



Evaluation of Female Condom Use among Students at the University of Lubumbashi: Knowledge, Attitude and Practice on University Cities

Mujanayi Mujanayi Jean Bernard¹, Ilunga Kandolo Simon^{2*}, Matungulu Matungulu Charles², Kaya Mulumbati Charles³, Mashini Ngongo Ghislain³, Mwembotambwe Ankoy Albert³, Kabyla Ilunga Benjamin³, Kalengamwenze Kayamba Prosper³

¹The Ilebo General Hospital, Kasai, Congo

²School of Public Health, University of Lubumbashi, Lubumbashi, Congo

³Faculty of Medicine, University of Lubumbashi, Lubumbashi, Congo

Email: *silungak@gmail.com

How to cite this paper: Bernard, M.M.J., Simon, I.K., Charles, M.M., Charles, K.M., Ghislain, M.N., Albert, M.A., Benjamin, K.I. and Prosper, K.K. (2017) Evaluation of Female Condom Use among Students at the University of Lubumbashi: Knowledge, Attitude and Practice on University Cities. *Open Access Library Journal*, 4: e4129. <https://doi.org/10.4236/oalib.1104129>

Received: November 7, 2017

Accepted: November 25, 2017

Published: November 28, 2017

Copyright © 2017 by authors 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/>



Open Access

Abstract

Introduction: The use of the female condom is still very low on university campuses. This study was conducted to assess the knowledge, attitudes and practices of female condom use in Lubumbashi. **Method:** We conducted a cross-sectional study on the use of the female condom on university campuses. Our sample consisted of 300 individuals, including 169 women and 131 men. A questionnaire was established to collect the data. SPSS version 23 helped us analyze the data, which was encoded in Excel. **Results:** Female condom use was reported in 137 women, or 81.1% of women had previously used the female condom (chi-square = 25.237). Single women were more likely than brides to use female condoms. Women who did not use female condoms were luckier than those who used it because they did not receive the information. **Conclusion:** Information on the existence of the female condom and the marital status of the survey influences the use of the female condom. Popularization about the existence of the female condom and its availability on university campuses are important steps to take for its use. Appropriate health education would be the key to popularize and promote the female condom.

Subject Areas

Public Health

Keywords

Female Condoms, Contraception, University Cities, Lubumbashi, DRC

1. Introduction

In the former USSR at Alma Ata from 6 to 12 September 1978, WHO and UNICEF adopted the following definition of primary health care (PHC):

“Primary Health Care is essential health care based on practical, scientifically valid and socially acceptable methods and techniques, made universally accessible to all individuals and families in the community with full participation and cost that the community and the country can assume at all stages of their development in a spirit of self-responsibility and self-determination” [1].

Essential PHC care includes curative, preventive, promotional and rehabilitative activities that are grouped as components, including the control of local epidemics and endemics including Sexually Transmitted Infections as well as maternal and child health.

The literature at our fingertips shows that other regions have made significant progress in the fight against HIV/AIDS, yet the pandemic remains a serious threat to public health.

The female condom is both a means of mechanical contraception and a means of protection against sexually transmitted infections (STIs). This condom gives the woman to decide for herself how to use this method of contraception and protection against STIs [2].

The increasing number of cases of HIV infection and the specific vulnerability of women call on prevention actors to consider all possible ways to strengthen women’s resources to enable them to act more autonomously in the context of HIV/AIDS framework for the protection of sexual relations [3].

Despite the decline in the seroprevalence rate, AIDS remains a public health problem, and is also considered to be a phenomenon at the base of social exclusion in some societies around the world. It is in essence a sexually transmitted disease and its emergence is one of the most striking social events since the end of the twentieth century. In addition, about 570.000 people live with HIV/AIDS, including 530.000 adults (15 - 45 years) and 40,000 children (0 - 14 years), including 46.600 deaths and 420.943 AIDS orphans [4].

Is the opposition of the partner, the desire to conceive, the obstacles to the use of the female condom?

