

ORIGINAL PAPER Arch Sex Behav

Sexuality in Young Adults of Quilombolas Communities in the Eastern Amazon Region

Lilian Gabrielle Ramos Costa¹, Aline Cristina Mercedes Pinheiro¹, Aline Lobato de Farias¹,
Hilton P. Silva¹, Thalita da Luz Costa¹, João Simão de Melo Neto^{1,*}

¹ Institute of Health Sciences, Federal University of Pará (UFPA), Belém, PA, Brazil

*Corresponding author at: J.S de Melo-Neto. School of Physiotherapy and Occupational
Therapy, Federal University of Pará (UFPA), Street Augusto Corrêa, 01, University City:
José Silveira Neto, Health sector: Guamá, Belém, PA, Brazil. CEP: 66075-110. Tel: +55 (91)
3201-8892

E-mail address: jsmeloneto@gmail.com

Running headline: Sexuality in Quilombolas Communities.

ABSTRACT

Quilombola communities are groups descended from African runaway slaves as a form of resistance against enslavement. In these communities there is absence of health promotion programs, hindering access to health care, due to socioeconomic, geographic and political factors. This deficiency places these individuals in greater vulnerability, as they lack adequate information about preventive care for improving quality of life. In addition, there are few studies on sexuality in these communities, especially in the Eastern Amazon region. This study aims to analyze the sexuality of young quilombola adults and the impact on their quality of life. This is an observational, cross-sectional, quantitative study with descriptive and inferential analysis. The participants were 79 individuals of both sexes, from 18 to 35 years of age, belonging to seven communities in the Eastern Amazon region. The questionnaires used were directed to know the sexual behavior and satisfaction, the values and beliefs about sexuality, the prejudice in relation to sexual and gender diversity and the knowledge about Sexually Transmitted Diseases (STD) and the quality of life. Women have greater sexual dissatisfaction and lower quality of life than men; men do not have sexual dysfunction, however, they have greater prejudice in relation to sexual diversity and gender. Low education can interfere in the sexuality of the quilombola population, because knowledge about STDs and values and beliefs influence sexual behavior, exposing individuals to vulnerability, in addition, sexual satisfaction directly influences the quality of life of the research participants.

Keywords Sexuality. Sexual Health. Population Groups. Ethnic Groups.

Introduction

Quilombola communities are populations descended from African runaway slaves as a form of resistance against enslavement. They are concentrated predominantly in rural areas of Brazil where they develop subsistence activities based on agriculture, extraction of natural products, handicrafts for sale, and fishing and hunting for subsistence, in addition to raising small animals for their own consumption (Salles, 1971; 2015; Silva et al., 2016). The Brazilian government recognized the quilombolas rights and formally granted them the ownership of their lands (Brasil, Planalto Federal, 1988). However, currently most quilombola areas remain not legalized and because of that they have little infrastructure and restricted access to health services. In this way, the quilombos, throughout the country, are in a constant state of vulnerability and low quality of health and life (Luisi, et al., 2019; Barroso, Melo, & Guimarães, 2015).

The scholar education in quilombola communities has always been very difficult because there are few schools and educators trained to promote quality education, respectful of their cultural norms (Brasil, Ministério da Educação, 2007). With this, low schooling becomes an aggravating factor regarding the inclusion of this population in the socio-cultural and economic sphere. Thus, it's possible to observe the importance of public policies to the implementation of education for equity of ethnic and racial rights, ensuring the active participation of quilombos to stimulate the experience with knowledge and theoretical-practical information to develop their skills, thus remaining effectively in society (Brasil, Ministério da Educação, 2007).

For Valadares, Pinto-Neto, Sousa and Osis (2010), knowledge of sexuality is fundamentally important for sexual health. Understanding of several aspects linked to sexuality such as desire, lubrication, orgasm and resolution in addition to affective feelings is

fundamental for good sexual health (Magno, Fontes-Pereira, Nunes, 2011; Cruzeiro, et al., 2010).

The little knowledge about sexuality, sexual response, adequate hygiene, pathologies that affect the urogenital system, can trigger problems in the individual and result in some types of dysfunctions, affecting sexual health. “Sexual health”, according to the World Health Organization [WHO] (2006), is a state of physical and psychological well-being in relation to sexuality, which must be seen respectfully by the individual, as well as the possibility of having sexual relations that are pleasant and safe.

There was a limitation in finding in scientific studies on gender diversity in quilombola communities and with well-developed methodologies addressing sexuality, added to this are the cultural expectations linked to gender rooted throughout the history of black men in Brazil so that heterosexuality and marked masculinity are expected, forgetting this as a sexualized being and with desires, thus reinforcing the importance of the discussion about identity forms that escape the heterosexual pattern. In addition, there is concern about thinking about relationships involving people of the same sex, being acceptable or ignored to have sexual intercourse between persons of the same sex, provided that it is not exposed and that this person publicly assumes only a stable relationship if it was heterosexual (Gontijo, Domingues, & Erick, 2017).

There is evidence that reinforces the importance of sex education not only to prevent the first sexual intercourse to occur too early, but to increase awareness about the use of condoms and other contraceptive and preventive methods as well, reducing exposure to the risk of Sexually Transmitted Diseases (STDs), unwanted pregnancy and reducing the vulnerability of the population. In addition to providing better self-knowledge and sexual freedom, these sexual behaviors have been approached as a way of promoting sexual health

and prevention (Cruzeiro, et al., 2010; World Health Organization, 2011; García-Vázquez, Quintó, & Agulló-Tomás, 2019).

In quilombola communities, as with many other aspects, there is little health promotion activity, making access to information more difficult, which may be a consequence of socioeconomic, geographic and cultural issues. Therefore, there is a great need and little attention focused on the health and quality of life of the quilombola population. Although there is information available in the mainstream media, it does not reach all layers of the population in the same way and it is hard to apprehend it so that it can produce knowledge and autonomy in relation to health care.

In 2002, WHO added pleasure as a key factor in sexual health. For better understanding, it is necessary to differentiate the concepts “sexual function” and “sexual satisfaction”. Sexual function refers to physiological changes in sexual response and sexual satisfaction can be defined as the degree of satisfaction in aspects of a person's sexual life. Therefore, sexual satisfaction is essential for sexual health, general well-being and quality of life (Ferrer-Márquez, et al., 2017).

In addition, there are few studies focused on such communities, addressing the issue of sexuality, especially in the Eastern amazon region of Brazil. In this context, it is extremely important to better understand these aspects so that promotion, prevention and treatment activities are implemented in a targeted manner towards the specific care needed by these communities.

Thus, this study aims to analyze the sexuality of young adults living in quilombola communities in the Eastern Amazon region and the impact on quality of life. Was analyzed sexual behavior; the level of sexual satisfaction; values and beliefs about sexuality; the level of prejudice in relation to sexual and gender diversity; knowledge of STDs and quality of life of these individuals.

Method

Ethical aspects

The research was carried out after approval by the Research Ethics Committee (REC) of the Institute of Health Sciences of the Federal University of Pará, under number 4.157.319, according to the ethical principles provided for in Resolution 466/12 and Resolution 510 / 2016 of the National Health Council - CNS, and after signing the Free and Informed Consent Term (ICF), in which the collection procedures were clarified.

Type of study

Observational, cross-sectional, quantitative study with descriptive and inferential analysis.

Sampling

Sampling was simple random probabilistic.

Participants

The sample consisted of 79 quilombolas individuals, living in their communities in Acará (recognized by the Palmares Cultural Foundations (<http://www.palmares.gov.br/>) through law number 7.668, of August 22th, 1988 (Brasil, Planalto Federal, 1988) in the Eastern Amazon region. The sample calculation was performed based on the study of Babakhani *et al.* (2018) and a minimum size of 74 participants was established. A comparison was made between the means of sexual function, aiming to verify the difference between two different groups. For this calculation, effect size 0.59, α error of 0.05 and β of 0.2 were evidenced. The software GPower (3.1, Franz Faul, Universitat Kiel, Germany, 2007) was used for calculation.

