Sexual practices of women who have sex with women and condom use

Práticas sexuais de mulheres que fazem sexo com mulheres e o uso do preservativo

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ABSTRACT
Objective: to analyze the sexual practice of women who have sex with women and its association with condom use.
Methods: correlational study involving 231 women who have sex with women, recruited through electronic application (Instagram and WhatsApp). A questionnaire was applied through Google Forms, containing sociodemographic data, sexual history, and the types of sexual practices. Results: most women performed oral sex (86.4%) and manual sex (86.9%) without using condoms. A large proportion (84.8%) reported the use of fomites in sexual practices without condoms. The inexistence of a fixed partnership (p=0.000) and the performance of sex with vaginal contact (p=0.013) were associated with sexual intercourse without condoms.
Conclusion: the sexual practice of women who have sex with women points to greater vulnerability to sexually transmitted infections, to practicing oral and vaginal sex with manual practices without the use of barrier methods.

Descriptors: Sexually Transmitted Diseases; Sex Education; Homosexuality, Female; Sexual and Gender Minorities; Health Vulnerability.

RESUMO
Objetivo: analisar a prática sexual de mulheres que fazem sexo com mulheres e sua associação ao uso do preservativo.
Métodos: estudo correlacional que envolveu 231 mulheres que fazem sexo com mulheres, recrutadas por meio de aplicativo eletrônico (Instagram e WhatsApp). Foi aplicado um questionário através do Google Forms, contendo dados sociodemográfico, história sexual e os tipos de práticas sexuais. Resultados: a maioria das mulheres realizava sexo oral (86.4%) e sexo com práticas manuais (86.9%) sem o uso de preservativo. A inexistência de parceria fixa (p=0.000) e a realização do sexo com contato vaginal (p=0.013) foram associadas à relação sexual sem preservativo.
Conclusão: a prática sexual de mulheres que fazem sexo com mulheres aponta maior vulnerabilidade às infecções sexualmente transmissíveis, ao praticar sexo oral e vaginal com práticas manuais sem a utilização de métodos de barreira.

Descritores: Doenças Sexualmente Transmissíveis; Educação Sexual; Homossexualidade Feminina; Minorias Sexuais e de Gênero; Vulnerabilidade em Saúde.
Introduction

The Brazilian Unified Health System needs to include in its vision issues related to human rights. In the context of female sexuality, it is necessary to meet the needs of women who have sex with women, with attitudes that favor the choice of different types of sexual intercourses, distancing themselves from heteronormative protocols, while at the same time the forms of prevention and assistance to this public should be emphasized(1).

In a study that analyzed 150 women who reported having sex with women or with women and with men, 71 women (43.3%) were identified with a diagnosis of some sexually transmitted infection (STI). The highest prevalence was of Human Papilloma Virus (HPV) infection (45.3%), followed by chlamydia (2.0%), Human Immunodeficiency Virus (HIV) and gonorrhea, with 0.7% each. Trichomoniasis and syphilis were identified in 1.3% of the women investigated(2).

Such prevalence may be associated with the fact that the devices used by women who have sex with women to prevent sexually transmitted infections (STIs) are widespread improvisations among this population. The device will depend on the type of sexual practice being performed. In the penetration of dildos/vibrators, it is possible to use the penile condom when both partners share the phial, thus reducing the contact of secretions between them(3). When the practices are manual, it is possible to use finger pads (a latex device often used in speech therapy), gloves or just the fingers of the glove cut off, as a finger condom. In the practice of oral sex or vagina-to-vagina contact, there is the possibility of using plastic film, or cut penile and vaginal/anal condoms to form a barrier. In this practice, dental dam is also used, which is a latex sheet used as a dental barrier in dental treatments(3).

Although there are methods that reduce the exposure of these infections among women, their re-
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The study population was composed of women who have sex with women, being considered as inclusion criteria: being Brazilian, age over 18 years, and having had a sexual encounter in the last year.

Thus, the sample size was calculated using the formula for infinite populations. The sample size calculation was based on the prevalence of the variable of interest “non-use of condoms” (12.7%), according to the adopted reference (6), and sample error of 5%. Thus, the estimated sample was of 97 participants and the final sample of 231 participants, no participant was excluded because all met the inclusion criteria.

