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Factors associated with the use of non-medical contraceptive methods in Burkina Faso

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Long abandoned in favor of hormonal contraceptive methods, non-medical contraceptive methods are making a comeback despite their low effectiveness. This study aimed to determine the factors associated with the use of non-medical contraceptive methods in Burkina Faso. A quantitative descriptive study was conducted for analytical purposes, utilizing data from phase 1 of the "Performance and Monitoring for Action" survey conducted from December 2019 to February 2020. A univariate analysis and a Chi-square test, and used binary logistic regression was performed to assess the net effect of each independent variable on the dependent variable. A threshold of 5% was used to present the results. The protocol for this study was authorized by the Burkina Faso Ethics and Health Research Committee under number 2023-08-207. The sample consisted of 2,167 women aged 15 to 49 using a contraceptive method, with 19% using non-medical contraception. The factors associated with the use of non-medical contraception at the 1% level ($p \leq 0.01$) were parity, level of education, sources of information, comprehensive counseling, and knowledge of medical contraceptive methods. At the 5% threshold ($p \leq 0.05$), the factors were decision-making, type of occupation, individual norms, and knowledge of non-medical contraceptive methods. The use of non-medical contraception is multifactorial. The interest aroused by these methods encourages family planning programs to pay attention to these factors to better accommodate users who resort to these methods.

Key words: Natural family planning; condom; contraception; Burkina Faso.

INTRODUCTION

Family planning (FP) is a major public health issue in many developing countries. It helps reduce the number of unexpected pregnancies and can prevent around 60% of maternal deaths and 57% of infant deaths worldwide (Bellizzi et al., 2015; Bellizzi et al., 2019). In developing countries, particularly in sub-Saharan Africa, the fertility rate is still very high despite a slight decline (Tabutin and Schoumaker, 2020), with low use of contraceptive methods (Kantorová et al., 2020; United Nations, Department of Economic and Social Affairs, Population

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Division, 2019). Burkina Faso is one of the poorest countries in West Africa, with a total fertility rate of 5.4 children per woman in 2019 and a predominantly rural population (INSD, 2022), where access to healthcare is a major challenge (Ministère de la Santé, 2017). This situation can have negative consequences for maternal and child health, as well as for the country's economic and social development.

Several strategies have therefore been developed, including the adoption of a law on reproductive health in 2005, the implementation of the strategic plan for securing reproductive health products for the period 2009-2015, the repositioning of FP as a priority action in the national health development plan, and improving access to FP services (Ministère de la Santé, 2013). The country's commitment is also reflected in the implementation of decisions taken at conferences on FP, including those held in Senegal in 2011, London in 2012, Addis Ababa in 2013, and London in 2017 (Ministère de la Santé, 2017). Finally, the adoption in 2019 of the policy of free family planning care has been a significant step. These strategies have increased the availability of family planning care, with modern contraceptive prevalence rising from 25% among married women in 2010 (Institut National de la Statistique et de la Démographie (INSD) et ICF International, 2012) to 31.9% in 2020 (Institut Supérieur des Sciences de la Population, Université Joseph Ki-Zerbo et The Bill and Melinda Gates Institute for Population and Reproductive Health at The Johns Hopkins Bloomberg School of Public Health, 2020). These commitments have also made modern contraceptive methods (such as the pill, IUD, implant, or injection) more widely available and accessible in the country's health facilities.

However, the use of modern contraceptive methods remains relatively low despite efforts to promote FP (Bakyono et al., 2020; INSD, 2022; Institut Supérieur des Sciences de la Population, Université Joseph Ki-Zerbo et The Bill & Melinda Gates Institute for Population and Reproductive Health at The Johns Hopkins Bloomberg School of Public Health, 2020).

In 2020, the discontinuation rate for modern methods was estimated at around 35% (Institut Supérieur des Sciences de la Population, Université Joseph Ki-Zerbo et The Bill & Melinda Gates Institute for Population and Reproductive Health at The Johns Hopkins Bloomberg School of Public Health, 2020).

In general, the choice of contraceptive method depends on several factors. Women often face cultural, social, and economic barriers, as well as confidentiality issues (Kabagenyi et al., 2016; Koulidiati et al., 2020) when seeking to use modern contraceptive methods. This makes them particularly vulnerable in their quest for FP care. Factors such as social stigma and mistrust of hormonal contraceptive methods are barriers to their adoption. According to the study by Barro et al. (2021), religious leaders have a good knowledge of modern contraceptive methods but equate them with abortion or female sterilization, thus preferring traditional methods and abstinence.

