

## 1. INTRODUCTION

Condoms are a critical component in a comprehensive and sustainable approach to the prevention of HIV and other sexually transmitted infections (STIs) and are effective for preventing unintended pregnancies. In 2021, an estimated 1.5 million [1.1 million–2.0 million] people became newly infected with HIV in 2021 (UNAIDS, 2021) and an estimated 500 million people acquired chlamydia, gonorrhoea, syphilis or trichomoniasis<sup>1</sup>. In addition, every year more One in ten women of reproductive age – some 270 million according to WHO estimates - have an unmet need for family planning and more than 200 million women who want to avoid pregnancy are not using modern contraception due to a range of barriers<sup>2</sup>. These three public health priorities require a decisive response using all available tools, with condoms playing a central role.

In spite of a relatively weak prevalence rate compared to countries of southern Africa, Cameroon experienced an increase in the number of HIV cases and latter a decrease in 2007. In fact, from 2011 to 2018, the prevalence of HIV infection in Cameroon declined from 5.55% to 2.8% [4, 5]. However, there were persistent disparities in HIV infection in Cameroon in terms of age, place of residence, region and gender. Prevalence was higher in the female population (3.5%, versus 1.9% in male population), urban areas (2.9%, versus 2.4% in rural), and in adults aged 35-39 years (INS, 2011, 2018).

In Cameroon, lack of access to quality reproductive health services contributes to large numbers of unwanted and mistimed pregnancies. Consequently, many Cameroonian women are exposed to the risks from childbirth without adequate obstetric care or to the perils of unsafe abortion, which threaten the lives, health, and economic well-being of women, their families, and society. The recent increase in the maternal mortality ration from 669 per 100,000 live births in 2004 to 782 per 100,000 live births in 2011 is an important pointer to the seriousness of the problem and the need for urgent actions to reverse this trend<sup>3</sup>.

Condoms have played a decisive role in HIV, STI and pregnancy prevention efforts in many countries. Condoms have helped to reduce HIV transmission and curtailed the broader spread of HIV in settings where the epidemic is concentrated in specific populations (Boily M-C et al.2013). Distribution of condoms has been shown to reduce rates of HIV and other STIs in sex workers and men who have sex with men (Johnson LF et al. 2012). In India and Thailand increased condom distribution to sex workers and their clients in combination with other prevention interventions were associated with reductions of transmission of both HIV and other STIs. Zimbabwe and South Africa are two high-prevalence countries where increased condom use was found to contribute to reductions in HIV incidence(Johnson LF et al. 2012).

A recent global modelling analysis estimated that condoms have averted around 50 million new HIV infections since the onset of the HIV epidemic (Stover J. 2014). For 2015, 27 billion condoms expected to be available globally through the private and public sector will provide up to an estimated 225 million couple years protection from unintended pregnancies<sup>4</sup>.

Despite generally increasing trends in condom use over the past two decades, substantial variations and gaps remain. Reported condom use at last sex with non-regular partners ranges from 80% use by men in Namibia and Cambodia to less than 40% usage by men and women in other countries, including some highly affected by HIV. Similarly, among young people aged 15 to 24 years, condom use at last sex varies from more than 80% in some Latin American and European countries to less than 30% in some West African countries.<sup>5</sup> This degree of variation highlights the need for countries to set ambitious national and subnational targets and that in many settings there are important opportunities for strengthening demand and supply of condoms.

Meanwhile, in spite of the sero-prevalence among the Cameroonian population and after many years of promotion of condoms among the sexually active population through the National Committee for the Fight Against AIDS and other Non Governmental Organizations, the use of condoms still remains below expectations. Nevertheless, we still find a gap between knowledge and the use of condoms. According to data collected by CDHS (CDHS-III, 2011:210), though nine out of ten men know about condoms, only 8% of men used it during the last sexual intercourse, no matter the reason, no matter the type of partner. The percentage of the use of condoms is greater for singles (73 %), against 51% for men from broken marriages and only 23% for married men.