Inclusion criteria

Were included in this study, individuals of both sexes, considering young adults according to Nancy (2002), with age between 18-35 years, belonging and living in

quilombolas communities more than 5 years, being active sexually, inactive or asexual, that agreed to participate in the research by signing the informed consent form (ICF). Were considered “sexually active” individuals who had any sexual activity until 3 months before the realization of the research; were considered “sexually inactive” individuals who had any sexual activity over 3 months before the realization of the research (Ueffing, Dasgupta, & Kantorová, 2019). An “asexual individual” was suggested as “*lack of sexual attraction or lack of interest in others*” (Bogaert, 2015) and “sexual activity” was defined as “any mutually voluntary activity with another person that involves sexual contact, whether or not intercourse or orgasm occurs” (Xiang, Tang, Li, & Li, 2020).

Exclusion criteria

The exclusion criteria were: individuals with age under 18 or over 35 years; not residents in the communities; and with incomplete or inconsistent data, because they hindered and interfered negatively in the planning and reliability of the results. Were not included those communities pointed out as quilombola but that are not recognized by the Palmares cultural foundation.

Data collection

The individuals were first approached and oriented about the research and, after being aware and signing the ICF, the following questionnaires were applied: 1- Socioeconomic / and sexual questionnaire, 2- Female Sexual Functioning Index (FSFI), 3- International Index of Erectile Function (IIEF) 4- Index of Sexual Satisfaction (ISS), 5- Questionnaire on Values and Beliefs about Sexuality, 6- Scale of prejudice against sexual and gender diversity, 7- Questionnaire on Knowledge of Sexually Transmitted Diseases (STD-KQ), 8- Questionnaire of Quality of Life (WHOQOL-BREF). Questionnaires 1, 2, 4, 5, 6, 7 and 8 were assigned to women; for men, questionnaires 1, 3, 4, 5, 6, 7 and 8 were used.

The Socioeconomic / Sexual Profile Questionnaire was applied to draw an objective profile of the population studied.

FSFI (Pacagnella, R. de C., Martinez, E. Z. & Vieira, E. M, 2009) was used to assess sexual feelings and responses, which is a 19-item questionnaire that assesses 6 domains of sexual function (desire, lubrication, arousal, orgasm, satisfaction and pain). The lower the score, the worse the sexual function is considered (Xiang, Tang, Li, & Li, 2020).

The IIEF was applied to measure erectile function in a culturally, linguistically and psychometrically valid way. It is divided into 5 domains (erectile function, sexual desire, orgasm, sexual satisfaction and general satisfaction), and low values indicate poor quality in sexual life (González, et al., 2013).

ISS (Pechorro, P., Diniz, A. & Vieira, R, 2009; Hudson, 1998, 2000; Hudson, Harrison, & Crosscup, 1981.) is a psychometric scale and was applied to measure the degree of sexual satisfaction (Rabiepoor, Kazemzadeh, & Alizadeh, 2018). The index is validated and contains 25 points, classified on a Likert scale from 1 (no time) to 7 (always).

The 17-item Questionnaire on Values and Beliefs about Sexuality, based on a 5-point Likert scale, was applied to measure values and beliefs about female sexual functions, pregnancy, desire for motherhood and abortion (Sereno, Leal, & Maroco 2009).

The scale of prejudice against sexual diversity and gender is an instrument that assesses prejudice in relation to gender and non-conformity of Gender and Transsexuality. The higher score shows greater prejudice (Costa, Bandeira, Ruschel, & Nardi, 2015).

The STD-KQ, consisting of 28 items, researched seven sexually transmitted diseases (gonorrhea, chlamydia, genital herpes, HPV, HIV / AIDS, hepatitis B and syphilis) (Teixeira, Figueiredo, Mendonza-Sassi, 2015; Teixeira, Figueiredo, Gonçalves, Mendonza-Sassi, 2019).

To assess quality of life, the World Health Organization (WHOQOL-BREF - 26) quality of life instrument was used - an abbreviated version, organized into four domains: physical, psychological, social and environmental relations. Higher scores indicate better quality of life (Fleck et al., 2000; Zimpel, Panzini, Bandeira Fleck, & Rocha, 2019).

After completing the forms, all data obtained were tabulated in the Excel® software, for data analysis.

Statistical Analysis

For the descriptive analysis, absolute and relative frequency (%) were used, in addition to variables that direct the analysis after verifying the normality of the data using the Shapiro Wilk test, and mean, standard deviation (parametric data) or median, 95% confidence interval (95% CI) (non-parametric data). For inferential analysis, the following tests were performed: non-paired t-test and Mann-Whitney, for intergroup comparison analyzed with parametric and non-parametric distribution, respectively. The relationship between variables was assessed using Pearson's Correlation (r) test (parametric) or Spearman (non-parametric).

Results

The characteristics of the sample are shown in Table 1. There is no significant age difference for both sexes (men: 24 [23.99; 26.94]; women: 24 [23.17; 26.28]; $U = 701$; $p = 0.4385$ Mann Whitney test). The sample had the following characteristics: black ethnicity; not married; up to two people contributing to the family income; up to four people surviving on this income; most with an active sex life; educational level with women with complete high school and men with incomplete; women's monthly income varies up to 260.00 reais and for men between 781.00 to 1.300,00 reais; in individual income, most women report not having their own income and men between 781.00 to 1,300.00 reais. Regarding the number of pregnancies, 40% of women had no pregnancies, and 92% did not have an abortion.

Regarding the number of children, the proportion does not differ significantly (women: 1 [0.63; 1.27]; men: 0 [0.44; 1.2]; $U = 682.5$; $p = 0.339$ Mann Whitney test).

Sexual Function

Female sexual function, assessed by the FSFI, obtained a total score of 23.7 (95% CI: 19.315; 23.335). Among the domains, the Satisfaction domain obtained the lowest score: 2.4 (95% CI: 2.148; 2.692), and the Lubrication and Pain domains had the highest scores: 4.5 (95% CI: 3.292; 4.328) and 4.48 (95% CI: 3.836; 5.124), respectively. The domains desire, arousal and orgasm had the respective scores: 3.6 (95% CI: 3.321; 4.029), 3.4 (95% CI: 2.880; 3.660) and 4.0 (95% CI: 3.190; 4.150) .

Male individuals, assessed by the IIEF, were classified as “Without erectile dysfunction” with a median of 26 (95% CI: 20.04; 25.80), based on the Erectile Dysfunction Classification (Cappelleri et al, 1999). The other domains presented the following values: Satisfaction 11 (95% CI: 7.99; 11.19), Orgasm 9 (95% CI: 6.13; 8.38), Sexual desire 9 (95% CI: 7.99; 8.83), Overall satisfaction 9 (95% CI: 8.53; 9.47) and Total 64 (95% CI: 51.46; 62.90).

Influence of sex on variables

The table 2 shows the difference in the level of sexual satisfaction, values and beliefs about sexuality, level of prejudice in relation to diversity and gender, knowledge about STDs and quality of life between sexes in the individuals evaluated. Sexual satisfaction showed that women had results of greater dissatisfaction when compared to men. Women have worse values and beliefs about motherhood. Men have better quality of life in the physical, psychological and environmental domains.

Relationship between variables

Table 3 shows the general correlations (of both sexes) between sexual satisfaction, values and beliefs about sexuality, prejudice in relation to sexual diversity and gender, STD-KQ and Quality of life. Tables 4 and 5 show the correlations divided by sex, with an analysis of male (by IIEF) and female (by FSFI) sexual function, respectively.

Sexual Function

Almost all five domains of male sexual function (erectile function, orgasm, sexual satisfaction, sexual desire and general sexual function) were correlated, except sexual desire that was not correlated with erectile function, sexual satisfaction and orgasm. The greater knowledge about STDs is correlated with the greater general function, erectile, satisfaction and orgasm. Higher sexual satisfaction, general sexual function and erectile function were correlated with lower beliefs about motherhood. The smallest belief around motherhood was related to greater sexual satisfaction, orgasm and general function. Finally, the better general quality of life and physical aspect were related to greater sexual desire and orgasm. (Table 4)

In women, we observed that the greater the desire, the greater the lubrication and less knowledge about STDs. Excitation correlated positively with lubrication, orgasm, pain, general sexual function and sexual satisfaction, and negative with the general quality of life and in the domains: physical, psychological and environment. Lubrication was related to less prejudice, quality of life in social relationships and the environment, and to an increase in general sexual function, orgasm, sexual satisfaction, pain and knowledge about STDs. Orgasm was related to greater sexual satisfaction, pain, general sexual function and lower quality of life in general and in the environment. Sexual satisfaction, as assessed by the FSFI, was positively related to almost all items assessed for sexual function, except desire. The increase in pain was related to greater sexual function and sexual satisfaction. Finally, overall

sexual function was correlated with higher scores for sexual satisfaction and belief around abortion and quality of life in the environment.