Some women in Burkina Faso therefore prefer to use non-medical contraceptive methods because they feel these methods better meet their needs for fertility regulation, such as traditional forms (Garenne, 2017). Non-medical methods have fallen into disrepute due to their low effectiveness (Millet, 2017). However, an analysis of the scientific literature shows a growing interest in these methods (Almalik et al., 2018; Bajos et al., 2013; Mathe et al., 2017; Rossier et al., 2017). Some of these studies reveal the persistence of these methods (Jane et al., 2015), with notable use among urban women in Ghana (Machiyama et Cleland, 2014) and in Burkina Faso (Rossier et al., 2014).

However, the use of these contraceptive methods can be risky and ineffective if not used correctly. They can pose risks to women's reproductive health, such as unwanted pregnancies, which are associated with increased risks of obstetric complications and maternal and infant mortality (Abebe et al., 2023; Cherie et al., 2022). Additionally, the non-use of contraception or the use of ineffective contraceptive methods, such as non-medical methods, can compromise economic development (Guttmacher Institute, 2011).

The scientific literature on the specific issue of non-medical contraceptive methods in Burkina Faso appears limited. This raises the need to improve knowledge of the use of these methods. This article aims to measure the proportion of non-medical contraceptive methods among all users and to determine the factors associated with the use of non-medical contraceptive methods in Burkina Faso.

METHODOLOGY

Data sources

This research is quantitative with a cross-sectional design. It uses secondary data from phase 1 of the Performance Monitoring for Action (PMA) project survey, carried out between December 2019 and February 2020 by the Institut Supérieur des Sciences de la Population (ISSP) of the Université Joseph Ki-Zerbo, in collaboration with the Burkina Faso government, the Bill and Melinda Gates Institute for Population and Reproductive Health at Johns Hopkins University, and Jhpiego. The databases, questionnaires, methodological guides, and summary results are available on the PMA website. The phase 1 data were made available to us following a duly submitted online request.

Target population and sample size

The target population for this study was women aged 15 to 49 who were using a method of contraception, whether medical or non-medical, at the time of the survey. Consequently, women not using any method of contraception were excluded from the analyses, as were those whose questionnaires were not fully completed. Therefore, the sample for this study is comprised of 2,167 women aged 15-49 using a method of contraception (medical or non-medical) at the time of the survey.

Analysis of variables

Dependent variable

The dependent variable in this study is the use of non-medical contraception. It comprises two modalities: 0 (No) and 1 (Yes). The first modality ("No") consists of users of medical contraceptive methods, while the second modality ("Yes") consists of users of non-medical contraceptive methods. Non-medical contraceptive methods include the breastfeeding method (LAM), the collar/fixed-day method, withdrawal/interrupted coitus, abstinence, other traditional methods, and condoms.

Independent variables

A review of the literature on the research theme and the context of Burkina Faso led to the selection of seventeen variables that could influence the use of non-medical contraception by women of childbearing age. Variables at the community level include place of residence, community norms on FP, source of information on FP, religion, awareness of contraceptive methods in the last twelve months, and FP counseling (also known as the information-method index). At the personal level, the variables include the decision to use the current contraceptive method, the woman's age, the standard of living of the household to which the woman belongs, her level of education, her marital status, her occupation in the last twelve months, her knowledge of medical contraceptive methods, her knowledge of non-medical contraceptive methods, individual norms on FP, parity, and the woman's desire to have (more) children.

Statistical methods for data analysis

The data used were analyzed using descriptive (univariate and bivariate) and explanatory methods. The univariate analysis described the socio-demographic characteristics of contraceptive users. The bivariate analysis used the Chi-square test with a threshold of 5% to assess the association between the independent and dependent variables. The multivariate analysis used binary logistic regression to estimate, with a threshold of 5%, the net effect of each independent variable on the dependent variable. This approach identified the factors associated with the use of non-medical contraception. We presented the logistic regression results using odds ratios, as these are easier to interpret. The data were processed and analyzed using Stata-MP software version 17.0. Tables and graphs were constructed and formatted in Microsoft Excel, and the text was written in Microsoft Word.

Ethical considerations

The protocol of the present study was submitted to the Ethics and Health Research Committee of the Ministry of Health of Burkina-Faso. It has obtained the ethics certificate under number 2023-08-207.

