



Research Article

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Female condom: Knowledge, attitudes and practices of students in three faculties of the University of Douala

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Abstract

Introduction: The female condom is a polyurethane sheath that fits into the vagina before the sexual act, protecting the woman against both sexually transmitted infections, including HIV, and unwanted pregnancies. Objectives. We assessed the attitudes and practices of the female condom among female students in three faculties at the University of Douala. **Methods:** We conducted a prospective, cross-sectional and analytical study of female students aged at least 21 years old and willing to participate in the study. We excluded those who were not sexually active, as well as those whose cards were poorly completed. A pre-tested and questionnaire was used to collect socio-demographic characteristics, attitudes and practical knowledge of female condom students. The rating tables have been established. Data was analyzed using SPSS version 2.0 software. **Results:** A total of 320 students were enrolled in the study. The average age was 23.6 ± 4 years old. The majority of participants were single. 74.4% were poorly knowledgeable, 17.5% had average knowledge, and 0.3% had good knowledge of female students. The attitude regarding the female condom was unfavorable at 83.3% and indeterminate at 16.2%. The female condom use rate was 8.4% with a user satisfaction rate of 7.4%. **Conclusion:** Students in these 3 faculties have poor knowledge of the female condom. Their attitude is unfavorable, and its use infrequent and unsatisfactory.

Keywords: Female condom, Students, Knowledge.

INTRODUCTION

The female condom (FC) is a polyurethane sheath with a flexible ring at both ends, which fits into the vagina before sexual intercourse, providing the woman with autonomy for protection, both against unwanted pregnancies and sexually transmitted infections (STIs), including HIV-AIDS [1-3]. Indeed, this is the only means of reciprocal protection put in place at the initiative of women alone [4]. However, the rate of unwanted pregnancies remains high, both in the West and in our area, which is 36% in France [5] and 40% in Cameroon [6]. Similarly, young women account for 64% of young people living with HIV globally [7]. In Cameroon, the seroprevalence of HIV among women is higher than that of men, with rates of 5.6% and 2.9% respectively [8], a trend also observed in age groups of 15 to 24 years (3.9 and 1.6%) [9]. Hence the interest of the female condom, for the young woman in Cameroon. However, is it well known, accepted, even used by this youth?

Our goal was to evaluate the knowledge, attitudes and practice of students from three faculties of Douala University on the female condom.

PATIENTS AND METHODS

We conducted a transversal and descriptive prospective study in three faculties of the University of Douala (Faculty of Legal and Political Sciences, Faculty of Economics and Applied Management, and the Faculty of Arts and Human Sciences). took place from November 15, 2016 to May 15, 2017, for a period of 7 months.

Study population. We recruited all female students from these faculties at least 21 years of age who gave their written consent. We excluded those who were not sexually active.

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Sampling. The minimum sample size was estimated at 320 by the LORENTZ formula. We performed a non-probability consecutive sampling. We considered the prevalence rate of female condom knowledge in Cameroon according to the 2011 Demographic Health Survey (DHS) (70%). The threshold of significance retained was 0.05.

Procedure. The method of data collection consisted of a small group information session of 8 to 10 participants, followed by individual filling of a self-administered questionnaire, with instantaneous collection of these forms.

Variables studied. The data collected were sociodemographic variables (age, marital status, religion), the level of knowledge of the female condom, the attitude towards the female condom, and the actual use of the female condom.

The level of knowledge, attitude and practice were assessed through a pre-established rating scale. The level of knowledge was rated satisfactory when the fair response rate was 85% or more; it was good for students who found between 65 and 84% of correct answers; it was qualified as a means for a score of good answers between 50 and 64%; it was poor for scores below 50%.

The attitude was qualified as favorable for a score of adequate answers $\geq 75\%$; it was indeterminate for any score between 50 and 74%, and

said unfavorable for a score $<50\%$. The acceptability rate was defined as the proportion of female students who used FP, and / or who were willing to do so, compared to the entire sample.

We determined the female condom use rate, as well as the user satisfaction rate.

Statistical analyzes. These data were recorded and processed using the Excel 2007 spreadsheet. They were then analyzed using the SPSS version 2.0 software.

Ethical considerations. We kept our results confidential for a strictly scientific purpose.

RESULTS

Sociodemographic characteristics.

In total, we selected 320 students in our study. The average age was 23.6 ± 4 years, with extremes of 21 and 46 years. The age group of 21 to 25 years was the most represented (81.6%), single people were the majority, with 75.6%. The Christian population represented 86% of the sample (Table 1).