Sexual Satisfaction

Regardless of sex, the best quality of life (total and specific to the environment) was correlated with greater sexual satisfaction (Table 3). In men, there was no correlation between sexual satisfaction and other variables (Table 4). However, when analyzed by sex, the better (total) quality of life in women was correlated with greater sexual satisfaction (Table 5).

Values and Beliefs about Sexuality

All domains of the questionnaire on values and beliefs about sexuality were correlated, that is, the greater the belief about motherhood as the main project of the female condition, the greater will also be the belief in reproduction as a primary function of female sexuality, of sexuality as sharing of affections, the worse the representations about abortion, and the greater the beliefs in considering pleasure as a primary function in female sexuality. The greatest prejudice was correlated with the greatest belief around reproduction, affectivity, motherhood, abortion and pleasure.

The lower knowledge about STDs was related to the greater belief around reproduction, affectivity and motherhood. The greatest belief around reproduction was correlated to the better quality of life in social relationships. The greatest belief around affectivity was related to the worst quality of life in the physical and environmental domains. (Table 3)

In men, the greatest belief around motherhood was correlated with the greatest belief around affectivity. The greater belief around abortion and pleasure were correlated with the greater belief around the other domains. The greater belief around reproduction was

correlated with a higher quality of life in the psychological and social relations domains. The greatest prejudice was related to the greater belief around motherhood and abortion. The lower knowledge about STDs was related to the greater belief around reproduction and motherhood pleasure. (Table 4)

In women, the greater the belief about motherhood as the main project of the female condition, the greater will be the belief about the need to share affections, the worse the representations about abortion, and the greater the beliefs in considering pleasure as a primary function in female sexuality. The greatest prejudice was related to the greater belief around reproduction, affectivity, motherhood belief around reproduction was correlated with greater pleasure, affection and motherhood. The better quality of life in the physical and environmental domains was associated with worse beliefs around affectivity. The lesser knowledge about STDs was related to the greater belief around motherhood. (Table 5)

Scale of prejudice against sexual diversity and gender

Regarding the prejudice in relation to sexual and gender diversity, regardless of sex, there was a negative correlation with knowledge about STDs (Table 3). In men, the greatest prejudice in relation to diversity shows a higher quality of life in the environmental domain and less knowledge about STDs (Table 4). For women, it was observed that the greatest prejudice in relation to diversity was related to less knowledge about STDs and quality of life in the psychological domain. (Table 5)

Questionnaire on Knowledge of Sexually Transmitted Diseases

Knowledge about STDs, regardless of gender, is negatively correlated with quality of life in the social relations domain (Table 3). For men, the less knowledge about STDs, the higher the quality of life in the domains: psychological, social relations and environment

(Table 4). However, for women there was no correlation of knowledge about STDs with the other variables. (Table 5)

Questionnaire on Knowledge of Sexually Transmitted Diseases (STD-KQ)

When analyzing the population regardless of gender and isolated female sex, quality of life was correlated with each other for all domains. (Table 3 and 5)

In the correlation by sex, for men the greater the general perception of quality of life, the lower the quality of life in the physical and social relations domains. The physical domain was related to higher quality of life in all domains. The better quality of life in the psychological domain is related to the higher quality of life in social relationships and the environment. Therefore, the social domain is positively correlated with quality of life in the environment. (Table 4)

Questionnaire of Quality of Life (WHOQOL-BREF)

When analyzing the population regardless of gender and isolated female sex, quality of life was correlated with each other for all domains. (Table 3 and 5)

In the correlation by sex, for men the greater the general perception of quality of life, the lower the quality of life in the physical and social relations domains. The physical domain was related to higher quality of life in all domains. The better quality of life in the psychological domain is related to the higher quality of life in social relationships and the environment. Therefore, the social domain is positively correlated with quality of life in the environment. (Table 4)

Discussion

This study aimed to analyze the sexuality of young adults living in quilombola communities in the Eastern Amazon region and the impact on quality of life. In addition to

analyzing sexual function, the level of sexual satisfaction, the values and beliefs about sexuality, the level of prejudice in relation to sexual and gender diversity, knowledge about sexually transmitted diseases (STDs) and the quality of life of these individuals, which reside in the largest administrative region with recognized quilombos in Brazil.

Despite the growth of research with quilombola communities in recent years, in the search for articles, there is a shortage of articles with well-developed methodologies, with sexuality as the object of study and the profile of this population. It is possible that this study is the first study to investigate the sexuality of quilombolas in the Eastern Amazon region.

According to the research by Almeida et al (2020), the population in this study declared themselves black and with a family income of up to R \$ 780,00 (seven hundred and eighty reais). In PNAD (2013), the inequality factor in the income distribution of the black population, showed that blacks and browns are among the poorest groups. In another study, Vieira and Monteiro (2013), it was found that the population has completed elementary school, while in our research the population of men have incomplete high school and women have complete high school. This may be related to the fact that currently there have been improvements in quilombola education conditions. In addition, it was also observed that most individuals in this study, casually, declare themselves to be single, unlike the study by Almeida (2020), in which the population assumes to live with a partner. In the study by Vieira and Monteiro (2013), the majority of individuals in a stable relationship were also observed. This fact may be associated with the age profile of each study.

Pechorro et al (2009) found, in a sample of 152 women (between 26 and 70 years old, Caucasian and urban) no relationship between the dimensions of sexual response and sexual satisfaction, demonstrating that in women satisfaction and sexual function are independent variables, however, he also found a strong relationship between sexual satisfaction and sexual behaviors in women, associating this result with the behavior of caresses and foreplay and not

necessarily with oral or vaginal sex itself. (Pechorro, Pedro, Diniz, António, & Vieira, Rui, 2009). From this, this result conflicts with ours, because in our correlation by sex, the greater the sexual satisfaction, the greater the female sexual function. It is worth noting the difference of the sample in the respective studies, which could justify the difference in the correlations.

About 40% of women can be affected by female sexual dysfunction, and the academic community has grown an interest in these problems. Therefore, currently, new diagnostic proposals have classified these problems in a more comprehensive way, with the ability to assess multiple aspects of women's sexual response. In a cross-sectional study of Pacagnella and collaborators (2009) with FSFI (n = 253) the results showed higher correlation rates between orgasm and arousal, satisfaction and orgasm, arousal and desire, between orgasm and lubrication and between arousal and lubrication. There was also less correlation between pain and all other domains including satisfaction. Such results are similar to ours, except where we find increased pain related to increased function, sexual satisfaction and orgasm.

Age has been an important factor in the difference in results between some studies. Rossi and collaborators (2016) observed that in men considered healthy (n = 359), aged up to 59 years, using the IIEF, 35.8% (n = 128) were classified as having some degree of ED, being 29.7% (n = 107) had mild dysfunction, 5 (1.4%) had moderate dysfunction and 16 (5.7%) had complete dysfunction. Although our study was also carried out with healthy individuals, our population consisted of young adult men, between 18 and 35 years old, and the group did not present erectile dysfunction. Another difference observed between the studies was the ethnicity, in which our study the majority was black and in the study mentioned, the majority was white.

The study by Nelas and collaborators (2016), carried out with higher education students (n = 641), found high values for beliefs and values around pleasure ($M73.69 \pm 16.056$), followed by affectivity ($M = 68.98 \pm 19.237$). Both in our study and in the study by

Nelas, low values were found for beliefs and values around reproduction. However, all domains tend to be directly related to each other, so when the belief around one domain is high, the others have similar values.