RESULTS

Prevalence of non-medical and medical contraception

A clear difference was observed between the proportion of women of childbearing age (15-49) using non-medical contraceptive methods (19.0%) and those using medical contraceptive methods (81.0%). The types of non-medical contraceptive methods used by women of childbearing age are summarized in Figure 1.

Socio-demographic characteristics of contraceptive users

The majority of contraceptive users in Burkina Faso in 2020 lived in rural areas (69.6%). Although more than seven out of ten users (71.8%) had access to at least one source of information on FP, only one out of ten users (11.9%) had access to at least three sources of information on FP. However, very few users (38.3%) had participated in mass awareness campaigns on FP in the last twelve months. Moreover, only four out of ten (35.7%) had received full counseling when they used contraception. All the socio-demographic characteristics are shown in Table 1.

Association between each of the independent variables and the dependent variable

The results of the bivariate analysis show that out of the seventeen independent variables selected, thirteen are significantly associated with the use of non-medical contraception among women aged 15 to 49 at the 5% threshold ($p \leq 0.05$) (Table 2). Specifically regarding non-medical contraception, the results indicate that most users of this method, for example, live in urban areas (32.3%) and have access to at least three sources of information on FP (37.0%) through radio, television, and newspapers/magazines (Table 2).

Factors associated with the use of non-medical contraception

Inserting all the independent variables into the model to measure their net effect on the dependent variable shows that twelve out of seventeen variables significantly influence the use of non-medical contraception among women of childbearing age (15 to 49) at the 1 and 5% thresholds, respectively (Table 3). At the 1% threshold, these variables include the woman's parity, her level of education, her source of information from mass media about FP, counseling, and her knowledge of medical contraceptive methods. At the 5% threshold, the variables include the person who decided to use the contraceptive method, the woman's occupation over the last twelve months, her norms on FP, and her knowledge of non-medical contraceptive methods.

At the 1% threshold, nulliparous women are approximately 23 times more likely to use non-medical contraception than multiparous women. Women with a

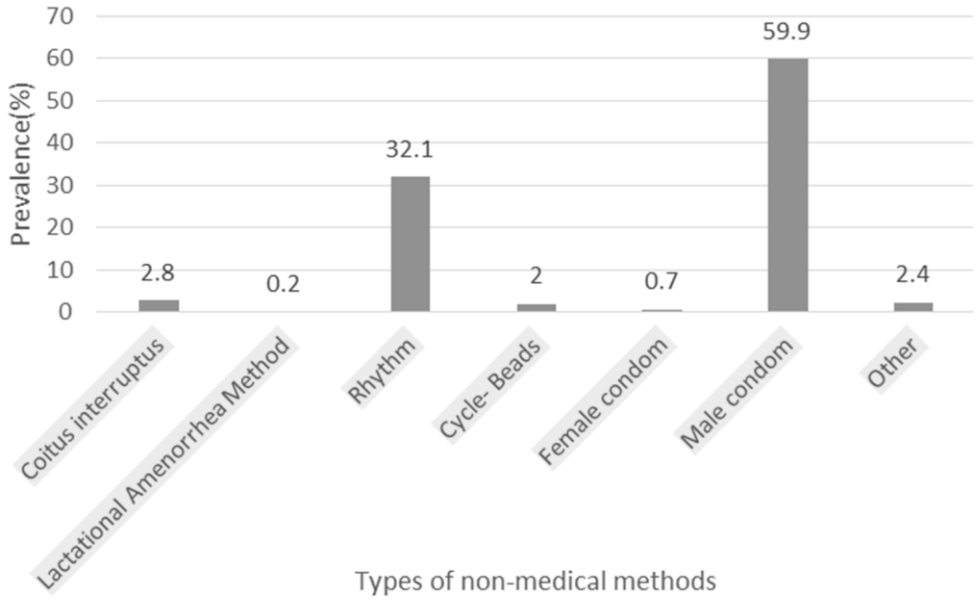

Figure 1. Distribution (%) of non-medical contraceptive users in Burkina Faso.
Source: Based on data from PMA phase 1 2020

Table 1. Distribution (in%) of women aged 15-49 using a contraceptive method at the time of the survey.