To collect the explanatory variables, a structured questionnaire was used with the following information: 1) sociodemographic: age (numeric variable) and/or age range, in years (18–25, 26–30, 31–40, and 41 or more); education, in years of study (none, 1–8, 8–16, and 16 and more); marital status (dichotomous nominal variable) (no partnership/with partnership); religion; self-reported color (people of color or white person); individual monthly income (no income, <1 or >1). 2) Sexual history: age at first sexual intercourse; age at first homosexual intercourse; heterosexual intercourse; fixed partner; gender of partner; length of partnership; number of partners in the last year; number of partners in life; history of STI; completion of treatment; term that best defines sexuality and family support. 3) Sexual practices: oral sex; condom during oral sex; sex with penetration of fomites; condom during sex with fomites; sex with manual practices; use of barriers for protection during sex with manual practices; sex with vaginal contact; protection during vaginal sex; sexual intercourse without condom in the last six months.

The study was conducted in a virtual environment. The women were recruited, and the information was collected through a link passed on in WhatsApp groups composed of women who self-referred as lesbians or who have sex with women. There was also dissemination of the survey link and collection through the Instagram platform, by posting in stories and fixing the survey link in the profile of the research group on sexual and reproductive health.

The link gave access to an electronic questionnaire on the Google Docs platform created by the researchers and contained an explanatory text about the research, how the data collection was carried out, and the informed consent form.

The questionnaire began with an informed consent form that explained the purpose of the research and the criteria necessary for participation in it. There was a mandatory response pop-up with a self-declaration from the participants, stating that they had all the necessary criteria. By checking it, they were able to continue answering the form. In addition, after the participants had answered the form, the researchers analyzed the spreadsheet generated in the Excel program, and the necessary requirements for participation in the research were evaluated.

The sample was recruited through two non-probability sampling methods, snowball sampling and convenience sampling. Convenience sampling was chosen, since it is difficult to access this population due to the stigma and social prejudice experienced, given the prevalence of homophobia. Snowball sampling was chosen to have contact with this population of difficult access, which was facilitated by the cycle of friendships or acquaintances with similar sexual behaviors. The questionnaire link was disseminated, and the women who responded spread the word to more women in their cycle who fit the survey profile, thus forming a referral chain.

The data were stored and analyzed in the SPSS, version 23.0, using percentage and absolute frequencies. The association measures used were: Crude Odds Ratio (OR) and Fisher’s exact test with 95% confidence interval (CI), p<0.05.

The ethical and legal aspects involving research with human beings were respected, and the study was approved by the Ethics Committee of the

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Federal University of Ceará, under opinion number 3,921,161/2020.

Results

There was a predominance of women in the age group 18 to 29 years old, with no fixed partner 144 (70%). Regarding the term that best defines their sexuality, there was a predominance of the term lesbian, representing 108 (46.8%), followed by the term bisexual, with 58 (25.1%). The absence of family support in relation to sexuality in 132 (57.1%) of the women is noteworthy.

Of the women interviewed, 164 (71%) reported having only one steady partner. The gender of these fixed partnerships was also analyzed, and the predominant gender was female, with 219 (96.6%). The analysis of the duration of these partnerships revealed that 122 (68.9%) relationships lasted longer than one year. To better understand their sexual practices, we tried to analyze their sexual activity in the last three months. It was evident that 157 (78.9%) respondents were sexually active and with a single fixed partner. However, 42 (21.1%) stated that they had had sexual intercourse with multiple partners, a fact that demonstrates their sexual vulnerability to STIs.

Regarding the number of partners in the last year, it was seen that 210 (93.8%) of the women had between one and five sexual intercourse ships. When questioned about knowledge of STIs in sexual intercourse between women, 222 (96.1%) demonstrated knowledge about this contagious. Despite reporting this knowledge, it was evidenced that 118 (51%) had contracted some STI, 104 (45%) had not, and 9 (4%) did not remember.

Regarding oral sex, 222 (96.1%) reported performing such practice, which makes evident the dissemination of oral sex among them. However, when investigating the use of condoms in oral sex, it was observed that 216 (95.2%) do not use barrier methods, showing the seriousness of the exposure of these women to STIs.

When asked about the use of fomites, it was evident that 119 (51.5%) of the women do not use any object for penetration. However, 112 (48.5%) reported using some type, and of these, 78 (70.3%) do not use condoms or barrier methods on objects.

In relation to manual practices in sex between women, it was revealed that 228 (98.7%) of the women use hands and fingers for their own and their partner’s satisfaction, and of these, 220 (95.2%) do not use any barrier method at the time of practice. Only 11 (4.8%) participants of the sample use barrier method for protection of manual practices. When asked about which methods, it was revealed that 9 (81.8%) used condoms, 1 (9.1%) used fingertips or gloves, and 1 (9.1%) used hygiene methods to prevent disease.