2. Methodology

We conducted a cross-sectional descriptive study of students housing Homes I for men and Home II for girls in cities during the period from 10 March to 30 August 2017 in the Kassapa health area in the Health District of Lubumbashi of Upper Katanga, province, in the Democratic Republic of Congo.

The study population consists only of students housing Homes I and II of Lubumbashi's university campuses in the Kassapa health area in the Lubumbashi Health District, Lubumbashi City, DR Congo's Upper Katanga Province.

Our sampling is in cluster. The student homes were considered as clusters and two of them were randomly selected. We thus included all the students living in the two homes taken as cluster in our study on the university cities. We included 300 students (All who are living in the two clusters) for both sexes combined and 167 for females.

A questionnaire was used to collect data that was analyzed by the SPSS software, version 23.

3. Results

Given the results of this, of the 300 students involved in our study, we observed 169 female students, 56.3% against 131 students or 43.7%.

In terms of marital status, 270 respondents were single or 90% against 30 married or 10%.

The minimum age of students was 18 years while the maximum age was 42 years. The age group between 18 and 24 years accounted for 59.3% or 178 people against that of over 24 years with 40.7% or 122 people.

With regard to the cycles of the studies surveyed, those of the first cycle represent 64% against 36% for the second cycle out of a total of 300 participants (**Table 1**).

Regarding information on the existence of the female condom 238 people or 79.3% were informed against 62 (20.7%) who had never heard of the female condom.

Regarding the use of the female condom according to religions, we found that Catholic Christians came in first place with 39.1% followed by other churches with 34.9%. Protestants come third with 20.1%. Muslims account for 5.9% (**Table 2**).

As for the use of the female condom 264 participants or 88% had already used against 36 people or 12% had never used it (**Table 3**).

Table 1. Distribution of students by socio-demographic data.

		N = 300	Percentage
Sex	Female	169	56.3
	Male	131	43.7
Civil status	Unmarried (Single)	270	90
	married	30	10
Age	18 - 24 ans	178	59.3
	>24 ans	122	40.7
Study levels	Under graduation	192	64
	Graduation	108	36

The **Table 4** on the distribution of female students by socio-demographic characteristics shows that 150 women or 88.8% were single compared to 11.2% who were married or 19 women. The age group between 18 and 24 comes in first place with 62.7% against 37.3% of students who are over 24 years old. Compared to cycles, undergraduate students account for 67.5%.

We found that 20 female students had never heard of the female condom or 11.8% and 149 out of 169 had already heard of the female condom 88.2% (**Table 5**).

Table 2. Distribution of students by information on the existence of the female condom.

Status	Frequency	Percentage
NO	62	20.7
YES	238	79.3
Total	300	100.0

Table 3. Distribution of students according to the yes or no use of the female condom.

Status	Frequency	Percentage
NO	36	12.0
YES	264	88.0
Total	300	100.0

Table 4. Sociodemographic data of female students.

		N = 169	Percentage
Civil status	Singles	150	88.8
	Married	19	11.2
Age	18 - 24 years	106	62.7
	>24 years	63	37.3
Study level	Under graduation	114	67.5
	Graduation	55	32.5
	Other	59	34.9
Religion	Catholic	66	39.1
	Muslim	10	5.9
	Protestant	34	20.1

Table 5. Distribution of female students on the knowledge of the existence of the female condom.

Knowledge	Frequency	Percentage
NO	20	11.8
YES	149	88.2
Total	169	100.0

Despite the benefits of the female condom compared to the male condom, 18.9% of female students never used it (**Table 6**).

The **Table 7** on the distribution of female students on female condom preference shows that out of the 169 respondents 66.9% have a preference for the male condom compared to 33.1% who have a preference for the female condom.

This table shows that only 33% of respondents encourage others to use the female condom (**Table 8**).

Regarding the reuse of the female condom, out of 169 students, 137 used the female condom among which 37 reused it or 27% as shown in **Figure 1**. This is due to lack of information on its unique use and the risks they run.

Table 6. Distribution of female students on female condom use.

USE	Frequency	Percentage
NO	32	18.9
YES	137	81.1
Total	169	100.0

Table 6. Female students' distribution of female condom use shows that 81.1% use it compared to 18.9% who do not use it.