Variable	Effectif	%	95% IC
Using a Non-medical contraception			
	555	19.0	[15.6-22.9]
1 method	525	94.6	
2 methods	29	5.2	
3 methods	1	0.2	
Medical contraception	1 612	81.0	[77.1-84.4]
1 method	1 594	98.9	
2 methods	14	0.9	
3 methods	4	0.2	
Place of residence			
Urban	1 455	30.4	[25.9-35.3]
Rural	712	69.6	[64.7-74.1]
FP community standard			
Unfavorables	678	34.3	[28.7-40.4]
Average	671	33.9	[29.5-38.6]
Favorable	670	31.8	[27.1-36.8]
Source of information on FP (radio, tv, etc.)			
None	521	28.2	[23.9-33.1]
1 à 2 sources	1 224	59.9	[55.0-64.5]
At least 3 sources	422	11.9	[9.9-14.2]
Sensitization of contraceptive methods over the past twelve months			
No	1 155	61.7	[55.8-67.2]
Yes	547	38.3	[32.8-44.2]
Counseling (indice informations-methods)			

Table 1. Cont'd

Incomplete counseling	1 457	64.3	[57.7-70.4]
Complete counseling	710	35.7	[29.6-42.3]
Decision to use current contraceptive method			
Personal decision	884	42.7	[39.1-46.4]
Spouse/partner decision	342	16.4	[13.6-19.6]
Consensus decision	904	38.5	[34.5-42.5]
Other	37	2.5	[1.5-4.0]
Age groups of women(years)			
15-19	226	10.7	[8.9-12.8]
20-24	471	19.0	[16.9-21.4]
25-29	414	17.4	[14.7-20.4]
30-34	423	20.1	[17.6-23.0]
35-39	306	15.0	[13.2-16.9]
40-44	203	11.5	[8.9-14.8]
45-49	124	6.3	[4.6-8.6]
Woman's religion			
Muslim	1297	57.0	[47.6-65.8]
Catholic	574	26.5	[20.8-33.1]
Protestant	171	9.0	[5.8-13.6]
Traditional	120	7.6	[4.5-12.5]
Quality of life			
Poor	302	29.6	[24.7-35.1]
Average	380	29.9	[25.0-35.2]
Rich	1485	40.5	[33.9-47.5]
Woman's educational level			
None	845	53.9	[50.0-57.9]
Primary school	452	19.2	[16.6-22.0]
High school	743	24.2	[20.9-27.9]
College	125	2.7	[2.0-3.6]
Marital status			
Single	439	13.6	[11.6-16.0]
Married/ free union	1 632	83.6	[81.0-85.9]
Divorced/separated/widow	96	2.8	[2.1-3.7]
Occupation of the woman during the last twelve months			
No	772	39.3	[31.8-47.3]
Yes	1 395	60.7	[52.7-68.2]
Knowledge of medical contraceptive methods			
Less than 3 methods	68	3.5	[2.4-5.2]
At least 3 methods	2 099	96.5	[94.8-97.6]
Knowledge of non-medical contraceptive methods			
Less than 3 methods	506	26.8	[22.0-32.3]
At least 3 methods	1 661	73.2	[67.7-78.0]
FP Community Standards			
Unfavorables	704	34.2	[29.0-39.8]
Averages	701	33.1	[27.9-38.8]
Favorables	704	32.7	[26.9-39.0]

Table 1. Cont'd

Woman's parity	**r**		
Nulliparous	346	11.7	[9.6-14.1]
Primiparous	400	15.2	[13.1-17.6]
Pauciparous	687	26.5	[23.4-29.8]
Multiparous	733	46.6	[42.7-50.6]
Desire to have (other) children			
Having (other) child	1626	76.4	[73.0-79.6]
Does not want another child	426	22.5	[19.2-26.1]
Can no longer conceive	30	1.1	[0.6-1.9]

Source: Based on data from PMA phase 1, 2020.

higher level of education are 3.3 times more likely to use non-medical contraception than those with no formal education. Additionally, women who have access to at least three sources of information on FP are 2.1 times more likely to use non-medical contraception than those with access to only one or two sources. At the 5% threshold, women of childbearing age (15 to 49) whose decision to use non-medical contraception is made by the couple or solely by the spouse or partner are respectively 1.9 and 1.8 times more likely to use non-medical contraception than those who make the decision themselves. Finally, women who are familiar with fewer than three non-medical contraceptive methods are 49.7% less likely to use non-medical contraception than those who are familiar with at least three methods (Table 3).