Table 1: Sociodemographic characteristics of female students

Variables	Size(n= 320)	Percentages(%)
Age		
[21- 25]	261	81,6
[25-30]	36	11,2
≥ 31	23	7,2
Matrimonial status		
Single	242	75,6
Couple	6	1,9
Married	72	22,5
Religion		
christian	275	86
muslim	41	12,8
others	4	1,2
Faculty		
Law	102	31,8
Letter	94	29,2
Economic sciences	124	39

Student knowledge of the female condom

The physical description of the condom was known to 54 (29.3%) female students

In terms of physical knowledge, 54 (29.3%) students were able to describe the female condom. The channels through which they were informed were mainly media (159 cases = 49.7%), HIV prevention campaigns (148 cases = 46.3%). Eleven students (3.4%) were informed by the medical staff.

As for FP functions, 244 students (77.2%) were aware of its protective role against STIs, while 171 (54.1%) mentioned its role in preventing unwanted pregnancies. About its use, 150 students (47%) knew that they had to introduce the female condom themselves, while 125 (39%) of them knew when to do it.

The students therefore had a fairly good knowledge of the functions and the role of the female condom, but they were unaware of its physical appearance and use. Their overall level of knowledge about the female condom was poor at 74.4%, 7% unsatisfactory, 17.5% average, and 0.3% satisfactory (Figure 1).

Attitudes of female students on the female condom

Female students found the uncomfortable PF in 37.4%, embarrassing in 29.4%, difficult to use in 36.1% and scary in 28.1% of cases. As for their use, 125, or 39.6% of the workforce was willing to use it. Those who were willing to offer it to other people numbered 121 (38.3%). The rate of acceptability of the PF was 48.1%. However, 83.3% of female students (including some female users) had an overall negative perception of the female condom, compared to 16.2% of undetermined attitudes.

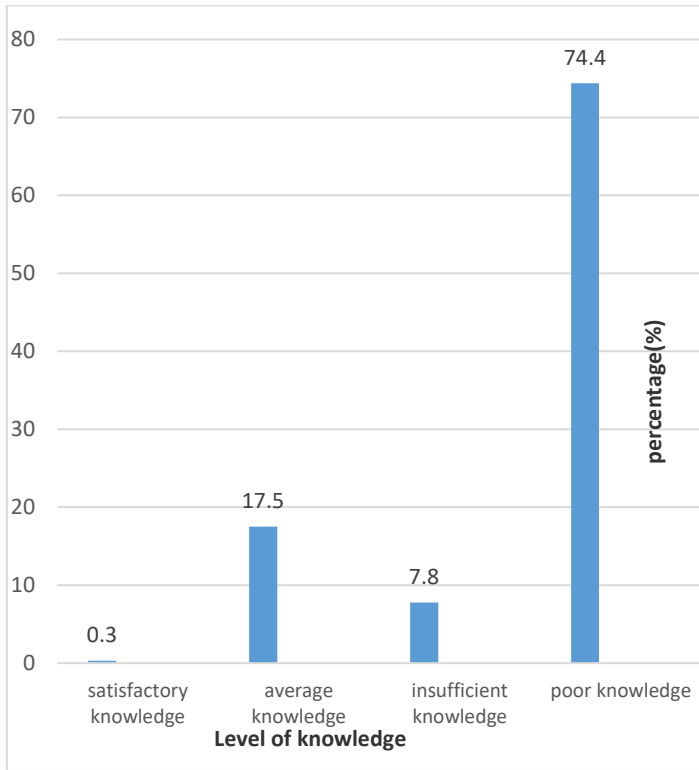


Figure 1: Level of knowledge

Condom practice by female students

The number of female students who used the female condom was 27, representing a utilization rate of 8.4%. Only 14 (51.9%) had reused it. Of the users, 2 said they were satisfied with their usage, a satisfaction rate of 7.4%, while 17 (63%) said they had difficulty using it, 14 (51.8%) of them at introduction.

DISCUSSION

The choice of our study population

We chose to exclude female students under the age of 21 because their participation would require parental authorization, a procedure that could hinder the practical realization of the survey. The exclusion of female students who were not sexually active is justified by the fact that the lack of motivation could constitute a bias for the evaluation of knowledge: similarly, the evaluation of condom use in this population was illogical.