The use of condoms is faced with several types of obstacles: psychosocial obstacles (The perception that requesting condom use is 'unfeminine' is a major barrier to condom use. Across condom acceptability studies, dilemmas arise between the construction of women as passive participants in sexual relationships and their responsibilities in sexual protection. Women have been broadly socialised as the instigators of safe sex behaviour, and held largely responsible for protection against their husband's infidelity), obstacles linked to the inherent property of the product, cultural obstacles (For married couples, it is culturally expected that they will have children; the prospect of having no children thus more often conflicts with, or outweighs, the value of condoms for HIV prevention), demographic obstacles (A study by the Joint United Nations Programme on HIV/AIDS (UNAIDS) in 2010 showed similarly that individuals infected with HIV, as well as known 'risk populations,' such as sex workers, experience high degrees of HIV-related discrimination in their family

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<sup>1</sup> WHO, Dept. of Reproductive Health and Research. Global incidence and prevalence of selected curable sexually transmitted infections

<sup>2</sup> <https://www.ohchr.org>

<sup>3</sup> (M. Vlassoff and J. Jerman: Guttmacher Institute, New York, USA; G. Beninguisse, F. Kamgaing and F. Zinvi: Institut de Formation et de Recherche Démographiques (IFORD), Yaounde, Cameroon.)

<sup>4</sup> In line with standard assumptions, 120 condoms are required for 1 couple year of protection. Projected condom sales for 2015 cited based on: Global Industry Analysts. 2014. Global Condoms Market. May 2014.

<sup>5</sup> Source: Data from a database of Demographic and Health Surveys (DHS) available at [statcompiler.com](http://statcompiler.com) (verified January 2015).

homes. Almost 50% of respondents reported negative attitudes or felt ostracised by family members (United Nations Programme on HIV/AIDS, 2010) and situational or accidental obstacles (One of the principal findings to emerge from AIDS research is that for both women and men, there is far greater willingness to use condoms in casual relationships, with prostitutes, or with casual sex partners than with stable partners or spouses.). But, the frequency of these different obstacles is subject to a social variability (Farrar, L (2013). In other words, there exist social categories whose obstacles have a higher prevalence rate to the average of the studied population. Thus, social characteristics such as age, education, religion, occupation amongst others, have a significant power of discrimination over the non-use of condoms.

In the African context, the society extols the virtues of fidelity generally, in the framework of procreation by excellence. The obstacles to the use of condoms are more frequently inevitable, where condoms usually appear to be in the minds of individuals as an obstacle in procreation of the couple and leads to an incentive or sexual permissiveness. The strategies for the promotion of condoms have to target most particularly, the men's milieu, which contributes in a greater extent to accentuation or to a permanent obstacle to the use of condoms in the general population. For this, we need a better knowledge of the determinants of the non-use of condoms in this stratum of the population and particularly with associated obstacles. Our studies propose to bring a contribution in this sense.

## **2. CONCEPTUAL FRAMEWORK**

In this section, we first need to present the hypotheses, latter the conceptual framework, which will be prior to the definition of our concepts.

From then on, we started asking ourselves the following questions:

- Generally, do men have a different behavior towards condoms based on their social stratification?
- What are the levels and the social variability of the non-use of condoms among married men?

This study has as principal aim to supply necessary information, for the setting up and orientation of prevention programs against HIV/AIDS. More specifically we are making reference to:

- Determine the level of the non-use of condoms;
- Identify to the individual level, the explanatory factors of the non use of the condom at the men in union.

### **Hypotheses**

#### **a) Fundamental Hypothesis**

This hypothesis announces itself thus: social stratification in Cameroon differentiates men when talking about the non-use of condoms.

#### **b) Derived hypothesis**

The specific hypotheses that these studies target to verify are:

1<sup>st</sup> Hypothesis:

Urbanization exercises a significant influence over the non-use of condoms by men. We then expect prevalence in this phenomenon in the urban areas than the rural areas.

2<sup>nd</sup> Hypothesis:

Ethnic cultural membership more precisely determines in different ways the non-use of condoms by men through attitudes and perceptions together with the practices it leads and confers.

3<sup>rd</sup> Hypothesis:

The degree at which the individual is exposed to the knowledge of HIV/AIDS and condoms usually influences the failures of the non-use of condoms among men.