DISCUSSION

Main findings

The main non-medical contraceptive methods used in Burkina Faso are the male condom, the rhythm (calendar) method, the withdrawal method, and the necklace. The main factors associated with the use of contraceptive methods are multilevel. The individual factors are essentially represented by the woman's level of education, her parity, and her desire to have children in the future. The main factor associated with the interpersonal level is the decision to use the current contraceptive method. Finally, the environmental determinants are religion, the source of information on FP, and the information-method index (counseling).

Types of non-medical methods used

The results show that, in descending order, users prefer the male condom, the rhythm method, and the withdrawal method. This result could be explained by the fact that condoms are used both to prevent unwanted pregnancies and to prevent sexually transmitted infections. Also, abstinence during the fertile period for those who do not combine the condom with other forms of method could support such a result. Similar results indicate that the main non-medical contraceptive methods most commonly used were the condom, the withdrawal method, and the calendar method, often in combination (De Irala et al., 2011; Johnson et al., 2013; Nilsson et al., 2018).

Factors associated with the use of non-medical contraceptive methods

The results show that better-educated women (those with secondary or higher education) and those with a higher standard of living tend to use non-medical methods. The use of non-medical contraceptive methods requires a good knowledge of human physiology. Their effectiveness therefore depends on the user's level of education. Women with a high level of education are more likely to use them. Other studies have found similar results. The use of traditional methods was higher among better-educated women with a high standard of living (Rossier et al., 2014; Rossier and Corker, 2017). According to another study, women with a higher level of education are more likely to use non-medical contraceptive methods than former users of natural methods and those who have never used these methods (Bertotti and Christensen, 2012).

The choice to use contraception is also influenced by the experiences of others, as well as gender relations such as the superpower of the man over the woman. In African societies in general, and Burkina Faso in particular, the power relationship also plays an important role within families, right up to the quest for healthcare. The man's decision is central and permeates the entire decision-making process. These results are similar to those of previous studies. The effectiveness of such a method depends on the couple's decision to use it correctly and successfully (Calimag et al., 2020). Arteaga and Gomez (2016) revealed that the context of the

Table 2. Association between each of the independent variables and contraceptive use (dependent variable) at the 5% threshold.

Variable	Medical contraception		Non-medical contraception		Total	Effectif	p-value
	%	95% IC	%	95% IC			
Place of residence							0.000***
Urban	67.7	[63.6-71.5]	32.3	[28.5-36.4]	1000	1 455	
Rural	86.8	[81.4-90.9]	13.2	[9.1-18.6]	100.0	712	
FP community standards							0.311^{ns}
Unfavorables	83.5	[79.0-87.1]	16.5	[12.9-21.0]	100.0	678	
Averages	78.7	[73.0-83.5]	21.3	[16.5-27.0]	100.0	671	
Favorables	81.0	[74.0-86.5]	19.0	[13.5-26.0]	100.0	670	
Source of information on FP (radio, tv, etc.)							0.000***
None	83.8	[78.4-88.0]	16.2	[12.0-21.6]	100.0	521	
1 - 2 sources	83.3	[78.8-87.0]	16.7	[13.0-21.2]	100.0	1 224	
At least 3 sources	63.0	[55.8-69.7]	37.0	[30.3-44.2]	100.0	422	
Sensitization of contraceptive methods in the last 12 months							0.025**
No	82.9	[78.8-86.4]	17.1	[13.6-21.2]	100.0	1 155	
Yes	88.2	[83.5-91.6]	11.8	[8.4-16.5]	100.0	547	
Information-methods index (counseling)							0.000***
Incomplete counseling	71.3	[66.0-76.2]	28.7	[23.8-34.0]	100.0	1 457	
Complete counseling	98.5	[96.8-99.3]	1.5	[0.7-3.2]	100.0	710	
Decision to use current contraceptive method							0.000***
Personal decision	86.9	[82.1-90.6]	13.1	[9.4-17.9]	100.0	884	
Spouse/partner decision	75.9	[66.5-83.3]	24.1	[16.7-33.5]	100.0	342	
Consensus decision	75.4	[70.4-79.8]	24.6	[20.2-29.6]	100.0	904	
Other	100.0		0.0		100.0	37	
Age groups of women(years)							0.000***
15-19	65.0	[53.8-74.8]	35.0	[25.2-46.2]	100.0	226	
20-24	71.0	[62.7-78.0]	29.0	[22.0-37.3]	100.0	471	
25-29	83.8	[78.0-88.3]	16.2	[11.7-22.0]	100.0	414	
30-34	86.0	[80.4-90.1]	14.0	[9.9-19.6]	100.0	423	
35-39	85.6	[77.7-91.0]	14.4	[9.0-22.3]	100.0	306	
40-44	89.2	[81.8-93.8]	10.8	[6.2-18.2]	100.0	203	