Table 7. Distribution of female students on female condom preference.

Preference	Frequency	Percentage
Female	56	33.1
Male	113	66.9
Total	169	100.0

Table 8. Distribution of female students on the encouragement of the female condom.

Encouragement	Frequency	Percentage
NO	113	67.0
YES	56	33.0
Total	169	100.0

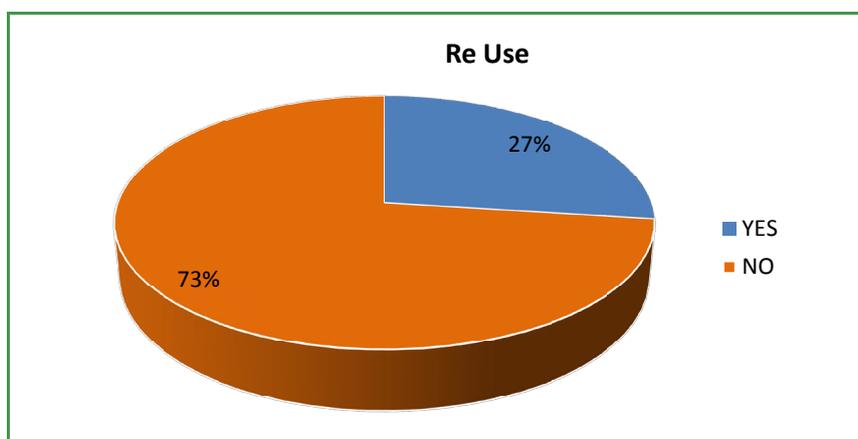


Figure 1. the reuse of the female condom by students.

Regarding the reuse of female condom, the **Figure 2** shows that soap is used to wash female condom by women who reused female condom.

Table 9 shows that unmarried students are more likely than female condoms.

Women who do not use the female condom are more likely than those who use it to have not been informed about the female condom. The lack of information on the existence of the female condom has a strong influence on its use (**Table 10**).

4. Discussion

In this part of the work we will present our results and compare them to those of others.

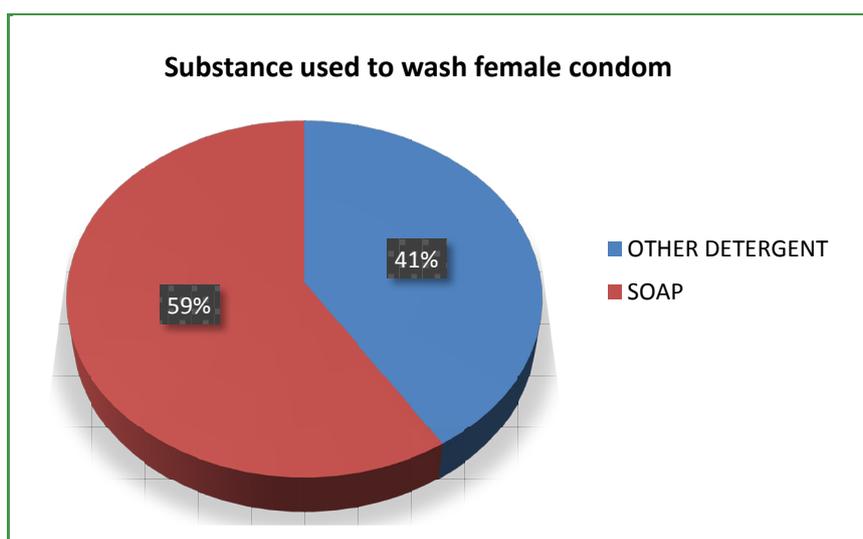


Figure 2. Substance used to wash female condom before reuse.

Table 9. The use of the female condom and the marital status of female students.

CIVIL STATUS	Use			OR	IC	P
	YES	NO	Total			
SINGLE	76	74	150	3.851	1.221; 12.144	0.000
MARRIED	4	15	19			
Total	80	89	169			

Table 10. Use of the female condom and information on the female condom.