The results

More than ¾ of the population was made up of young single people. The same characteristics are found in the series of Bongka [10] *et al* which interested the student environment as in this study.

Almost all female students (98.8%) were aware of the female condom. These results are similar to those of Bull *et al* [11] in 2003 in the USA (90%), Lhuillier *et al* [12] in 2012 in France (98%), and bongka *et al* in Cameroon in 2013 (100%) [10]. The media (49.7%), and the HIV prevention campaigns (46.3%) found as the main sources of information on FP in our sample, corroborate the work of Lhuillier [12] who found rates 68% and 69% respectively. However, at bongka [10], prices were the main source of information. In fact, unlike our series, her study focused on female medical students, who are available at compulsory academic sources. It should be noted that medical staff was the source of the information only in 3.4% of cases. These figures are of great interest to practitioners in the field of popularizing this tool with young people: have they appropriated it?

Students at the three faculties had poor physical knowledge of the female condom. Indeed, more than 2/3 of the population was unable to describe it physically. However, most of them knew its role in preventing STIs (77%), and protecting against unwanted pregnancies. This rate was 61% in the spizzichino series [13]. Similarly, the oiler in 2013 [12] and kessler in 2005 [14] reported 59% and 70% for knowledge of FP as a contraceptive method. Regarding the use of FP, more than half of female students did not know one of the major benefits of this contraceptive method: self-administration. Similarly, three-fifths of the students did not know the time frame for setting up the FP before coitus, these aspects had not been explored by the Bongka study [10], conducted in a similar environment.

Regarding the attitude of female students to FC, the uncomfortable (37.4%), embarrassing (29.4%), and difficult-to-use (36.1%) characteristics observed in this series were found in bay work [10] but in larger proportions (72.3%, 60% and 77.1%). Similarly, the sensation of fright (28.1%) was observed in smaller proportions than in the Lhuillier series [12]. For this last aspect, this difference was probably influenced by the better decline that the students had in relation to the beginning of FC extension. The acceptability of FC has mainly been studied in risk groups such as sex workers [15,16]. It was evaluated through a process involving the following sequences: information, distribution, use, and re-evaluation. Due to the singular nature of our study population (students), we have chosen to emphasize the intentional aspect of acceptability here. Therefore, the acceptability rate we observe in our series n' does not have the same meaning as in the studies on risky subjects, although they are more modest. However, it has the advantage of being based on direct and clearly indicative questions. Bongka [10], who studied a population similar to ours, did not specifically look for either the rate of acceptability of the FC or a quantified translation of the attitudes of the subjects examined in relation to the FC.

Regarding the practice, we found a rate of use (8.4%) close to that of Bull (5%) or even oil (6%) among female medical students in France [11,12], but clearly below that observed in the same environment in Cameroon by Bongka (20%) [10]. This difference can not be due solely to the quality of the information. Indeed, Bongka [10] and Lhuillier [12] have both been interested in medical students, who probably have access to the same level of information. One could evoke a better conjunction between the quality of information and the need of the population studied. Our work corroborates those of the "All Women, All Children" action, which ranked the female condom as one of the three least used reproductive health products [17]. The satisfaction rate (7.4%) observed here was lower than that revealed by Farr (54%) in France [16]. Lack of knowledge of the use of FP found in our population would probably have played a determining role in the non-satisfaction found here; In our series, nearly 2 / 3 of the users (63%) had difficulty using the FP. Kessler [14] found problems with use in 34% of cases, however, he also noted a tendency to improve with repetitive use, corroborating Smith's work [18].

Limits

The low use of the female condom in our population has limited the analysis of the practice of this tool in this study.

CONCLUSION

In the end, the students interviewed did not know the FP physically, they did not know the use, but most of them knew the role. The overall level of knowledge about FP was poor. Most of them had an unfavorable perception of FP. The acceptability rate was 48%. The PF utilization rate was 8.4%. The satisfaction rate was low (7.4%) compared to those observed by other authors.

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Contributions of the authors

- Design of the study: Michel Ekono.
- Data collection and analysis: Michel Ekono, JGS Bwemba, A Felix Elong.
- Writing of the manuscript: Michel Ekono, JGS Bwemba, A Felix Elong.
- Revision of the manuscript: Michel Ekono, Henry Essome, Pierre Marie Tebeu, Belinga E, A Felix Elong.
- Supervision: Emile Mboudou.

Conflict of interest

The authors declare that there is no conflict of interest

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