4<sup>th</sup> Hypothesis:

The individual perception concerning the risks of contracting an STI/AIDS generally influences the non-use of condoms among men.

## **3. UNIT OF ANALYSIS**

Cameroon Demographic Health survey (CDHS) constitutes the source of figures of these studies. Our sample consists of men aged between 15-59 years and having in common the fact of living (at least with one woman), With the union be consecrated or not by any agreement (juridical, civil, customary or any other). It represents at least half of the 2562 men investigated, either 1310 men "married".

## **4. ANALYTIC FRAMEWORK OF STUDY**

Social stratification in Cameroon is in such a way that the various different behaviors among men as regard the non-use of condoms can be understood through the following procedures:

Factors of modernization interact with one's culture of origin on the non-use of condoms, directly or indirectly, through ones level of knowledge concern HIV/condoms. Moreover, cultural characteristics influence the non-use of condoms. On the other hand, the exposure to knowledge concerning HIV and condoms will influence the use of preservatives through the attitude and the perception of

risk of contracting AIDS. Finally, the effects of attitudes and individual perception concerning condoms and the risks of contracting HIV over the non-use of condoms will be mediatized by the geographic and economic accessibility of the latter.

## 5. RESULTS AND DISCUSSION

### 5.1. Explanatory factors of the non-use of condoms among men.

The search for explanatory factors for the non-use of condoms among men will be done in two phases. In the first stage, we would examine the social determinants and the non-use of condoms. At this stage, the link between the non-use of condoms among men and each of the independent variables will be studied with the help of a simple logistic drop at a double varied level. In a second phase, it will help us to carry out a more detailed analysis in order to emanate the intrinsic effects on the different characteristics of men on the obstacles over the use of condoms. It is at the end of this that one would be able to know if the hypotheses formulated from the beginning are invalidated or asserted.

It springs forth a double varied analysis that not all independent variables maintain a significant association with the phenomenon to be explained. Thus, the dependent relationships of the following variables with the non-use of condoms have not been well known at the level of 10%: the age and risk of contracting HIV/AIDS. All the other variables kept for these studies have associated in a significant way to the studied phenomenon.

Now, it is important to evaluate the intrinsic effects of each of the independent variables over each of the studied phenomenon by appealing to the most performing statistical method. We intend therefore to identify and explain the real portion of the influence of each of the characteristics of men on the obstacles to the use of condoms through the determination of the contribution of the principal factors and of multi-varied analyses.

