, the most cited source of information on family planning was the health personnel. Lack of information, side effects and high cost were cited as reasons for not using modern contraceptive methods in both the surveyquantitative than during focus groups. Factors associated with the low use of modern contraceptive methods, long distances to travel bythe woman to health training (FOSA), and the fact of displaying an unfavorable attitude to the use of Modern Contraceptive Methods [18].

In the province of Kasaï-Oriental, all health zones integrate activities related to the health of mothers and children, among other family planning, on the one hand, and on the other hand all the inputs of these activities. are permanently available and given free of charge [15]. However, the observation remains bitter because in most households we notice close births. To improve the rate of use of modern contraception, it is necessary to identify the levers on which to rely. It is in this perspective that the present study was carried out in order to determine the knowledge and practices of contraception in the health zone of Kansele, city of Mbujimayi.

2. Material and Method

2.1. Study Site and Target Population

Kansele health zone of the city of Mbuji-Mayi, in the Democratic Republic of Congo. Our study had as target population the inhabitants of the health zone of Kansele, and was included in our study, any person of childbearing age residing in this health zone, and having agreed to answer the survey questionnaire after informed consent.

2.2. Sampling Type and Sample Size

We used stratified probability sampling. To determine the size of our sample, we referred to the following Ficher formula:

$$n = z^2 \frac{p * q}{d^2}$$

n: sample size;

Z: confidence coefficient for a degree estimated at 95% or 1.96;

P: proportion of the target population with characteristics studied 18% (EDS, 2016 Dibindi Health Zone);

Q: proportion of the target population not having the characteristics studied (1-p);

d: significance level = 0.05 (5%).

So the sample size will be calculated as follows:

$$n = (1.96)^2 \frac{0.18(1-0.18)}{(0.05)^2} = 226.8$$

It is preferable to add the proportion of non-respondents of 10% which gives in the end = 249 households.

We used the four-stage stratified probability sampling technique which is applied to select the Health Zone, Health Areas, Avenues and Households.

- At the 1st level: a health zone was selected among the 10 health zones of the city of Mbujimayi.
- 2nd stage: random sampling to select 4 health areas: Aimérance, Boulaska, Kambi, Lusambo.
- 3rd degree: simple random sampling to select neighborhoods in each health area.
- 4th degree: systematically choose the household in each district.

2.3. Type of Study and Data Collection

This is a cross-sectional study with an analytical aim. It was carried out over a period from July 30 to September 30, 2021, *i.e.* a duration of 3 months. The survey method and interview technique, as well as the questionnaire as an instrument were used to collect the data for this study.

2.4. Data Analysis

The data from the collection site recorded on the data collection tools by the investigators were compiled, coded, data entry was done using the Excel 2010 spreadsheet and SPSS version 20 software to analyze the identification variables respondents.

First, we proceeded to a description of the data by calculating the percentages; and secondly we approached the bivariate analysis, where we crossed the characteristics of respondents with the use of contraception in order to establish the existence or not of the links of significance, there we used the Odds and the interval of confidence at 95% are calculated with a risk of error Alpha fixed at 5%.

3. Results

In **Table 1**, the female sex was in the majority with 219 out of 249% or 87.95% against 12.05% of the male sex. Among our respondents those aged between 21 - 26 years were more represented with 89 out of 249% or 38.55%. Majority of our respondents were at the secondary school level with 146 cases or 58.63%. The most dominated religion in our studies was that of the church of revivals with 126% or 50.60%. Traders were more represented 87% or 34.94%, most of our respondents had 5 more children or 43.78% and those who wanted to have an inter-birth interval greater than 2 were in the majority or 83.53%.