The situation is similar in the variable of sex with vaginal contact, in which 223 (96.5%) of the women practicing this form of sex do not use any barrier method for protection against STIs. Only 8 (3.5%) use some method. Of these, 6 (66.7%) use condoms, 2 (22.2%) only use film paper, and 1 (11.4%) use both.

When asked about having sexual intercourse without a condom in the last six months, 200 (86.6%) did not use any barrier method for STIs.

The existence of a steady partner associated with unprotected sex demonstrated statistical significance (p=0.000), showing that the chance of a woman who has a steady partner having unprotected sex is 5.014 times greater when compared to those who do not have a steady partner (Table 1).

Table 2 shows an association between vaginal contact sex and sex without a condom (p=0.013), revealing that 196 (87.9%) women who have vaginal contact sex with women do not use any type of barrier against STIs. This fact is justified by the fact that in Brazil there is no preventive method developed exclusively and specifically for sex with vaginal contact.
Table 1 – Association of the sexual history variable with sexual intercourse without condom among women who have sex with women. Fortaleza, CE, Brazil, 2020

<table>
<thead>
<tr>
<th>Variables</th>
<th>Had sexual intercourse without a condom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
</tr>
<tr>
<td>Had sexual intercourse with a man</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>126 (85.7)</td>
</tr>
<tr>
<td>No</td>
<td>74 (88.1)</td>
</tr>
<tr>
<td>Has a fixed partner</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>152 (92.7)</td>
</tr>
<tr>
<td>No</td>
<td>48 (71.6)</td>
</tr>
<tr>
<td>Nº of partners in the last year</td>
<td></td>
</tr>
<tr>
<td>&gt;5</td>
<td>12 (85.7)</td>
</tr>
<tr>
<td>1 a 5</td>
<td>182 (86.7)</td>
</tr>
<tr>
<td>Knowledge about STIs transmission</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1 (11.1)</td>
</tr>
<tr>
<td>Yes</td>
<td>30 (13.5)</td>
</tr>
</tbody>
</table>

*OR: crude Odds Ratio; †CI: 95% Confidence Interval; ‡Fisher’s test; §STI: Sexually Transmitted Infections

Table 2 – Association of the variable of sexual practices with sexual intercourse without condom among women who have sex with women. Fortaleza, CE, Brazil, 2020

<table>
<thead>
<tr>
<th>Variables</th>
<th>Had sexual intercourse without a condom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
</tr>
<tr>
<td>Condom use during oral sex in the past six months</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td>2 (18.2)</td>
</tr>
<tr>
<td>No</td>
<td>30 (13.6)</td>
</tr>
<tr>
<td>Manual sex in the last six months</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1 (33.3)</td>
</tr>
<tr>
<td>Yes</td>
<td>30 (13.1)</td>
</tr>
<tr>
<td>Sex with breath penetration in the last six months</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>27 (12.1)</td>
</tr>
<tr>
<td>Yes</td>
<td>17 (15.2)</td>
</tr>
<tr>
<td>Sex with vaginal contact in the last six months</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>27 (12.1)</td>
</tr>
<tr>
<td>Yes</td>
<td>4 (50.0)</td>
</tr>
</tbody>
</table>

*OR: Raw Odds Ratio; †CI: 95% Confidence Interval; ‡Fisher’s test
Discussion

As a limitation of this research, we identified aspects related to the cross-sectional methodological design, which hinders the cause-and-effect relationship between the variables.

It was possible to realize that sexual practices among women are not only related to the existence of internal and individual factors, but also to programmatic elements and social aspects. Thus, the research can contribute to health professionals, especially nurses, to increase their knowledge about the sexual practices of women who have sex with women and factors that may influence condom use, to identify possible behaviors and aspects of vulnerability to STIs, so that attitudes of prevention can be proposed for this population segment, often excluded from health education strategies.

The profile of the women interviewed points to a greater vulnerability to STIs, given that young lesbian and bisexual women are vulnerable to bullying, family rejection, and risky sexual behavior. It was evidenced that single women perform a risky sexual practice, causing exposure to themselves and to multiple partners. The presence of trust in the fidelity of the monogamous lesbian relationship behaves as a protective factor against STIs in relationships between women who have sex with women.

It was observed that the term that best defines the respondents’ sexuality is lesbian, followed by the term bisexual, corroborating the findings of a study that involved 582 women who have sex with women and pointed out that most of them (66.5%) identify themselves as lesbian, and 31.6% as bisexual. With this predominance, it is believed that, despite not being the majority, the term bisexual in this context leads us to reflect those women do not necessarily identify themselves as lesbians, hence the importance of investigating the aspects related to the sexual identity of this segment.