Table 2. Cont'd

45-49	89.5	[80.2-94.7]	10.5	[5.3-19.8]	100.0	124	
Woman's religion							0.036**
Muslim	82.2	[77.4-86.1]	17.8	[13.9-22.6]	100.0	1 297	
Catholic	73.8	[66.4-80.1]	26.2	[19.9-33.6]	100.0	574	
Protestant	89.0	[80.2-94.2]	11.0	[5.8-19.8]	100.0	171	
Traditional	87.9	[70.0-95.8]	12.1	[4.2-30.0]	100.0	120	
Standard of living of the household to which the woman belongs							0.000***
Poor	85.5	[76.8-91.3]	14.5	[8.7-23.2]	100.0	302	
Average	89.1	[83.1-93.2]	10.9	[6.8-16.9]	100.0	380	
Rich	71.7	[67.3-75.8]	28.3	[24.2-32.7]	100.0	1 485	
Women's educational level							0.000***
None	90.8	[86.1-94.0]	9.2	[6.0-13.9]	100.0	845	
Primary school	86.0	[81.6-89.5]	14.0	[10.5-18.4]	100.0	452	
High school	59.9	[53.7-65.9]	40.1	[34.1-46.3]	100.0	743	
College	38.6	[30.0-47.9]	61.4	[52.1-70.0]	100.0	125	
Marital status							0.000***
Single	38.3	[31.3-45.8]	61.7	[54.2-68.7]	100.0	439	
Married/free union	88.2	[84.7-91.0]	11.8	[9.0-15.3]	100.0	1 632	
Divorced/separated/widow	75.1	[61.3-85.2]	24.9	[14.8-38.7]	100.0	96	
Woman's occupation							0.599^{ns}
No	79.9	[73.6-85.0]	20.1	[15.0-26.4]	100.0	772	
Yes	81.7	[76.9-85.8]	18.3	[14.2-23.1]	100.0	1 395	
Knowledge of medical contraceptive methods							0.348^{ns}
Less than 3 methods	87.6	[69.9-95.6]	12.4	[4.4-30.1]	100.0	68	
At least 3 methods	80.8	[76.8-84.2]	19.2	[15.8-23.2]	100.0	2 099	
Knowledge of non-medical contraceptive methods							0.002***
Less than 3 methods	88.4	[82.6-92.4]	11.6	[7.6-17.4]	100.0	506	
At least 3 methods	78.3	[73.8-82.3]	21.7	[17.7-26.2]	100.0	1 661	
Individual standards on FP							0.269^{ns}

Table 2. Cont'd

Unfavorables	81.3	[75.5-86.0]	18.7	[14.0-24.5]	100.0	704	
Averages	83.7	[78.8-87.7]	16.3	[12.3-21.2]	100.0	701	
Favorables	77.9	[70.1-84.0]	22.1	[16.0-29.9]	100.0	704	
Woman's parity							0.000***
Nulliparous	30.5	[22.0-40.7]	69.5	[59.3-78.0]	100.0	346	
Primiparous	83.4	[76.2-88.8]	16.6	[11.2-23.8]	100.0	400	
Pauciparous	85.0	[80.5-88.7]	15.0	[11.3-19.5]	100.0	687	
Multiparous	90.5	[86.6-93.4]	9.5	[6.6-13.4]	100.0	733	
Desire to have (other) children							0.039**
Having (another) child	79.5	[74.9-83.5]	20.5	[16.5-25.1]	100.0	1 626	
Does not want another child	85.7	[80.0-90.0]	14.3	[10.0-20.0]	100.0	426	
Can no longer conceive	86.2	[69.8-94.4]	13.8	[5.6-30.2]	100.0	30	
Total	81.0	[76.9-84.5]	19.0	[15.5-23.1]	100.0	2 082	-

Source: Use of PMA phase 1 data, 2020.

relationship was also an important factor, as many people used withdrawals to increase intimacy with their partner. According to the French National Authority for Health (HAS) (2013), students use information from their biology course on the mechanisms of ovulation to protect themselves against pregnancy during this restricted period.