According to **Table 2**, the majority of the surveys had already heard of contraception with 230% or 92.37%, the most cited channel was health personnel with 130% or 56.52%, most of our surveys defined contraception as being methods or medication for birth space with 177 or 76.96. The majority of respondents were for contraception with 179% or 77.84% and the reason for refusing contraception was the fear of complications related to contraception with 21% or 41.18%. The majority of respondents had knowledge of contraceptive methods with 190% or 82.61%. The calendar was the contraceptive method best known by respondents with 62% or 32.64%.

In analyzing **Table 3**, the majority of the surveys had knowledge of the sources of supply with 175% or 92.11%, the health structure was the place of supply known with 120% or 68.58%. The majority of our surveys did not have easy access to contraceptives with 97% or 55.43%.

Regarding **Table 4**, the majority of our respondents wanted to have more than 6 with 140 or 60.87%. Half of respondents or 51.30% had used contraceptive methods during the last 12 months; Most of respondents, 60.17%, used natural methods. From this table, among the kinds of natural methods used, the calendar came first, 73.24%. Most respondents used condoms, *i.e.* 31.91%.

As for Table 5, among the respondents who had used contraceptive methods, only 20% or 16.95% had side effects and the most cited side effect was bleeding 15% or 75%. All of the respondents, *i.e.* 100%, find family planning important. Almost half of them, *i.e.* 53.04%, said that planning had the advantage of birth spacing, the majority of respondents, *i.e.* 79.57% said family planning was a matter for the couple.

Finally, in **Table 6**, the Relationship between the profile of respondents and the use of contraception, Profession, level of education and desired inter-birth interval are associated with the use of contraception (p < 0.005).

4. Discussion

Concerning the sex, our study shows a predominance of the female sex, that is to say 87.95% with a sex ratio of 0.14. These results are far superior to those found by Léon Bijlmakers during a study conducted in Mali where 39% of respondents were female, the sex ratio was 1.4 [19].

Variables	Workforce $(n = 249)$	Percentage
Sex		
Male	30	12.05
Feminine	219	87.95
Age		
<20 years	8	3.21
21 - 26 years old	96	38.55
27 - 32 years old	86	34.54
>33 years old	59	23.69
Study level		
Primary	44	17.67
Secondary	146	58.63
Higher and university	35	14.06
None	24	9.64
Religion		
Catholic	30	12.05
Muslim	13	5.22
Protestant	80	32.13
Church of	126	50.60
Occupation		
Trader	87	34.94
Unemployed	47	18.88
Household	38	15.26
Employee	34 13.65	
Others_	32	12.85
Liberal	11 4.42	
Number of children		
А	27	10.84
two to three	46	18.47
three to five	67	26.91
five more	109 43.78	
Desired interval		
<2 years	41	16.47
>2 years	208	83 53

Table 1. Distribution of respondents according to their socio-demographic characteristics.

Variables	Workforce $(n = 249)$	Percentage	
Obtain information on contraception			
Yes	230	92.37	
No	19	7.63	
If yes, through which channel			
Personal health	130	56.52	
Media	47	20.43	
Others	45	19.57	
None	8	3.48	
What is contraception			
Method or medicine to space births	177	76.96	
Method or drug to stop births	29	12.61	
I don't know	24	10.43	
Acceptance of contraception			
Yes	179	77.83	
No	51	22.17	
Reasons for refusing contraception			
Fear of birth control complications	21	41.18	
have many children	18	35.29	
Religion	9	17.65	
Low income and others to be specified	3	5.88	
Knowledge of contraceptive methods	n/230		
Yes	190	82.61	
No	40	17.39	
If so why			
Calendar	62	32.64	
Condom	57	29.48	
Pills	38	20	
Implant	19	10	
Abstinence during the fertile period	12	6.31	
Injectable	3	1.57	

Table 2. Knowledge of respondents about contraception and contraceptive methods.

Variables	Workforce	Percentage
Knowledge of Source of supply		
Yes	175	92.11
No	15	7.89
If yes which one		
Sanitary facilities	120	68.58
Pharmacy	42	24
Others	13	7.42
Easy access to contraceptives		
Yes	78	44.57
No	97	55.43

Table 3. Distribution of respondents according to their knowledge of sources of supply.