INFORMATION	USE			Khi-deux	IC
	NON	OUI	Total		
NON	20	0	20	25.237	2.042; 3.020;
OUI	60	89	149		
Total	80	89	169		

The female condom is both a means of mechanical contraception and a means of protection against sexually transmitted infections (STIs). This condom gives the woman the opportunity to decide for herself how to use this method of contraception and protection against STIs [2].

Among the participants in the study (300), 169 were female (56.3%) versus 131 (43.7%) were male (**Table 1**). Our results are similar to those found in Nigeria or in a study on the female condom, women were the majority with 51.9% against those of the male with 48.1% [5].

In terms of marital status, 270 respondents were single or 90% against 30 married or 10%. In Zambia a study on acceptability, knowledge and beliefs about circumcision and the female condom reveals that 35% of respondents were married [6].

The minimum age of the respondents was 18 years while the maximum age was 42 years. The age group between 18 and 24 years accounted for 59.3% or 178 people over the age of 24 with 40.7% or 122 people.

64% of the participants had the under-graduation level against 36% for the for the graduation level.

Regarding the information on the existence of the female condom 238 people or 79.3% were informed against 62 (20.7%) people who had never heard of it.

As for the use of the female condom 264 people or 88% had already used against 36 people or 12% had never used it.

Regarding the distribution of female students by age group, we find that the age group between 18 and 24 years was the majority with 62.7% against 37.3% of the respondents who were over 24 years old. Our results are different from those found in Zimbabwe where the age group between 15 and 18 years was the majority [7].

Regarding the use of the female condom according to religion we found that Christian Catholics came in first place with 39.1% followed by women from other churches with 34.9%. Protestants come third with 20.1%. Muslim women represent 5.9% (**Table 4: Sociodemographic data**). In Ethiopia, a study on the use of the female condom shows that 42.4% of female students were of Orthodox Christianity [8]. Okunlola in his study conducted at the University teaching Hospital of Ibadan in Nigeria among employees of the center found that Christians used more female condom followed by Muslims and followers of other religions with respectively 69.1%, 39.1% and 0.8% [9].

The **Table 5** shows that 20 female students had never heard of the female condom or 11.8% and 149 out of 169 had already heard of the female condom 88.2%. Our results are almost similar to those of Chipfuwa on female condom use in the central province of Zimbabwe, which shows that 36.3% of participants had never heard of the female condom and 83.5% had never used it [10]. In South-eastern Nigeria, however, a survey of undergraduate students indicates that the level of knowledge about the female condom is 76.7% among the students surveyed [11]. Okunlola found that in Nigeria that 81.4% of women had

knowledge about the female condom [9].

Table 6 on the distribution of female students regarding female condom use shows that 81.1% use it against 18.9% who do not use it.

Table 7 on the distribution of women on female condom preference shows that of the 169 respondents, 66.9% have a preference for the male condom compared to 33.1% who have a preference for the female condom.

Only 33.0% of women encourage others to use the female condom as shown in **Table 8**. Mutowo study says 76.3% of women encourage others to use female condoms [7].

Table 9 shows that single women are more likely than brides to use female condoms (OR = 3.851, $p = 0.000$).

Women who do not use the female condom are more likely than those who use it to be unaware of the female condom (chi-square = 25.237) as shown in **Table 9**.

Regarding the reuse of the female condom, out of 169 women included in our study, 137 had used it while 37 had reused it or 27%. Audrey, in his study on the acceptability of the reuse of the female condom among women in southern urban areas finds that 83% say they can reuse them and 45% say they reuse it up to 7 to 8 times [12].

Figure 2 indicates that 22 out of 37 respondents who reused the female condom, or 59%, had used the soap before reuse. Audrey reports in her study that almost 99% of the women who participated in her study use liquid soap to clean the female condom before reusing it [12]. Based on the recommendations of the January 2002 consultation, WHO does not recommend or promote reuse of female condoms [13].