It has been observed that the level of education and access to information have been correlated with the level of prejudice in relation to sexual diversity and gender. In this context, Costa and collaborators (2015), in their study (n = 800) concluded that men obtained greater results in terms of prejudice ($t(571) = 10.52, p < 0.001$), followed by religious ($t(390) = 7.36, p < 0.001$), rural residents ($t(798) = 0.02, p < 0.001$) and people with less education ($t(798) = 0.26, p < 0.02$). (Costa, Bandeira, Ruschel, & Nardi, 2015). In our study it was found that quilombola men and women are prejudiced in relation to sexual diversity and gender, without significant differences between genders. Similar to the study by Costa and collaborators, our sample consisted of rural residents, with less access to information and less education about sexuality.

The individual's sexuality is beyond his genital anatomy, its meaning is directly related to the sociocultural context in which the subject is. Thus, the socioeconomic and cultural conditions faced by young quilombolas, leave them more exposed and vulnerable. Regarding the knowledge of STDs, Cardoso (2011) found that the majority (84%) of the young people in his sample (50 young people, between 18 and 24 years old) have heard of STDs, while a minority (10%) said they were unaware. The most well-known diseases were Gonorrhea, syphilis and AIDS. The self-perception of the risk of being infected with any STD was low, demonstrating a risk behavior commonly adopted through condom disuse. In our results found from the STD-QK questionnaire, of 23 questions, the average score for men was 7.59 ± 4.375 and for women 6.98 ± 4.605 , demonstrating a low level of knowledge about sexually transmitted diseases. These results show a higher risk of contracting diseases due to lack of access to care and prevention information. There is a great risk that the quilombola

population will be infected with STDs, this is due to the fact that there are ineffective health policies in the communities, in addition to the lack of health education, in the sense of greater prevention and health promotion (Riscado, Oliveira, & Brito, 2010)

Quality of life can be defined as “the individual's perception of his position in the context of the culture and value system in which he lives and in relation to his goals, expectations, standards and concerns”, it involves dimensions such as physical health, psychological, level of independence, social relations, environment and spiritual standard. Almeida-Brasil (2017), (n = 930) assessed the QOL of individuals attended at four BHU in Belo Horizonte using the WHOQOL-bref and concluded that the score in the social relations domain was higher and with lower averages in the environment domain. Being the worst QOL results related to "worse health, housing, education and income conditions, in addition to problems in social relationships and psychological conditions". (Almeida-Brasil, Celline Cardoso et al, 2017). Horta and collaborators (2019) measured the quality of life of African refugees (n = 31) and 48.38% of the participants rated their quality of life as “neither good nor bad”, followed by 29.03% who classified it as “bad” . Regarding satisfaction with health, 35.2% referred to themselves as “dissatisfied”. In our article, it is noted that although the quilombola population has less access to the factors cited by Almeida-Brasil, the perception of quality of life was not lower, in addition other factors such as sexual function and beliefs correlated with higher scores in quality of life in the environment.

Limitations

Due to the Sars-cov-2 pandemic, there was great difficulty in accepting the research by community leaders and in collecting data due to the risk of exposure of researchers and people interviewed, in addition, there was a limitation in finding indexed articles and with well-developed methodologies. addressing sexuality and quilombola communities so that we could discuss in a richer way. Although in recent years there has been an increase in research

with such a population, there is a need for a greater emphasis on studies with these communities.

Conclusion

From the communities evaluated in this research, it is concluded that women have greater sexual dissatisfaction and worse quality of life, when compared to men. Men present without sexual dysfunction. In addition, it can be concluded that men and women are similar in terms of values and beliefs around reproduction, affectivity, abortion and pleasure, however, women have worse values regarding motherhood, because they feel more pressured to be mothers. Men are more prejudiced in relation to sexual diversity and gender, but are more knowledgeable about STDs.

In addition, it is also concluded that educational aspects can interfere in the sexuality of the quilombola population, since knowledge about STDs and values and beliefs influence the sexual behavior of this population, placing them at greater vulnerability.

Regarding quality of life, factors such as sexual satisfaction, values and beliefs in relation to reproduction and affectivity directly influence. Our study is the first to address these issues in this population, therefore, it is necessary to conduct more research aimed at the quilombola population in the topic addressed.

Compliance with Ethical Standards

Conflict of interest

The authors declare that they have no conflict of interest.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

References

- Almeida-Brasil, C. C., Silveira, M. R., Silva, K. R., Lima, M. G., Faria, C. D. C. M., Cardoso, C. L., Menzel, H-J. K. & Ceccato, M. G. B. (2017). Qualidade de vida e características associadas: aplicação do WHOQOL-BREF no contexto da Atenção Primária à Saúde. *Ciência & Saúde Coletiva*, 22, 1705-1716.
- Almeida, I. L. da S., Santos, S. R. dos, Queiroz, B. M. de, & Mussi, R. F. de F. (2020). Lifestyle, morbidity and multimorbidity in adult Quilombolas. *ABCS Health Sciences*, 45, 1325.
- Babakhani, N., Taravati, M., Masoumi, Z., Garousian, M., Faradmal, J., & Shayan, A. (2018). The Effect of Cognitive-Behavioral Consultation on Sexual Function among Women: A Randomized Clinical Trial The Effect of Cognitive-Behavioral Consultation on Sexual Function among Women: A Randomized Clinical Trial. *Journal of Caring Sciences*, 7, 83–88.
- Barroso, S. M., Melo, A. P., & Guimarães, M. D. C. (2015). Factors associated with depression: sex differences between residents of Quilombo communities. *Revista Brasileira de Epidemiologia*, 18, 503-514.
- Bogaert, A. F. (2015). Asexuality: What It Is and Why It Matters. *The Journal of Sex Research*, 52, 362–379.
- BRASIL, Ministério da Educação. (2007). Educação quilombola. Salto para o futuro.
- Brasil. Ministério da Saúde. Secretaria de Gestão Estratégica e Participativa. Departamento de Articulação Interfederativa. Temático Saúde da População Negra / Ministério da Saúde, Secretaria de Gestão Estratégica e Participativa, Departamento de Articulação Interfederativa.- Brasília : Ministério da Saúde, 2016. 82 p. : il. (Painel de Indicadores do SUS; v. 7, n. 10)
- BRASIL, Planalto Federal. (1988). Lei nº N° 7.668, de 22 de agosto de 1988. Autoriza o Poder Executivo a constituir a Fundação Cultural Palmares - FCP e dá outras providências.
- Cappelleri J.C., Rosen R.C., Smith M.D., Mishra A., Osterloh I.H. (1999). Diagnostic evaluation of the erectile function domain of the International Index of Erectile Function. *Urology*, 54, 346-51.