Table 4. Distribution of respondents according to the number of children desired and the use of contraceptive methods.

Number of children desired	Effective $(n = 230)$	Percentage
<3 children	19	8.26
3 to 6 children	71	30.87
>6 children	140	60.87
Use of contraceptive methods in the last 12 months		
Yes	118	51.30
No	112	48.70
If yes which method		
Natural	71	60.17
Artificial	47	39.83
So natural which		
Calendar	52	73.24
Coitus interruptus	7	9.86
Feeding with milk	7	9.86
Cervical mucus	3	4.23
Temperature	2	2.82
So artificial which ones		
Condom	15	31.91
Pills	14	29.79
Implants	13	27.66
IUD	5	10.64

Variables	Workforce (n = 230)	Percentage
Secondary effects		
No	98	16.95
Yes	20	83.05
If so why		
Bleeding	15	75
Sterility	2	10
Others	3	15
Importance of FP for the couple		
Yes	230	100
No	0	0
If so what are the advantages		
Birth spacing	122	53.04
Improves the health of mother and child	64	27.83
Avoid certain diseases	27	11.74
reduce poverty	10	4.35
Other (s) to be specified	7	3.04
Decision		
Couple	183	79.57
Man	23	10.00
Women	22	9.57
Other (s) to be specified	2	0.87

Table 5. Knowledge of respondents about the side effects of contraceptive methods and the importance of Family Planning for the couple.

 Table 6. Relationship between the profile of respondents and the use of contraception.

	Contraceptive use		OD	CI	п
	No	Yes	OR	CI	Р
Sex					
Man	18 (60.00%)	12 (40.00%)	0.5706	[0.2623; 1.2414]	0.1534
Women	101 (46.12%)	118 (53.88%)			
Age					
<26 years old	58 (55.76%)	46 (44.23%)	6.9981	[7.4240; 4.7100]	0.0721
>26 years old	61 (42.06%)	84 (57.93%)			
Occupation					
With a job	77 (46.95%)	87 (51.78%)			
Unemployed	42 (49.41%)	43 (50.58%)	2.6633	[1.4240; 4.7100]	0.0421
Study level					
Down	38 (55.88%)	30 (44.11%)	2.4922	[1.4672; 4.2673]	0.0003
Pupil	85 (46.96%)	96 (53.03%)			
desired interval					
<2 year	25 (60.97%)	16 (39.02%)	2.0221	[1.321; 4,147]	0.0386
>2 years	96 (46.15%)	112 (53.83%)			

Our study shows that the age group of 21 and 26 years is more represented with 38.55%. These results corroborate a study conducted by Matungulu C, *et al.* in Lubumbashi which indicated that the most represented age group was between 18 and 29 years old with 37% [14]. Contrary to the results found in Cameroon, the most represented age group was that of 40 to 49 years with 26.9% [20].

With regard to the level of study, our results show that 58.63% of our respondents have a secondary level. These results differ from those found by Lenan in Tachad where 96% of respondents had no level of education' study. However, these respondents with a low level of education had a risk twice as high of not using contraception OR = 2.4922; CI: [1.4672; 4.2673] and p = 0.0003 [21].

In our study, 50.60% of respondents were revival churches. Faith and family planning interact in complex ways at the level of governments, civil society, communities and individuals. If all stakeholders better understand how it works, secular actors, religious leaders, and faith-based organizations can move family planning forward more effectively. Leaders influence the behaviors of people seeking care and faith-based organizations provide a wealth of care information, services and products. Faith-based organizations inspire trust and credibility through their continued presence with all citizens, especially in hard-to-reach or conflict-affected communities where other actors only visit sporadically. Faith-based organizations help contextualize family planning interventions and concepts using language and approaches appropriate to the culture and beliefs of the communities involved. When faith-based organizations take the lead in supporting family planning, they can help nurture strong family planning incentives [22] [23] [24].