The use of non-medical contraceptive methods was significantly associated with religion, particularly among Protestant women. This result reinforces the idea that socio-cultural beliefs present numerous challenges to the success of sexual and reproductive health programs. These factors act as barriers to the adoption of contraceptive methods, particularly so-called modern methods (Kabagenyi et al., 2016) which would lead women to choose non-medical methods. This study demonstrates the role of religion in the choice to use non-medical contraceptive methods as opposed to medical contraceptive methods. Numerous studies have reported results similar to ours (Fehring and Manhart, 2021; Mathe et al., 2011; Staveteig, 2017). One of these studies showed that over half the women using natural contraceptive methods were Protestants. Another study carried out in the Congo found that religion was one of the barriers to the adoption of modern contraceptive methods, leading women to opt for traditional methods (Mathe et al., 2011).

The use of non-medical methods, particularly *coitus interruptus*, was also higher among Catholic and Muslim women (Audu et al., 2006). People with a high standard of living and those living in urban areas are more exposed to the media, which could explain why they are more likely to use non-medical methods. Some studies have shown that a higher proportion of women using natural or traditional contraceptive methods live in urban areas (Rossier and Corker, 2017).

Counseling is a strategy for better informing users about family planning, and women who are better informed tends to make better choices. Our results show that women who have been fully counseled are more likely to use non-medical contraceptive methods, as are those exposed to at least two media sources. These results highlight the importance of counseling and communication strategies in offering a range of contraceptive methods.

It is recommended that programs offering sexual and reproductive health services, particularly family planning, emphasize counseling to improve adherence to various methods.

These results are corroborated by other studies. For instance, one study found that FP care providers often lack the appropriate knowledge and skills to support users of non-medical methods, leading to reluctance in promoting these methods (Simmons and Jennings, 2020).

Table 3. Factors associated with the use of non-medical contraceptive methods among women of childbearing age (15-49 years).

Variables	Gross effects			Net effects		
	OR	IC (95%)	p-value	OR	IC (95%)	p-value
Woman's place of residence						
Urban	3.148	[2.384-4.157]	0.000	1.200	[0.709-2.030]	0.497
Rural	Réf.	-	-	Réf.	-	-
FP Community Standards						
Unfavorables	Réf.	-	-	Réf.	-	-
Averages	1.365	[0.943-1.976]	0.099	1.568	[0.928-2.650]	0.093
Favorables	1.184	[0.818-1.714]	0.371	1.594	[0.912-2.784]	0.102
Source of information from the media on FP (radio, tv)						
None	0.967	[0.665-1.406]	0.862	1.278	[0.738-2.216]	0.381
1 -2 sources	Réf.	-	-	Réf.	-	-
At least 3 sources	2.923	[2.092-4.085]	0.000	2.054	[1.220-3.459]	0.007
Sensitization about FP						
No	Réf.	-	-	Réf.	-	-
Yes	0.653	[0.451-0.945]	0.024	0,932	[0.551-1.577]	0.793
Missing	2.555	[1.816-3.595]	0.000	1,813	[1.101-2.987]	0.019
FP counseling						
Incomplete counseling	Réf.	-	-	Réf.	-	-
Complete Counseling	0.039	[0.0224-0.0673]	0.000	0.0353	[0.0177-0.0706]	0.000
Author of decision to use current contraceptive method						
Personal decision	Réf.	-	-	Réf.	-	-
Spouse/partner decision	2.110	[1.362-3.266]	0.001	1.773	[1.035-3.036]	0.037
Consensus decision	2.168	[1.561-3.011]	0.000	1.872	[1.153-3.037]	0.011
Other	1	-	-	1	-	-
Women’s age groups						
15-19	3.289	[1.921-5.630]	0.000	0.498	[0.207-1.197]	0.119
20-24	2.502	[1.565-3.998]	0.000	0.994	[0.461-2.144]	0.988
25-29	1.184	[0.712-1.967]	0.516	0.768	[0.360-1.639]	0.495
30-34	Réf.	-	-	Réf.	-	-
35-39	1.032	[0.578-1.841]	0.916	0.907	[0.405-2.032]	0.812
40-44	0.745	[0.402-1.378]	0.347	0.821	[0.317-2.128]	0.685
45-49	0.717	[0.318-1.614]	0.421	0.485	[0.150-1.570]	0.227
Woman’s religion						
Muslim	Réf.	-	-	Réf.	-	-
Catholic	1.636	[1.191-2.246]	0.002	1.528	[0.929-2.513]	0.095
Protestant	0.570	[0.311-1.045]	0.069	0.515	[0.265-0.998]	0.049
Traditional	0.634	[0.265-1.521]	0.308	0.578	[0.214-1.557]	0.278
Standard of living of the household to which the woman belongs						
Poor	0.430	[0.285-0.649]	0.000	0.956	[0.468-1.956]	0.903
Average	0.310	[0.200-0.479]	0.000	0.721	[0.386-1.349]	0.306
Rich	Réf.	-	-	Réf.	-	-

Table 3. Contd.