- Cardoso, R. L. S. (2011). Vulnerabilidade às DSTs/AIDS entre jovens de uma comunidade quilombola do município de Turiaçu-MA. Dissertação (mestrado em Saúde e Ambiente). Universidade Federal do Maranhão. São Luís.
- Costa, A. B.; Bandeira, D. R.; Nardi, H. C. (2015). Avaliação do preconceito contra diversidade sexual e de gênero: construção de um instrumento. *Estud. Psicol.*, 32, 163-172.
- Cruzeiro, A. L. S., Souza, L. D. de M., Silva, R. A. da, Pinheiro, R. T., Rocha, C. L. A. da, & Horta, B. L. (2010). Comportamento sexual de risco: fatores associados ao número de parceiros sexuais e ao uso de preservativo em adolescentes. *Ciência & Saúde Coletiva*, 15, 1149-1158.
- Ferrer-Márquez, M., Pomares-Callejón, M. Á., Fernández-Agis, I., Belda-Lozano, R., Vidaña-Márquez, E., & Soriano-Maldonado, A. (2017). Satisfacción sexual tras cirugía bariátrica: estudio observacional prospectivo. *Cirugía Española*, 95, 521–528.
- Fleck, M. P. A., Louzada, S., Xavier, M., Chachamovich, E., Vieira, G. Santos, L., & Pinzon, V. (2000). Application of the Portuguese version of the abbreviated instrument of the quality of life WHOQOL-bref. *Rev Saude Publica*, 34, 178-83.
- García-Vázquez, J., Quintó, L., & Agulló-Tomás, E. (2019). Impact of a sex education programme in terms of knowledge, attitudes and sexual behaviour among adolescents in Asturias (Spain). *Global Health Promotion*, 27, 122–130.
- Gontijo, F., Domingues, B., & Erick, I. (2017). As experiências da diversidade sexual e de gênero em quilombos do nordeste e do norte do Brasil: para início de conversa. *Amazônica - Revista de Antropologia*, 8, 62-89.
- González, A. I., Sties, S. W., Wittkopf, P. G., Mara, L. S. de, Ulbrich, A. Z., Cardoso, F. L., & Carvalho, T. de. (2013). Validation of the International Index of Erectile Function (IIFE) for Use in Brazil. *Arquivos Brasileiros de Cardiologia*, 101, 176-182.
- Horta, A. L. de M., Cruz, M. G. & Carvalho, G. (2019). Famílias refugiadas africanas: qualidade de vida, expectativas e necessidades em relação à saúde. *Saúde e Sociedade*, 28, 113-123.
- Hudson, W. (1998). Index of Sexual Satisfaction. In C. Davis, W. Yarber, R. Bauserman, G. Schreer & S. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 512-513). Thousand Oaks, California: Sage Publications.
- Hudson, W. (2000). Index of Sexual Satisfaction. In K. Corcoran & J. Fischer (Eds.), *Measures for clinical practice: A sourcebook* (3rd ed., vol. 2). New York: The Free Press.
- Hudson, W., Harrison, D., & Crosscup, P. (1981). A short-form scale to measure sexual discord in dyadic relationships. *The Journal of Sex Research*, 17(2), 157-174.
- Luisi, C., Figueiredo, F., Sousa, L., Quaresma, F., Maciel, E., & Adami, F. (2019). Prevalence of and Factors Associated with Metabolic Syndrome in Afro-Descendant Communities in a Situation of Vulnerability in Northern Brazil: A Cross-Sectional Study. *Metabolic syndrome and related disorders*, 17, 204–209.

- Magno, L. D. P., Fontes-Pereira, A. J., & Nunes, E. F. C. (2011). Avaliação quantitativa da função sexual feminina correlacionada com a contração dos músculos do assoalho pélvico. *Revista Pan-Amazônica de Saúde*, 2, 39-46.
- Nelas, P., Chaves, C., Coutinho, E., & Amaral, O. (2016). Valores e crenças sobre sexualidade, maternidade e aborto. *Revista INFAD de Psicologia. International Journal of Developmental and Educational Psychology*, 1, 211-220.
- Pacagnella, R. de C., Martinez, E. Z. & Vieira, E. M. (2009). Validade de construto de uma versão em português do Female Sexual Function Index. *Cadernos de Saúde Pública*, 25, 2333-2344.
- Pechorro, P., Diniz, A. & Vieira, R. (2009). Satisfação sexual feminina: Relação com funcionamento sexual e comportamentos sexuais. *Análise Psicológica*, 27, 99-108.
- Petry N. M. (2002). A comparison of young, middle-aged, and older adult treatment-seeking pathological gamblers. *The Gerontologist*, 42, 92–99.
- Rabiepoor, S., Kazemzadeh, J., & Alizadeh, S. (2018). The Relationship between Quality of Life and Sexual Satisfaction in Women with Severe Burns. *Medica*, 13, 137–142.
- Riscado, J. L. de S., Oliveira, M. A. B. de & Brito, A. M. B. B. de (2010). Vivenciando o racismo e a violência: um estudo sobre as vulnerabilidades da mulher negra e a busca de prevenção do HIV/aids em comunidades remanescentes de Quilombos, em Alagoas. *Saúde e Sociedade*, 19, 96-108.
- Rossi, T. L., Barbosa, G. C., & Oliveira, E. R. A. de. (2016). Função erétil e qualidade de vida de homens doadores de sangue. *Revista Brasileira De Pesquisa Em Saúde/Brazilian Journal of Health Research*, 17, 48–57.
- Salles, V. (1971). *O Negro no Pará: Sob o regime de escravidão*. Rio de Janeiro: Fundação Getúlio Vargas, Belém: Universidade Federal do Pará.
- Salles, V. (2015). *O Negro na Formação da Sociedade Paraense*. 2ª Ed. Belém: Paka-Tatu.
- Sereno, S. Leal, L & Maroco, J. (2009). Construção e validação de um questionário de valores e crenças sobre sexualidade, maternidade e aborto. *Psicologia, Saúde & Doenças*, 10, 193-204.
- Silva, H. P., Padez, C., Moura, E. A., & Filgueiras, L. A. (2016). Obesity, hypertension, social determinants of health and the epidemiologic transition among traditional Amazonian populations. *Annals of human biology*, 43, 371–381.
- Teixeira, L. O., Figueiredo, V. L. M., Mendonza-Sassi, R. A. (2015). Adaptação transcultural do Questionário sobre Conhecimento de Doenças Sexualmente Transmissíveis para o português brasileiro. *J. bras. psiquiatr.*, 64, 247-256.
- Teixeira, L. O., Figueiredo, V. L. M., Gonçalves, C. V., & Mendoza-Sassi, R.. (2019). Avaliação Psicométrica da versão brasileira do “Questionário sobre Conhecimento de Doenças Sexualmente Transmissíveis”. *Ciência & Saúde Coletiva*, 24, 3469-3482.

Ueffing, P., Dasgupta, A., & Kantorová, V. (2019). Sexual activity by marital status and age: A comparative perspective. *Journal of Biosocial Science*, 1-25.

Valadares, A. L. R., Pinto-Neto, A. M., Sousa, M. H. de, & Osis, M. J. D. (2010). Adaptação sociocultural do short personal experiences questionnaire (SPEQ) no Brasil. *Revista Brasileira de Ginecologia e Obstetrícia*, 32, 72-76.

Vieira, A. B. D. & Monteiro, P. S. (2013). Comunidade quilombola: análise do problema persistente do acesso à saúde, sob o enfoque da Bioética de Intervenção. *Saúde em Debate*, 37, 610-618.

World Health Organization. (2006). *Defining sexual health: report of a technical consultation on sexual health*. Geneva. WHO, 2006.

World Health Organization. (2011). *Sexual Health: A public health challenge in Europe*. Entre Nous, Copenhagen, 72.

Xiang, Y., Tang, Y., Li, J., & Li, D. (2020). How Is the Sexual Function of Premenopausal Chinese Women Without Hyperlipidemia?. *Sexual medicine*, 8, 65–75.

Zimpel, R. R., Panzini, R. G., Bandeira, D. R., Fleck, M. P., & da Rocha, N. S. (2019). Psychometric properties of the WHOQOL-SRPB BREF, Brazilian Portuguese version. *Braz. J. Psychiatry*, 41, 411-418.

Table 1. Characterization of the sample.

	Women n=40 (%)	Men n=39 (%)	Total n=79 (%)
Ethnicity			
White	1 (2.50)	-	1 (1.26)
Black	26 (65.00)	26 (66.67)	52 (65.82)
Brown	13 (32.50)	12 (30.77)	25 (31.64)
Indigenous	-	1 (2.56)	1 (1.26)
Marital Status			
Single	25 (62.50)	28 (71.79)	53 (67.10)
Married	15 (37.50)	11 (28.21)	26 (32.90)
Scholarity			
Incomplete Elementary School	8 (20.00)	10 (25.64)	18 (22.78)
Complete Elementary School	1 (2.50)	1 (2.56)	2 (2.53)
Incomplete High School	6 (15.00)	14 (35.90)	20 (25.31)
Complete High School	21 (52.50)	12 (30.77)	33 (41.77)
Incomplete Higher Education	4 (10.00)	2 (5.13)	6 (7.59)
Family income			
Up to 260.00	15 (37.50)	5 (12.82)	20 (25.31)
From 261.00 to 780.00	13 (32.50)	6 (15.38)	19 (24.05)
From 781.00 to 1,300.00	9 (22.50)	15 (38.46)	24 (30.37)
From 1,301.00 to 1,820.00	2 (5.00)	5 (12.82)	7 (8.86)
From 1,821.00 to 2,600.00	1 (2.50)	5 (12.82)	6 (7.59)
From 2.601,00 to 3.900,00	-	3 (7.69)	3 (3.79)
N. of people that contribute to the income of the house			
One	4 (10.26)	9 (23.08)	13 (16.45)
Two	21 (53.85)	13 (33.33)	34 (43.03)
Three	6 (15.38)	9 (23.08)	15 (18.98)
Four	6 (15.38)	3 (7.69)	9 (11.39)
Five	-	3 (7.69)	3 (3.79)