A NURHI evaluation found a 30% increase in contraceptive use among women exposed to family planning messages from religious leaders compared to women who were not exposed to these messages. In Kenya, the number of family planning consultations increased significantly after the Christian Health Association of Kenya (CHAK) implemented a project involving six health facilities run by faith-based organizations to increase service delivery family planning volunteers in western Kenya, in partnership with volunteer religious leaders and community health workers [25]. To be effective, family planning programs and policies must take religion into account with intelligence, openness, persistence, and creativity [26]. Our results show 34.94% of respondents were traders, 47% unemployed and 4.42% liberal. Unlike the studies of Lenan S in Tachad conducted in Chad, 91.6% of respondents were unemployed. This could be because most of the population trades [21].

Regarding the number of children, our results show that 43.78% of respondents had more than five children. Concerning the inter-birth interval and the use of contraception, our study shows that 59.09% of respondents who did not use contraception were likely to wish to contract an interval before their child celebrates their first birthday. There is a statistically significant association between these two variables (p-valued = 0.0386 < 0.05; OR = 2.0221; CI = 1.321; 4.147). Thus, the risk of contracting an interval before their child celebrates their first birthday is twice as great as in those who did not use contraception. These results are slightly lower than those of Badose Musimwa *et al.* who found that in 31% of cases, the desired interval was greater than 3 years, *i.e.* 63.7%. This difference is explained by the fact that couples link children to wealth and prefers to have a lot of them [27].

Our field investigations showed that 92.37% of respondents had already heard of contraception; this through the channel of the health center or 56.52%; 76.96% of respondents defined contraception as a method or medication for spacing births; 77.83% were for contraception; 41.18% of respondents were afraid of complications related to contraception as the cause of non-acceptance. This fear is often motivated by the transmission of false information about contraception. A study explains that even teenagers and teachers have misconceptions about contraception. These results indicate the likely low popularization of FP among adolescents and teachers [28].

Contraceptive misconceptions aren't unique to teens. Ho & Wheeler (2018) [29] in a study carried out in eastern DRC, highlighted misconceptions about some modern methods of contraception by providers, users and community members. Yoost (2014) [30] reported that even in developed countries, misconceptions persist regarding IUD use, particularly among young people and nulliparous women. Apart from these observations, the judgmental attitude of health care providers and the lack of confidentiality can deter the use of contraception by adolescents [31].

The results have revealed that 82.61% of respondents had knowledge of types of contraception; 32.64% had knowledge of the calendar as a type of contraception; 92.11% knew the source of supply among which the health structures were known, *i.e.* 68.58%; 55.43% of respondents did not have easy access to the source of contraceptive methods. This is explained by the fact that the majority of respondents already had knowledge of the types of contraceptive methods during the awareness campaign by community relays. Our results are close to those found by Matungulu C, *et al.*, they had respectively (84%, 37%, 88%, 73%, and 50%) in a study carried out in Lubumbashi on the determinants of the use of methods contraceptives in the Mumbunda health zone [15].

Asked about the number of children desired, the respondents considered having more than 6, or 60.87%. These results differ from that of Lenan in Tachad where 92.6% of respondents wanted to have children from 3 to 6 children. This discrepancy is explained by the fact that the majority of respondents who wanted fewer children, sought to control their births [21].

Our results stipulate that almost half of the respondents, *i.e.* 52.21%, used contraceptive methods. Most of the respondents, 60.17%, used natural methods. Among the kinds of natural methods used, the calendar came first with 73.24%, but for the artificial methods, most respondents used condoms, with 31.91%.

Similarly, a health demographic survey on the determinants of the low use of contraception in the Dibindi Health Zone had shown that the male condom was the method most used by 35% of the population [15].