5. Conclusion

We conducted a cross-sectional study of attitude and practice knowledge about female condom use in university campuses at the University of Lubumbashi in the Democratic Republic of Congo. Three hundred men and women were included in our study, of which 106 women (62.7%) belong to the 18 - 24 age group, 39.1% were Catholic; 114 women or 67.5% were undergraduate; 20 female students had never heard of the female condom 11.8% and 149 out of 169 had already heard of the female condom 88.2%; women who do not use female condoms are more likely than those who use it to have not received the information (chi-square = 25.237).

Ethical Clearance

This work has been approved by the Ethics Committee of the University of Lubumbashi as well.

Limitations about This Study

The Ideal was to do an interview, it was not possible because the students did not

accept it.

Conflict

Authors declared they have no conflict of interest.

References

- [1] Van Lerberghe, W., Evans, T. and Rasanathan, K. (2008) Public Policies for Public Health. In: Van Lerberghe, W., Ed., *Le Rapp. on Health in the World Now More Than Ever*, WHO Press, Geneva, 63-80.
- [2] OPALS (2010) Study of Female Condom Acceptance by Sex Workers and Role of Training.
- [3] Déogratias Mazina, V.M. (2002) The Female Condom.
- [4] CNLCS (2010) National Strategic Plan for the Fight against HIV/AIDS 2006-2010. JUNE 2006, 1-161.
- [5] Avaezi, O. (2014) Repetitive Risk Reduction Counseling on Condom Use among HIV Exposed Sero-negative (HESN) Persons in Jos, Nigeria. *AIDS Research and Human Retroviruses*, **30**, A200. <https://doi.org/10.1089/aid.2014.5431.abstract>
- [6] Jones, D., *et al.* (2014) Acceptability, Knowledge, Beliefs, and Partners as Determinants of Zambian Men's Readiness to Undergo Medical Male Circumcision. *AIDS and Behavior*, **18**, 278-284. <https://doi.org/10.1007/s10461-013-0530-0>
- [7] Mutowo, J., Kasu, C.M. and Mufunda, E. (2014) File. *Pan African Medical Journal*, **17**, 1-7.
- [8] Feyissa, G.T., Abebe, L., Girma, E. and Woldie, M. (2012) Stigma and Discrimination against People Living with HIV by Healthcare Providers, Southwest Ethiopia. *BMC Public Health*, **12**, 522. <https://doi.org/10.1186/1471-2458-12-522>
- [9] Okunlola, M.A., Morhason-Bello, I.O., Owonikoko, K.M. and Adekunle, A.O. (2006) Female Condom Awareness, Use and Concerns among Nigerian Female Undergraduates. *Journal of Obstetrics and Gynaecology*, **26**, 353-356. <https://doi.org/10.1080/01443610600613516>
- [10] Chipfuza, M. and Ancia, T. (2014) Level of Awareness and Uptake of the Female Condom in Women Aged 18 to 49 Years in Bindura District, Mashonaland Central Province, Zimb Abwe. *African Journal of AIDS Research*, **13**, 7.
- [11] Ikeako, L.C., Ezegwui, H.U., Mba, S., Iyioke, C.A. and Okeke, T.C. (2015) Prevalence and Factors Associated with Use of the Female Condom among Undergraduates in a University in Enugu, South East Nigeria., Vol. **8**, 532-540.
- [12] Pettifor, A.E., Beksinska, M.E., Rees, H.V., Mqoqi, N. and Dickson-Tetteh, K.E. (2001) The Acceptability of Reuse of the Female Condom among Urban South African Women. *Journal of Urban Health*, **78**, 647-657. <https://doi.org/10.1093/jurban/78.4.647>
- [13] World Health Organization (2002) WHO Information Update: Considerations regarding Re-Use of the Female Condom. July 2002, WHO, Geneva.



Submit or recommend next manuscript to OALib Journal and we will provide best service for you:

- Publication frequency: Monthly
- 9 [subject areas](#) of science, technology and medicine
- Fair and rigorous peer-review system
- Fast publication process
- Article promotion in various social networking sites (LinkedIn, Facebook, Twitter, etc.)
- Maximum dissemination of your research work

Submit Your Paper Online: [Click Here to Submit](#)

Or Contact service@oalib.com