More than five	2 (5.13)	2 (5.13)	4 (5.06)
N. of people supported by the house income			
One	1 (2.50)	2 (5.13)	3 (3.79)
Two	7 (17.50)	5 (12.82)	12 (15.18)
Three	9 (22.50)	10 (25.64)	19 (24.05)
Four	14 (35.00)	10 (25.64)	24 (30.37)
Five	4 (10.00)	3 (7.69)	7 (8.86)
More than five	5 (12.50)	9 (23.08)	14 (17.72)
Individual monthly paid activity			
I don't own	18 (45.00)	4 (10.26)	22 (27.84)
Up to 260.00	17 (42.50)	11 (28.21)	28 (35.44)
From 261.00 to 780.00	2 (5.00)	8 (20.51)	10 (12.65)
From 781.00 to 1,300.00	3 (7.50)	12 (30.77)	15 (18.98)
From 1.301,00 A 1.820,00	-	3 (7.69)	3 (3.79)
From 1.821,00 A 2.600,00	-	1 (2.56)	1 (1.26)
Sexual life			
Active	34 (85.00)	35 (89.74)	69 (87.34)
Assexual	-	-	-
Inactive	6 (15.00)	4 (10.26)	10 (12.65)
Pregnancy			
One	9 (22.50)	-	9 (11.39)
Two	12 (30.00)	-	12 (15.18)
Three	2 (5.00)	-	2 (2.53)
Above four	1 (2.50)	-	1 (1.26)
Nulliparous	16 (40.00)	-	16 (20.25)
Abortion			
Yes	2 (5.00)	-	2 (2.53)

No

38 (95.00)

-

37 (48.09)

Table 2. Difference of level of sexual satisfaction; values and beliefs about sexuality; level of prejudice in relation to sexual and gender diversity; knowledge of sexually transmitted disease (STD-KQ) and quality of life between the sexes in these individuals.

Instruments	Men (n = 39)	Women (n = 40)	T or U	p
Sexual Satisfaction	17.45 ± 7.16	21.37 ± 10.29	-1.889	0.0315*
Values and Beliefs (Reproduction)	8.0 (7.99; 9.70)	8.0 (7.13; 8.47)	626.500	0.124
Values and Beliefs (Affectivity)	12 (11.8;12.25)	12(10.95;11.90)	707.000	0.454
Values and Beliefs (Maternity)	16.36 ±3.752	14.43 ±3.706	2.305	0.012*
Values and Beliefs (Abortion)	12 (11.07; 12.57)	12 (11.02; 12.13)	758.500	0.828
Values and Beliefs (Pleasure)	12 (12.02; 13.21)	12 (11.67; 12.68)	664.000	0.218
Prejudice	49.77 ± 14.202	44.60 ± 16.311	1.501	0.069
STD-KQ	7.59 ± 4.375	6.98 ± 4.605	0.608	0.2725
Quality of life (total score)	4 (3.7686; 4.3340)	4 (3.5828; 4.1095)	632.500	0.182
Quality of life (physical domain)	4.2857 (4.1533; 4.4547)	4 (3.7492; 4.1213)	481.000	0.005*
Quality of life (psychological domain)	4.1667 (4.1100; 4.3600)	4 (3.7827; 4.106)	499.500	0.009*
Quality of life (social relationships)	4 (3.9840; 4.3579)	4 (4.0342; 4.3846)	792.000	0.747
Quality of life (environment)	3.55 ± 0.58	3.34 ± 0.52	1.693	0.0475*

*p < 0.05

T or U: Teste t (T) ou teste de Mann-Whitney (U).

Questionnaire on Knowledge of Sexually Transmitted Diseases (STD-KQ)

Table 3. Correlation between variables regardless of sexes.

	Sexual Satisfaction	Values and Beliefs (Reproduction)	Values and Beliefs (Affectivity)	Values and Beliefs (Maternity)	Values and Beliefs (Abortion)	Values and Beliefs (Pleasure)	Prejudice	STD-KQ	Quality of life (total score)	Quality of life (physical domain)	Quality of life (psychological domain)	Quality of life (social relationships)
Values and Beliefs (Reproduction)	P = 0.120 p = 0.160	-	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Affectivity)	P= -0.035 p= 0.387	P= 0.245 p= 0.014*	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Maternity)	P= 0.146 p= 0.112	P= 0.240 p= 0.016*	P= 0.440 p= 0.000**	-	-	-	-	-	-	-	-	-
Values and Beliefs (Abortion)	P= 0.070 p= 0.282	P= 0.282 p= 0.006*	P= 0.526 p= 0.000**	P= 0.462 p= 0.000**	-	-	-	-	-	-	-	-
Values and Beliefs (Pleasure)	P= 0.100 p= 0.204	P= 0.482 p= 0.000**	P= 0.372 p= 0.000**	P= 0.349 p= 0.001**	P= 0.432 p= 0.000**	-	-	-	-	-	-	-
Prejudice	P= 0.018 p= 0.441	P= 0.300 p= 0.004*	P= 0.227 p= 0.022*	P= 0.528 p= 0.000**	P= 0.332 p= 0.01*	P= 0.309 p= 0.003*	-	-	-	-	-	-
STD-KQ	P= 0.006 p= 0.481	P= -0.250 p= 0.010*	P= -0.193 p= 0.044*	P= -0.302 p= 0.003*	P= -0.115 p= 0.154	P= -0.076 p= 0.253	P= -0.288 p= 0.005*	-	-	-	-	-
Quality of life (total score)	P= -0.308 p= 0.005*	P= 0.135 p= 0.120	P= -0.008 p= 0.473	P= 0.088 p= 0.221	P= 0.047 p= 0.342	P= 0.040 p= 0.364	P= -0.027 p= 0.407	P= 0.089 p= 0.219	-	-	-	-
Quality of life (physical domain)	S= -0.071 p= 0.279	S= 0.113 p= 0.163	S= -0.218 p= 0.027*	S= 0.035 p= 0.380	S= -0.003 p= 0.489	S= 0.018 p= 0.437	S= 0.000 p= 0.499	S= 0.092 p= 0.212	S= 0.420 p= 0.000**	-	-	-
Quality of life (psychological domain)	S= -0.115 p= 0.170	S= 0.140 p= 0.111	S= -0.024 p= 0.419	S= -0.092 p= 0.212	S= 0.123 p= 0.142	S= -0.023 p= 0.421	S= -0.036 p= 0.377	S= -0.129 p= 0.130	S= 0.220 p= 0.026*	S= 0.556 p= 0.000**	-	-
Quality of life (social relationships)	P= -0.101 p= 0.201	P= 0.232 p= 0.021*	P= -0.035 p= 0.380	P= 0.027 p= 0.408	P= 0.025 p= 0.414	P= -0.151 p= 0.094	P= 0.184 p= 0.053	P= -0.313 p= 0.003*	P= 0.217 p= 0.028*	P= 0.451 p= 0.000**	P= 0.397 p= 0.000**	-
Quality of life (environment)	P= -0.198 p= 0.049*	P= 0.065 p= 0.286	P= -0.239 p= 0.018*	P= 0.000 p= 0.498	P= -0.107 p= 0.175	P= -0.144 p= 0.104	P= 0.132 p= 0.124	P= -0.140 p= 0.111	P= 0.329 p= 0.002*	P= 0.415 p= 0.000**	P= 0.322 p= 0.002*	P= 0.432 p= 0.000**

P: r of Pearson; S: r of Spearman; p: <0.05

* High correlation: P or S < 0.33

** Moderate correlation: P or S 0.34 to 0.66

*** Low correlation: P or S > 0.66

Questionnaire on Knowledge of Sexually Transmitted Diseases (STD-KQ)

Table 4. Correlation between the variables in males.