These data do not corroborate with those found by Mustafa G, and al, in which 68% of respondents used contraceptive methods and a small proportion of respondents who used contraception [32]. Compared to a study conducted specifically on the use of contraceptive methods by women with HIV, the contraceptive prevalence among HIV-infected women was 62.5% [33]. Several studies in sub-Saharan Africa have evaluated the use of modern contraceptive methods among HIV-infected women. The proportion of HIV-infected women using contraceptives in this study was similar to that seen in a South African study. In this prospective survey that included 290 women living with HIV in Durban, contraceptive prevalence was 63% [34].

Among the types of side effect encountered, bleeding was the most represented at 75%. Most respondents had not interrupted the use of contraceptive methods. These results do not corroborate those of EDSMV.BAMAKO where ¾ of respondents had had metrorrhagia and abdominal pain as a side effect, and 41% of respondents had interrupted the use of contraceptive methods because of adverse effects and did not reiterate their experiences.

All of the respondents, *i.e.* 100%, find family planning important. Almost half of respondents or 53.04% say that birth spacing is the advantage of family planning. The majority of respondents, *i.e.* 79.57%, attribute the family planning affair to the couple. Family planning is one of the cheapest, most cost-effective interventions with the most lasting impact on health. Yet it is often overlooked as a key strategy for improving health in urban areas. Although family planning services are less available in rural areas and in the most isolated regions of less developed countries, the poor who live in urban areas have more difficulty accessing family planning services than wealthier residents, for various reasons related to the social, cultural and financial context. Given that half of the world's residents now live in urban areas, improving access of the poor to family planning services in urban areas should be a high priority, especially considering that the majority of urban residents in many countries live on less than US\$2 a day [9].

Bivariate analyzes show that: the respondents who were without profession, those who had a low level of education and those who wanted an inter-birth interval of less than 2 years were proportionally likely to not use contraception (p < 0.005) during the last 12 months. On the other hand, the benefits of family planning, free contraceptives, the approval of their husbands and moral obligation were the reasons for the use of the voucher by women. The desire to become pregnant, their husbands' opposition (to contraceptives), women's reluctance, women's lack of knowledge of contraceptives and intervention-related factors have been cited as reasons for not using vouchers [35]. Another study notes that the main obstacles to contraception are: lack of reliable and adequate information, misconceptions about contraception, fear of side effects, illiteracy, male de-

cision-making power, religious prohibitions and socio-cultural contradictions [36].

5. Conclusions

The population of the health zone of Kansele, town of Mbujimayi have knowledge of contraception (92.37%), but the use of the latter is relatively low. However, this use was influenced by the level of study, the profession and the desire for an inter-birth interval of less than 2 years.

Therefore, the substantial improvement in modern contraceptive practice in the Kansele health zone (city of Mbujimayi) must necessarily go through an ambitious and well-coordinated program. This program should focus its interventions on targeted and multi-channel awareness, coupled with the supply of a wide range of contraceptive products at affordable costs.

Acknowledgements

We thank the authorities of the Health Zones for having facilitated data collection for the investigators.

Conflicts of Interest

The authors declare no conflicts of interest.

References

 Organisation mondiale de la Santé (2018) Espacement des naissances et choix en matière de méthodes de planification familiale du post-partum—Outil de counseling. Genève.

https://apps.who.int/iris/bitstream/handle/10665/328163/WHO-RHR-18.38-fre.pdf ?ua=1