**Table 1: The clear effects of the non-use of condoms among men**

VARIABLES	Related risks of not using condoms associated to each modality										
	Brut	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10
<b>Place of abode</b>											
Urban	0.32***	0.43***	0.43**	0.50**	0.51**	0.47**	0.51**	0.52**	0.57**	0.46**	0.49**
Rural	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
<b>Ethnic group</b>											
The Ethnic Groups of N. Cameroon	9.04***	7.28***	6.70***	6.41***	3.97***	4.60**	4.50***	4.47***	3.72**	3.23**	3.02**
Coastals and Bassa/Bakoko	1.39ns	1.36ns	1.41ns	1.46ns	1.64ns	1.55ns	1.64ns	1.63ns	1.62ns	1.55ns	1.52ns
Beti/Boulou/Fang and Yambassa	2.07**	1.81*	1.89*	1.97**	2.23**	2.35***	2.50***	2.48***	2.51**	1.92*	1.95*
Maka/Kaka/Pygmies	6.80**	5.28*	5.45*	5.66**	6.45**	7.97**	8.20**	7.81**	6.37**	4.31ns	3.65ns
Foreigners	1.72ns	1.22ns	1.24ns	1.21	1.26ns	1.27ns	1.38ns	1.45ns	1.47ns	1.54ns	1.46ns
Bamileke and Anglophones	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
<b>Religion</b>											
Christians	0.54ns	0.83ns	0.82ns	0.92ns	0.91ns	0.88ns	0.92ns	0.93ns	0.99ns	1.05ns	1.11ns
Non-Christians	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
<b>Occupation</b>											
Jobless	0.58ns			0.52ns	0.49ns	0.55ns	0.53ns	0.54ns	0.44ns	0.47ns	0.41ns
Traditional sector	2.49***			1.17ns	0.95ns	0.96ns	0.87ns	0.88ns	0.82ns	0.76ns	0.69ns
Formal sector	Ref			Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
<b>Education</b>											
Illiterate	13.83***				6.29ns*	4.86**	3.61ns	3.70ns	3.12ns	2.69ns	2.41ns
Primary	1.76**				1.40ns	1.35ns	1.24ns	1.20ns	1.15ns	1.04ns	0.96ns
Secondary and above	Ref				Ref	Ref	Ref	Ref	Ref	Ref	Ref
<b>Age</b>											
25-34 years	1.36ns					2.12*	2.29**	2.33**	2.32**	2.59**	2.76***
35-44 years	1.33ns					2.04*	2.19**	2.25**	2.08*	2.31**	2.43**
45-59 years	2.36ns					2.72**	2.8**	2.93**	2.32*	2.33*	2.34*
15-24 years	Ref					Ref	Ref	Ref	Ref	Ref	Ref
<b>Access to information</b>											
Exposed	0.32***						0.59*	0.59*	0.67ns	0.72ns	0.70ns
Unexposed	Ref						Ref	Ref	Ref	Ref	Ref
<b>Risk of contracting HIV/AIDS</b>											
No risks	1.49ns							1.36ns	1.32ns	1.24ns	1.26ns
Important	1.16ns							1.40ns	1.42ns	1.43ns	1.34ns
Weak	Ref							Ref	Ref	Ref	Ref
<b>Non classic sources of supply of knowledge</b>											
No knowledge	6.88***								3.40ns	2.82ns <sup>3</sup>	2.84***
Knowledge	Ref								Ref	Ref	Ref
<b>Attitude towards contraception</b>											
Disapprove	10.43***									6.53***	5.52***
Do not know	3.43***									2.08ns	1.74ns
Approve	Ref									Ref	Ref
<b>Discussion among couples about FP</b>											
Discuss less	0.42**										0.78ns
Discuss often	0.19***										0.45***
Do not discuss at all	Ref										Ref

Pseudo r <sup>2</sup>	-	09%	09%	09%	10%	11%	11%	12%	14%	17%	19%
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**Note:** Significance at the level of 10%;\*\* 5%;\*\*\* from 1%; not significant (Ref) indicates the group of reference

The results of the drop in table 1 show the variable levels of non-use according to retained indicator.

On another dimension, men, not having classical sources of knowledge have 2.8 times more risk of not using condoms. This risk is at 2.5 when the husband has “an unfavorable behavior over contraception”. On another, when he “discusses more often with his partner about FP” the risk is reduced to 55%. We realize that there is a variation in the level of non-use of condoms according to ethnic membership. The level of failure of its use is three times higher among ethnic groups of Northern Cameroon than among the Anglophone-Bamilekes. On the contrary the Beti-Boulou-Fang have 95% are at higher risk of not using condoms. In other words, the variations in the levels of the non-use of condoms are equally important according to age. The level of non-use is more raised from 25 years and above. In fact, they are 2.8 times at risk of not using condoms than those between 15-24 years. In revenge, men between 35-44 and 45-59 years have 2.4 and 2.3 higher risks respectively of behaving thus. Finally, indicators of modernization reduce in a significant way the risks of the non-use of condoms among men. For example, this risk is reduced to 51% for the city-dwellers and to 59% for the jobless.

## 5.2. Explanatory factors to the non-use of condoms among men at the individual level

The second objective was to identify the explanatory factors to the non-use of condoms among men at the individual level. Ethnic groups, age, attitudes towards condom and the knowledge of non-classic sources are prior to the explanation for the non-use of condoms. We realize therefore that the non-use of condoms in Cameroon highlights the role played by the influence of the following factors: culture through ethnic membership; factors of modernization through urbanization and access to employment, knowledge of non-classical sources, his attitude towards contraception and discussions with his wife on FP. These characteristics have revealed major factors in the explanation of the studied phenomenon, yet the opinion of the husband on contraception dominates over every consideration, for it is the most influential variable.

## 6. REFERENCES

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