	IEEF (Erectile Function)	IEEF (Sexual Satisfaction)	IEEF (Orgasm)	IEEF (Sexual Desire)	IEEF (General Satisfaction)	IEEF (Total)	Sexual Satisfaction	Values and Beliefs (Reproduction)	Values and Beliefs (Affectivity)	Values and Beliefs (Maternity)	Values and Beliefs (Abortion)	Values and Beliefs (Pleasure)	Prejudice	STD-KQ	Quality of life (total score)	Quality of life (physical domain)	Quality of life (psychological domain)	Quality of life (social relationships)
IEEF (Sexual Satisfaction)	S= 0,548 p= 0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IEEF (Orgasm)	S= 0.657 p= 0.000 **	S= 0.672 p= 0.000 ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IEEF (Sexual Desire)	S= 0.164 p= 0.160	S= 0.257 p= 0.057	S= 0.256 p= 0.058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IEEF (General Satisfaction)	S= 0.379 p= 0.009 **	S= 0.343 p= 0.016 **	S= 0.534 p= 0.000 **	S= 0.543 p= 0.000 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IEEF (Total)	S= 0.804 p= 0.000 ***	S= 0.828 p= 0.000 ***	S= 0.860 p= 0.000 ***	S= 0.459 p= 0.002 **	S= 0.619 p= 0.000 **	-	-	-	-	-	-	-	-	-	-	-	-	-
Sexual Satisfaction	P= 0.133 p= 0.210	P= 0.247 p= 0.065	P= 0.222 p= 0.87	P= 0.108 p= 0.256	P= -0.017 p= 0.459	P= 0.186 p= 0.128	-	-	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Reproduction)	S= -0.125 p= 0.224	S= -0.208 p= 0.101	S= -0.040 p= 0.406	S= 0.162 p= 0.162	S= -0.157 p= 0.170	S= -0.127 p= 0.221	S= 0.104 p= 0.265	-	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Affectivity)	S= -0.231 p= 0.078	S= -0.426 p= 0.003 **	S= -0.275 p= 0.045 *	S= -0.001 p= 0.497	S= -0.025 p= 0.441	S= -0.302 p= 0.031 *	S= -0.029 p= 0.431	S= 0.136 p= 0.205	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Maternity)	P=-0,388 p=0,007 **	P=-0,365 p=0,011 **	P=-0,263 p=0,053	P=-0,140 p=0,198	P=-0,077 p=0,320	P=-0,366 p=0,011 **	P= 0.126 p= 0.222	P= 0.176 p= 0.141	P= 0.506 p= 0.001 **	-	-	-	-	-	-	-	-	-
Values and Beliefs (Abortion)	S= -0.167 p= 0.1155	S= -0.156 p= 0.171	S= -0.048 p= 0.387	S= -0.075 p= 0.325	S= -0.116 p= 0.240	S= -0.139 p= 0.200	S= 0.157 p= 0.170	S= 0.387 p= 0.007 **	S= 0.484 p= 0.001 **	S= 0.521 p= 0.000 **	-	-	-	-	-	-	-	-

Values and Beliefs (Pleasure)	S= -0.145 p= 0.190	S= -0.302 p= 0.031 *	S= -0.197 p= 0.114	S= -0.075 p= 0.325	S= -0.258 p= 0.056	S= -0.248 p= 0.064	S= -0.007 p= 0.482	S= 0.277 p= 0.044 *	S= 0.431 p= 0.003 **	S= 0.343 p= 0.016 **	S= 0.613 p= 0.000 **	-	-	-	-	-	-	-
Prejudice	P= -0.091 p= 0.291	P= -0.061 p= 0.357	P= -0.072 p= 0.333	P= 0.175 p= 0.144	P= 0.254 p= 0.059	P= -0.043 p= 0.397	P= 0.116 p= 0.242	P= 0.232 p= 0.078	P= -0.008 p= 0.480	P= 0.313 p= 0.026 *	P= 0.330 p= 0.020 *	P= 0.213 p= 0.097	-	-	-	-	-	-
STD-KQ	P= 0.382 p= 0.008 **	P= 0.316 p= 0.025 *	P= 0.269 p= 0.049 *	P= -0.016 p= 0.462	P= 0.116 p= 0.241	P= 0.342 p= 0.017 **	P= 0.208 p= 0.102	P= -0.342 p= 0.017 **	P= -0.256 p= 0.058	P= -0.351 p= 0.014 **	P= -0.151 p= 0.179	P= -0.111 p= 0.250	P= -0.311 p= 0.027*	-	-	-	-	-
Quality of life (total score)	S= 0.094 p= 0.284	S= -0.097 p= 0.278	S= 0.277 p= 0.044 *	S= -0.086 p= 0.301	S= 0.079 p= 0.316	S= 0.098 p= 0.276	S= -0.190 p= 0.124	S= 0.210 p= 0.100	S= 0.013 p= 0.470	S= 0.127 p= 0.221	S= 0.070 p= 0.336	S= 0.132 p= 0.211	S= -0.012 p= 0.471	S= -0.067 p= 0.343	-	-	-	-
Quality of life (physical domain)	S= 0.110 p= 0.253	S= 0.260 p= 0.055	S= 0.327 p= 0.021 *	S= 0.037 p= 0.410 **	S= -0.042 p= 0.399	S= 0.255 p= 0.059	S= -0.001 p= 0.497	S= 0.012 p= 0.472	S= -0.166 p= 0.157	S= -0.008 p= 0.480	S= 0.072 p= 0.331	S= -0.057 p= 0.366	S= -0.003 p= 0.493	S= 0.175 p= 0.143	S= 0.479 p= 0.001 **	-	-	-
Quality of life (psychological domain)	S= -0.102 p= 0.269	S= 0.117 p= 0.240	S= -0.023 p= 0.446	S= 0.252 p= 0.061	S= -0.155 p= 0.174	S= 0.032 p= 0.424	S= 0.085 p= 0.304	S= 0.379 p= 0.009 **	S= 0.015 p= 0.464	S= -0.150 p= 0.181	S= 0.097 p= 0.279	S= -0.029 p= 0.431	S= 0.122 p= 0.229	S= -0.362 p= 0.012 **	S= 0.015 p= 0.464	S= 0.409 p= 0.005 **	-	-
Quality of life (social relationships)	S= 0.040 p= 0.405	S= 0.002 p= 0.496	S= 0.159 p= 0.167	S= 0.228 p= 0.081	S= 0.001 p= 0.498	S= 0.098 p= 0.276	S= -0.138 p= 0.201	S= 0.429 p= 0.003 **	S= -0.146 p= 0.188	S= 0.003 p= 0.492	S= 0.047 p= 0.389	S= -0.240 p= 0.071	S= 0.192 p= 0.120	S= -0.389 p= 0.007 **	S= 0.296 p= 0.034 *	S= 0.543 p= 0.000 **	S= 0.556 p= 0.000 **	-
Quality of life (environment)	P= -0.166 p= 0.156	P= -0.237 p= 0.073	P= -0.133 p= 0.210	P= -0.229 p= 0.080	P= 0.012 p= 0.472	P= -0.192 p= 0.121	P= -0.111 p= 0.251	P= 0.147 p= 0.185	P= -0.243 p= 0.068	P= 0.051 p= 0.380	P= -0.043 p= 0.398	P= -0.161 p= 0.163	P= 0.271 p= 0.048 *	P= -0.273 p= 0.046 *	P= 0.237 p= 0.073	P= 0.352 p= 0.014 *	P= 0.282 p= 0.041 *	P= 0.584 p= 0.000 **

P: r of Pearson; S: r of Spearman; p: <0.05

* High correlation: P or S < 0.33

** Moderate correlation: P or S 0.34 to 0.66

*** Low correlation: P or S > 0.66

Questionnaire on Knowledge of Sexually Transmitted Diseases (STD-KQ)

Table 5. Correlation between the variables in female.