- [2] GRACE DANN (2013) La conduite sexuelle et l'utilisation de contraceptifs parmi les jeunes en Afrique de l'Ouest. https://www.prb.org/wp-content/uploads/2021/02/west-africa-family-planning_fr.pdf
- [3] Direction Nationale Population et Développement (2020) Les Déterminants de la Planification Familiale et du Dividende démographique en Guinée. <u>https://www.stat-guinee.org/images/Documents/Publications/SSN/mpde/rapport_final_dterminants_PF_DD_Guine_CORRIGE_20_07_2020.pdf</u>
- [4] World Health Organization and Johns Hopkins Bloomberg School of Public Health (2018) Family Planning: A Global Handbook for Providers. <u>https://apps.who.int/iris/bitstream/handle/10665/260156/9780999203705-eng.pdf?s</u> <u>equence=1</u>
- [5] OMS (2020) Planification Familiale/Contraception. https://www.who.int/fr/news-room/fact-sheets/detail/family-planning-contraception
- [6] Organisation mondiale de la Santé (2021) Des services de santé de qualité: Un guide de planification. Organisation mondiale de la Santé. https://apps.who.int/iris/handle/10665/345385
- [7] Fonds des Nations Unies pour la population (UNFPA) (2013) Le Rapport sur le statut des adolescents et des jeunes en Afrique subsaharienne: Possibilités et enjeux. https://www.adeanet.org/fr/system/files/rapport_adolescents_et_jeunes_en_afrique

<u>_subsaharienne.pdf</u>

- [8] UNFPA et le Population Reference Bureau (2014) Le Rapport sur le statut des adolescents et des jeunes en Afrique subsaharienne: Possibilités et enjeux. <u>https://www.adeanet.org/fr/system/files/rapport_adolescents_et_jeunes_en_afrique_subsaharienne.pdf</u>
- [9] Kantorová, V., Wheldon, M.C., Ueffing, P. and Dasgupta, A.N.Z. (2020) Estimating Progress towards Meeting Women's Contraceptive Needs in 185 Countries: A Bayesian Hierarchical Modelling Study. *PLOS Medicine*, 17, e1003026. <u>https://doi.org/10.1371/journal.pmed.1003026</u>
- [10] United Nations, Department of Economic and Social Affairs, Population Division (2017) Family Planning and the 2030 Agenda for Sustainable Development. United Nations, New York.
 <u>https://www.un.org/en/development/desa/population/publications/pdf/family</u>
- [11] Mariko, S., Ayad, M., Hong, R., Kéïta, O. and Diop, M. (2009) Pratique contraceptive et importance des besoins non satisfaits en matière de planification familiale au Mali, de1995 à 2006: Analyses approfondies des Enquêtes Démographiques et de Santé au Mali, 1995-1996, 2001 et 2006. Rapports d'analyses approfondies des EDS No. 69. CPS/DNSI et ICF Macro, Calverton. https://www.dhsprogram.com/pubs/pdf/FA69/FA69.pdf
- [12] Mbacké Leye, M.M., Faye, A., Diongue, M., Wone, I., Seck, I., Ndiaye, P. and Tal Dia, A. (2015) Déterminants de l'utilisation de la contraception moderne dans le district sanitaire de Mbacké (Sénégal). *Santé Publique*, 27, 107-116. https://doi.org/10.3917/spub.151.0107
- [13] Population Reference Bureau (2016) La planification familiale améliore la vie et la santé des pauvres en zone urbaine et économise de l'argent.
- [14] Matungulu, C.M., Kandolo, S.I., Mukengeshayi, A.N., Nkola, A.M., Mpoyi, D.I., Mumba, S.K., Kabamba, J.N., Cowgill, K. and Kaj, F.M. (2015) Déterminants de l'utilisation des méthodes contraceptives dans la zone de santé Mumbunda à Lubumbashi, République Démocratique du Congo. *Pan African Medical Journal*, 22, Article No. 329. <u>https://doi.org/10.11604/pamj.2015.22.329.6262</u>
- [15] Ntambue, A.M., Tshiala, R.N., Malonga, F.K., Ilunga, T.M., Kamonayi, J.M., Kazadi, S.T., Matungulu, C.M., Musau, A.N., Mulamba, D., Dramaix-Wilmet, M. and Donnen, P. (2017) Utilisation des méthodes contraceptives modernes en République Démocratique du Congo: Prévalence et barrières dans la zone de santé de Dibindi à Mbuji-Mayi. *Pan African Medical Journal*, **26**, Article No. 199. https://doi.org/10.11604/pamj.2017.26.199.10897
- [16] Cleland, J. and Shah, I.H. (2013) The Contraceptive Revolution: Focused Efforts Are Still Needed. *The Lancet*, 381, 1604-1606. https://doi.org/10.1016/S0140-6736(13)60588-7
- [17] Ministère De La Sante Publique RDC (2013) Planification Familiale: Plan Stratégique National à vision multisectorielle (2014-2020). <u>http://www.familyplanning-drc.net/docs/Final%20Plan%20Strategique%20version</u> <u>%20officielle.pdf</u>
- [18] Katoka Fuanda (2017) Déterminants de la faible utilisation des méthodes contraceptives modernes chez les femmes en âge de procréer: Cas de la zone de sante de Gombe matadi. Mémoire de Spécialiste en Santé Publique, Ecole De Sante Publique, Université De Kinshasa, République Démocratique Du Congo.
- [19] Bijlmakers, L., et al. (2012) Pratique contraceptive et la contribution des activités de