Women's educational level						
None	Réf.	-	-	Réf.	-	-
Primary school	1.601	[1.016-2.523]	0.043	1.107	[0.576-2.126]	0.761
High school	6.581	[4.527-9.568]	0.000	1.332	[0.699-2.536]	0.383
College	15.69	[9.702-25.37]	0.000	3.343	[1.493-7.489]	0.003
Woman's marital status						
Single	12.05	[8.380-17.32]	0.000	1.490	[0.754-2.947]	0.251
Married/free union	Réf.		-	Réf.	-	-
Divorced/separated/widow	2.473	[1.298-4.711]	0.006	1.964	[0.810-4.759]	0.135
Occupation of the woman during the last 12 months						
No	1.125	[0.835-1.515]	0.440	0.622	[0.410-0.945]	0.026
Yes	Réf.	-	-	Réf.	-	-
Knowledge of medical contraceptive methods						
Less than 3 methods	0.592	[0.243-1.445]	0.250	0.197	[0.0675-0.577]	0.003
At least 3 methods	Réf.	-	-	Réf.	-	-
Knowledge of non-medical contraceptive methods						
Less than 3 methods	0.476	[0.319-0.710]	0.000	0.503	[0.294-0.860]	0.012
At least 3 methods	Réf.	-	-	Réf.	-	-
Individual standards on FP						
Unfavorables	Réf.	-	-	Réf.	-	-
Averages	0.844	[0.588-1.212]	0.358	0.532	[0.321-0.881]	0.014
Favorables	1.237	[0.861-1.777]	0.250	0.859	[0.499-1.478]	0.583
Women's parity						
Nulliparous	21.78	[13.11-36.20]	0.000	22.95	[7.737-68.11]	0.000
Primiparous	1.901	[1.186-3.047]	0.008	1.503	[0.664-3.400]	0.328
Pauciparous	1.684	[1.088-2.606]	0.019	1.361	[0.747-2.478]	0.314
Multiparous	Réf.	-	-	Réf.	-	-
Desire to have (other) children						
Have a (nother) child	Réf.	-	-	Réf.	-	-
Does not want another child	0.648	[0.437-0.961]	0.031	2.015	[0.946-4.293]	0.070
Can no longer conceive	0.620	[0.214-1.799]	0.379	1.464	[0.437-4.908]	0.536
Chi2				343.8		
p-value				0.000		
Pseudo R2 (%)				41.7		
Effectif				1.888		

Source: Use of data from phase 1 of Performance Monitoring for Action (PMA) Burkina Faso, 2020.
ns = not significant; * = significant at the 10% level; ** = Significant at the 5% threshold; *** = significant at the 1% level; Ref. = reference modality.

Additionally, a scoping review by Calimag et al. (2020) on natural contraceptive methods reported that the main sources of information among university students were friends, books, school, and media, with no information coming from health professionals. This represents a significant limitation in the quality of FP care.

Conclusion

Using data from phase 1 of the PMA, this study identified the factors associated with and the extent of the use of non-medical contraceptive methods in the context of Burkina Faso. The factors identified are multifactorial and

can be classified into individual, interpersonal, and community factors. For example, better-educated and wealthier women living in urban areas are more likely to use non-medical methods. The results also indicate a relatively high prevalence of non-medical contraceptive methods, considering the government's efforts to promote the supply of contraceptives and the implications of their use by women. These findings suggest that family planning programs should pay close attention to these influencing factors. Strategies to support optimal use of non-medical methods are needed, not only to prevent unexpected pregnancies but also to ensure that women have access to their rights. Future studies could explore partner satisfaction with the use of non-medical methods and investigate the barriers to offering these methods in healthcare settings.

LIMITATIONS OF THE STUDY

This study has its limitations. The use of secondary data could mask certain important variables that were not taken into account. However, most of the variables identified in the literature were taken into account.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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