	FSFI (Desire)	FSFI (Excitement)	FSFI (Lubrication)	FSFI (Orgasm)	FSFI (Satisfaction)	FSFI (Pain)	FSFI (Total)	Sexual Satisfaction	Values and Beliefs (Reproduction)	Values and Beliefs (Affectivity)	Values and Beliefs (Maternity)	Values and Beliefs (Abortion)	Values and Beliefs (Pleasure)	Prejudice	STD-KQ	Quality of life (total score)	Quality of life (physical domain)	Quality of life (psychological domain)	Quality of life (social relations hips)
FSFI (Excitement)	S= -0.160 p= 0.162	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSFI (Lubrication)	S= -0.296 p= 0.032 *	S= 0.721 p= 0.000 ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSFI (Orgasm)	S= -0.197 p= 0.111	S= 0.629 p= 0.000 **	S= 0.687 p= 0.000 ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSFI (Satisfaction)	S= -0.120 p= 0.231	S= 0.567 p= 0.000 **	S= 0.584 p= 0.000 **	S= 0.769 p= 0.000 ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSFI (Pain)	S= -0.212 p= 0.094	S= 0.384 p= 0.007 **	S= 0.505 p= 0.000 **	S= 0.508 p= 0.000 **	S= 0.574 p= 0.000 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSFI (Total)	S= 0.024 p= 0.441	S= 0.690 p= 0.000 ***	S= 0.720 p= 0.000 ***	S= 0.816 p= 0.000 ***	S= 0.793 p= 0.000 ***	S= 0.699 p= 0.000 ***	-	-	-	-	-	-	-	-	-	-	-	-	-

Sexual Satisfaction	P= -0.021 p= 0.454	P= 0.437 p= 0.006 **	P= 0.502 p= 0.002 **	P= 0.500 p= 0.002 **	P= 0.487 p= 0.002 **	P= 0.297 p= 0.050 *	P= 0.501 p= 0.002 **	-	-	-	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Reproducti on)	S= -0.018 p= 0.456	S= 0.054 p= 0.370	S= -0.042 p= 0.399	S= 0.063 p= 0.349	S= 0.064 p= 0.348	S= -0.182 p= 0.130	S= 0.068 p= 0.339	S= 0.295 p= 0.051	-	-	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Affectivity)	S= -0.101 p= 0.267	S= 0.067 p= 0.341	S= -0.090 p= 0.290	S= 0.062 p= 0.351	S= -0.089 p= 0.292	S= -0.060 p= 0.357	S= 0.026 p= 0.436	S= -0.161 p= 0.190	S= 0.172 p= 0.144	-	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Maternity)	P= -0.091 p= 0.289	P= 0.144 p= 0.187	P= -0.001 p= 0.497	P= 0.114 p= 0.241	P= 0.082 p= 0.308	P= 0.101 p= 0.267	P= 0.087 p= 0.306	P= 0.259 p= 0.076	P= 0.223 p= 0.083	P= 0.359 p= 0.012 **	-	-	-	-	-	-	-	-	-	-
Values and Beliefs (Abortion)	S= -0.033 p= 0.419	S= 0.255 p= 0.056	S= 0.085 p= 0.302	S= 0.167 p= 0.151	S= 0.345 p= 0.015 **	S= 0.232 p= 0.075	S= 0.280 p= 0.040 *	S= -0.068 p= 0.356	S= 0.078 p= 0.316	S= 0.418 p= 0.004 **	S= 0.379 p= 0.008 **	-	-	-	-	-	-	-	-	-
Values and Beliefs (Pleasure)	S= 0.083 p= 0.305	S= 0.019 p= 0.453	S= -0.001 p= 0.497	S= -0.009 p= 0.479	S= -0.002 p= 0.494	S= -0.134 p= 0.205	S= 0.087 p= 0.297	S= 0.243 p= 0.090	S= 0.655 p= 0.000 **	S= 0.383 p= 0.007 **	S= 0.319 p= 0.022 *	S= 0.253 p= 0.058	-	-	-	-	-	-	-	-
Prejudice	P= -0.023 p= 0.444	P= -0.180 p= 0.133	P= -0.285 p= 0.037 *	P= -0.146 p= 0.184	P= -0.062 p= 0.353	P= -0.119 p= 0.232	P= -0.194 p= 0.115	P= -0.022 p= 0.452	P= 0.327 p= 0.020 *	P= 0.455 p= 0.002 **	P= 0.681 p= 0.000 ***	P= 0.339 p= 0.016	P= 0.380 p= 0.008 **	-	-	-	-	-	-	-
STD-KQ	P= -0.390 p= 0.006 **	P= 0.140 p= 0.195	P= 0.275 p= 0.043 *	P= 0.066 p= 0.344	P= -0.018 p= 0.456	P= 0.173 p= 0.143	P= 0.098 p= 0.274	P= -0.116 p= 0.264	P= -0.219 p= 0.087	P= -0.139 p= 0.195	P= -0.312 p= 0.025 *	P= -0.08 p= 0.295	P= -0.059 p= 0.358	P= -0.300 p= 0.030 *	-	-	-	-	-	-

Quality of life (total score)	S= 0.00 p= 0.478	S= -0.287 p= 0.038 *	S= -0.183 p= 0.133	S= -0.320 p= 0.024 *	S= -0.249 p= 0.063	S= -0.007 p= 0.482	S= -0.262 p= 0.053	S= -0.341 p= 0.028 **	S= -0.032 p= 0.423	S= - 0.213 p= 0.096	S= 0.008 p= 0.480	S= -0.022 p= 0.447	S= 0.01 p= 0.468	S= -0.019 p= 0.453	S= 0.194 p= 0.118	-	-	-	-
Quality of life (physical domain)	S= 0.047 p= 0.388	S= -0.324 p= 0.022 *	S= -0.175 p= 0.143	S= -0.252 p= 0.061	S= 0.008 p= 0.480	S= -0.002 p= 0.496	S= -0.169 p= 0.152	S= 0.004 p= 0.492	S= 0.090 p= 0.293	S= -0.392 p= 0.007 **	S= -0.086 p= 0.300	S= -0.125 p= 0.225	S= -0.032 p= 0.424	S= -0.161 p= 0.164	S= -0.02 p= 0.432	S= 0.344 p= 0.016 **	-	-	-
Quality of life (psychological domain)	S= 0.086 p= 0.301	S= -0.314 p= 0.026 *	S= -0.202 p= 0.109	S= -0.265 p= 0.052	S= -0.068 p= 0.340	S= -0.047 p= 0.389	S= -0.241 p= 0.069	S= -0.148 p= 0.210	S= -0.269 p= 0.049	S= -0.174 p= 0.144	S= -0.245 p= 0.066	S= 0.109 p= 0.254	S= -0.220 p= 0.090	S= -0.308 p= 0.028 *	S= 0.056 p= 0.368	S= 0.393 p= 0.007 **	S= 0.618 p= 0.000 **	-	-
Quality of life (social relationships)	S= 0.158 p= 0.169	S= -0.246 p= 0.065	S= -0.365 p= 0.011 **	S= -0.262 p= 0.053	S= -0.131 p= 0.214	S= 0.116 p= 0.240	S= -0.157 p= 0.169	S= -0.114 p= 0.268	S= 0.015 p= 0.463	S= 0.036 p= 0.413	S= 0.066 p= 0.351	S= -0.074 p= 0.328	S= 0.033 p= 0.421	S= 0.234 p= 0.076	S= -0.21 p= 0.092	S= 0.345 p= 0.016 **	S= 0.389 p= 0.007 **	S= 0.29 p= 0.036 *	-
Quality of life (environment)	P= 0.167 p= 0.155	P= -0.453 p= 0.002 **	P= -0.377 p= 0.009 **	P= -0.365 p= 0.011 **	P= -0.190 p= 0.124	P= -0.139 p= 0.200	P= -0.314 p= 0.026 *	P= -0.204 p= 0.132	P= -0.148 p= 0.185	P= -0.281 p= 0.042 *	P= -0.159 p= 0.167	P= -0.253 p= 0.060	P= -0.201 p= 0.110	P= -0.059 p= 0.362	P= -0.040 p= 0.401	P= 0.404 p= 0.005 **	P= 0.412 p= 0.005 **	P= 0.29 p= 0.037 *	P= 0.285 p= 0.039 *

P: r of Pearson; S: r of Spearman; p: <0.05

* High correlation: P or S < 0.33

** Moderate correlation: P or S 0.34 to 0.66

*** Low correlation: P or S > 0.66

Questionnaire on Knowledge of Sexually Transmitted Diseases (STD-KQ)