planification familiale au Mali. Une étude dans le cadre de la coopération malienne-néerlandaise.

https://www.researchgate.net/publication/286259477_Pratique_contraceptive_et_la _contribution_des_activites_de_planification_familiale_au_Mali_-_Etude_dans_le_ cadre_de_la_cooperation_malienne_-_neerlandaise

- [20] Pilon, M. and Guillaume, A. (2000) Maifrise de la fecondite et planification familiale au Sud: Actes des Ve Journeés demographiques de l'IRD, Paris, 28-30 septembre 1994. Editions IRD.
- [21] Lenan Ganguinon (2009) Les facteurs explicatifs de la non-utilisation des méthodes contraceptives modernes par les femmes au Tchad. Mémoire de master professionnel en démographie. Institut de Formation et de Recherche Démographiques (IFORD). https://ireda.ceped.org/inventaire/ressources/lenan_ganguignon2009.pdf
- [22] Heward-Mills, N.L., Atuhaire, C., Spoors, C., Pemunta, N.V., Priebe, G. and Cumber, S.N. (2018) The Role of Faith Leaders in Influencing Health Behaviour: A Qualitative Exploration on the Views of Black African Christians in Leeds, United Kingdom. *Pan African Medical Journal*, **30**, Article No. 199. https://doi.org/10.11604/pamj.2018.30.199.15656
- [23] Karam, A., Clague, J., Marshall, K. and Olivier, J. (2015) The View from Above: Faith and Health. *The Lancet*, **386**, e22-e24. https://doi.org/10.1016/S0140-6736(15)61036-4
- [24] Olivier, J., Tsimpo, C., Gemignani, R., Shojo, M., Coulombe, H., Dimmock, F., Nguyen, M.C., Hines, H., Mills, E.J., Dieleman, J.L., Haakenstad, A. and Wodon, Q. (2015) Understanding the Roles of Faith-Based Health-Care Providers in Africa: Review of the Evidence with a Focus on Magnitude, Reach, Cost, and Satisfaction. *The Lancet*, **386**, 1765-1775. <u>https://doi.org/10.1016/S0140-6736(15)60251-3</u>
- [25] Ruark, A., Kishoyian, J., Bormet, M. and Huber, D. (2019) Increasing Family Planning Access in Kenya through Engagement of Faith-Based Health Facilities, Religious Leaders, and Community Health Volunteers. *Global Health: Science and Practice*, 7, 478-490. <u>https://doi.org/10.9745/GHSP-D-19-00107</u>
- [26] Katherine Marshall, World Faiths Development Dialogue (2015) L'engagement religieux dans les politiques de la planification famil-iale. Une expérience dans six pays majoritairement musulmans. <u>https://berkleycenter.georgetown.edu/publications/religious-engagement-in-familyplanning-policies</u>
- [27] Musimwa, B., Bisusa, C., Musimwa, M.M.B., Bisusa, C. and Maroyi, M. (2014) Problématique de la non-intégration du planning familial et ses conséquences sur le développement des ménages dans les entités rurales de Kabare Nord. *International Journal of Innovation and Applied Studies*, 9, 989-997. <u>https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.685.7105&rep=rep1&typ</u> <u>e=pdf</u>
- [28] Mpunga, D.M., Chenge, F.M., Mapatano, M.A., Mambu, T.N.M. and Wembodinga, G.U. (2021) Connaissances, attitudes et pratiques des adolescents et des enseignants en matière de contraception: Résultats dune étude qualitative réalisée en République Démocratique du Congo. *Pan African Medical Journal*, **38**, Article No. 121. https://doi.org/10.11604/pamj.2021.38.121.21678
- [29] Ho, L.S. and Wheeler, E. (2018) Using Program Data to Improve Access to Family Planning and Enhance the Method Mix in Conflict-Affected Areas of the Democratic Republic of the Congo. Global Health. *Science and Practice*, 6, 161-177. <u>https://doi.org/10.9745/GHSP-D-17-00365</u>
- [30] Yoost, J. (2014) Understanding Benefits and Addressing Misperceptions and Bar-