Given the initiation of sexual activity with another woman at the age of 18, these women are in a condition that puts them at greater risk, because this age group is the most vulnerable group most strongly associated with the laboratory diagnosis of STIs. Therefore, this clientele requires special attention from intersectoral services to develop strategies to promote sexual health.

The fact that the women presented fixed and monogamous relationships does not make the female homoerotic practice “safe” against STIs, since there is a mistaken logic when considering the monogamous affective-sexual intercourse ship exempt from vulnerability.

In the United States, the incubation period and risk factors for bacterial vaginosis evaluated among women who have sex with women were verified, being seen in the samples of vaginal swabs collected daily the presence of bacterial vaginosis among the 36 women examined, being common and directly associated with sexual activity among women, predominantly, among African Americans. Thus, a worrisome finding seen in this research was that most women who have sex with women have already contracted some STI in their lives.

It is worrisome to note that women are aware of their vulnerability to transmission, but in their sexual practices, they expose themselves to the occurrence of STIs. In this public, it is common the speech of having knowledge about the risks, but not performing positive attitudes towards the transmission and prevention of STIs through inadequate practices.

The context of the absence of a partner in this public allows us to glimpse the urgency of paying attention and considering that this population has priority aspects for individual and collective interventions. A study conducted with women who have sex with women in Australia showed that sex with a new partner was associated with an increase in bacterial diversity and an increase in the change of composition (or instability) of the resident vaginal microbiota, which contributes to susceptibility to sexual diseases.

It is noteworthy, in this research, the high sexual risk behavior when evidencing the non-use of any
barrier method for protection against STIs among these women, which allows the maintenance of the chain of disease transmission. In a survey conducted with 582 women who have sex with women, it was also possible to notice that sexual practices are carried out without condoms. It was observed in the study that the practice of oral sex (95.2%) and sex with fingertip penetration (97.3%) were frequent in sex between women. As a barrier method, women had greater adherence to the male condom in vaginal sex within the use of fomites (56.5%) and in anal penetration (52.9%). The use of plastic film is perceived in oral sex (6.7%) and, during vaginal penetration using fingers, the use of gloves (5.6%). It was evidenced that a great part of the participants (83-87%) never used barrier to give or receive oral sex, during sex with use of objects and/or sexual toys (62-63%), and in sex with manual-digital stimulation (88%)\(^{(12)}\).

When compared to women with bisexual practices, women who have sex only with women are less likely to use a barrier method in their sexual intercourse (41.1% versus 28.3%; \(p=0.04\)). The annual gynecological consultation in women who have sex with women is less frequent (38.9%) when compared to women with bisexual practices (70.8%). In addition, the former receives less guidance on STIs, Acquired Immunodeficiency Syndrome (44.0% versus 59.1%; \(p=0.03\)) and sexual doubts (50.0% versus 63.0%; \(p=0.04\))\(^{(12)}\). The need to implement actions aimed at training and sensitizing health professionals about safe sexual practices in this public is perceived, so that they develop attitudes of care during their sexual intercourses.

Another important aspect of non-condom sex was addressed in research involving campaign designs for HIV prevention in Spain to assess the degree of inclusion of women who have sex with other women. The findings pointed out that the messages of the general prevention campaigns, present total exclusion of HIV risk in women who have sex with women. It is inferred, therefore, that women, despite having risk of transmission of STIs in sexual practices are made invisible by the heteronormative model of women’s health\(^{(13)}\).

In addition, it is important to mention that fixed partnership is also considered a factor of individual vulnerability, since trust in the partner annuls the fact that there is transmission of STIs between the couple. However, a survey that investigated the frequency and the factors associated with these infections showed that living with a partner was not a protective factor for STIs, since they do not perceive themselves as vulnerable and fail to protect themselves adequately\(^{(14)}\).

Thus, it is noted the vulnerability associated with sexual practices without condoms, reflecting the absence of protective methods designed for sex between vaginas and for oral-vaginal sex and the low adherence to the use of improvised methods for these practices. Therefore, it is important to develop prevention methods and strategies that address the specificity of sex between women\(^{(15)}\).

**Conclusion**

The sexual practice of women who have sex with women points to greater vulnerability to sexually transmitted infections, when practicing oral sex and sex with manual practices without the use of barrier methods, being common the use of fomites in sexual intercourse without condoms. The inexistence of a fixed partnership and the performance of sex with vaginal contact were associated with sexual intercourse without condoms.

**Authors’ Contribution**

Conception of the project, analysis, and interpretation of the data, writing of the article, relevant critical review of the intellectual content, and final approval of the version to be published: Cavalcante DR, Ribeiro SG, Pinheiro AKB, Soares PRAL, Aquino OS, Chaves AFL.
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