riers to Intrauterine Device Access among Populations in the United States. *Patient Preference and Adherence*, **8**, 947-957. <u>https://doi.org/10.2147/PPA.S45710</u>

- [31] Onokerhoraye, A.G. and Dudu, J.E. (2017) Perception of Adolescents on the Attitudes of Providers on Their Access and Use of Reproductive Health Services in Delta State, Nigeria. *Health*, 9, 88-105. <u>https://doi.org/10.4236/health.2017.91007</u>
- [32] Mustafa, G., Azmat, S.K., Hameed, W., Ali, S., Ishaque, M., Hussain, W., Ahmed, A. and Munroe, E. (2015) Family Planning Knowledge, Attitudes, and Practices among Married Men and Women in Rural Areas of Pakistan: Findings from a Qualitative Need Assessment Study. *International Journal of Reproductive Medicine*, 2015, Article ID: 190520. <u>https://doi.org/10.1155/2015/190520</u>
- [33] N'guessan, E., Gbeli, F., Dia, J.M. and Guie, P. (2019) Pratiques contraceptives des femmes infectées par le VIH suivies en ambulatoire au Centre Hospitalier Universitaire de Treichville (Abidjan, Côte d'Ivoire). *Pan African Medical Journal*, **33**, Article No. 79. <u>https://doi.org/10.11604/pamj.2019.33.79.16435</u>
- [34] Marlow, H.M., Maman, S., Moodley, D., Curtis, S. and McNaughton Reyes, L. (2015) HIV Status and Postpartum Contraceptive Use in an Antenatal Population in Durban, South Africa. *Contraception*, 91, 39-43. https://doi.org/10.1016/j.contraception.2014.09.007
- [35] Bakyono, R., Tapsoba, L.D.G., Lépine, A., Berthé, A., Ilboudo, P.G., Diallo, C.O., Méda, N. and D'Exelle, B. (2020) Utilisation des contraceptifs par les femmes rurales mariées ou en concubinage au Burkina Faso: Une analyse qualitative de l'utilisation d'un bon gratuit. *Pan African Medical Journal*, **37**, Article No. 72. https://doi.org/10.11604/pamj.2020.37.72.23786
- [36] Coulibaly, M., *et al.* (2019) Obstacles socioculturels liés à l'utilisation de la contraception moderne en Côte d'Ivoire. *Santé Publique*, **32**, 389-397.
 <u>https://www.cairn.info/revue-sante-publique-2020-4-page-389.html</u>
 <u>https://doi.org/10.3917/spub.204.0389</u>