# SEXUAL AND REPRODUCTIVE HEALTH AND SOCIOCULTURAL ASPECTS OF INDIGENOUS WOMEN

Saúde sexual, reprodutiva e aspectos socioculturais de mulheres indígenas

Salud sexual, reproductiva y aspectos socioculturales de mujeres indígenas

**Original Article** 

### **ABSTRACT**

**Objective:** To know the profile of sexual and reproductive health and sociocultural aspects of indigenous women Methods: Observational and descriptive cross-sectional study conducted in an outpatient reference center for indigenous health in the period from 2010 to 2013. A semi-structured questionnaire containing socio-cultural data and history of sexual and reproductive life was applied. Cervicovaginal smear was collected. Descriptive analysis was conducted using mean and standard deviation (SD) for quantitative variables and absolute and relative numbers for qualitative variables. Results: The sample included 90 indigenous women with mean age of 36 years (±SD13.41), belonging to 35 ethnicities. A total of 75 women (83.4%) experienced the first sexual intercourse at age 12-19 years, 74 (82.2%) were at reproductive age, 36 (48.6%) used contraceptive methods such as hormonal contraceptives and tubal sterilization. There was a mean of 4.6 births per woman; average age at first childbirth was 17.3 years (±SD 3.23); 23 of the women (26.8%) had 1-3 abortions and 26 (31. 2%) had one or more cesarean deliveries. In all, eight women (8.9%) presented alterations for cytologic atypia and sexually transmitted diseases (Trichomonas vaginalis and Human Papillomavirus) in the Pap test. Conclusion: Vulnerable conditions for indigenous women were observed based on their sexual and reproductive profile, with exposure to sexually transmitted diseases, cervical cancer, early initiation of sexual activity and poor access to information and prevention.

**Descriptors:** Sexual and Reproductive Health, Health of Indigenous Peoples, Uterine Cervical Neoplasms, South American Indians.

#### **RESUMO**

Objetivo: Conhecer o perfil da saúde sexual, reprodutiva e aspectos socioculturais de mulheres indígenas. Métodos: Estudo observacional, transversal e descritivo, realizado em ambulatório de referência em saúde indígena, durante o período de 2010 a 2013. Aplicouse um formulário semiestruturado contendo dados socioculturais, histórico de vida sexual e reprodutiva. Coletou-se o esfregaço cervicovaginal. Utilizou-se a análise descritiva, com apresentação de média e desvio padrão (DP) para variáveis quantitativas, e números absolutos e relativos para variáveis qualitativas. Resultados: A amostra constituiu-se de 90 indígenas, com idade média de 36 anos (± DP 13,41), pertencentes a 35 etnias. Para 75 mulheres (83,4%), a coitarca ocorreu na faixa etária de 12 a 19 anos, 74 (82,2%) estavam em período reprodutivo e 36 (48,6%) usavam método contraceptivo, como o anticoncepcional hormonal e a laqueadura tubária. A média de partos foi de 4,6 por mulher; a idade média no primeiro parto foi de 17,3 anos (± DP 3,23); 23 delas (26,8%) tiveram de 1 a 3 abortamentos e 26 (31,2%) tiveram um ou mais partos cesáreas. Em oito mulheres (8,9%), identificaram-se alterações para atipias citológicas e doenças sexualmente transmissíveis (Trichomonas vaginalis e Papilomavírus humano) no exame colpocitológico. Conclusão: Foram observadas condições de vulnerabilidade das mulheres indígenas a partir do seu perfil sexual e reprodutivo, com exposição às doenças sexualmente transmissíveis, câncer do colo do útero, início precoce da vida sexual e pouco acesso à informação e prevenção.

**Descritores:** Saúde Sexual e Reprodutiva; Saúde de Populações Indígenas; Neoplasias do Colo do Útero; Índios Sul-Americanos.

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#### **RESUMEN**

**Objetivo:** Conocer el perfil de la salud sexual, reproductiva y los aspectos socioculturales de mujeres indígenas. Métodos: Estudio observacional, transversal y descriptivo realizado en ambulatorio de referencia en salud indígena entre 2010 y 2013. Se aplicó un formulario semi-estructurado con datos socioculturales, el histórico de la vida sexual y reproductiva. Se realizó el frotis cérvicovaginal. Se utilizó un análisis descriptivo con presentación de la media y desviación típica (SD) para las variables cuantitativas y números absolutos y relativos para las variables cualitativas. Resultados: La muestra fue de 90 indígenas con media de edad de 36 años (± SD 13,41) y pertenecientes de 35 etnias distintas. Para 75 mujeres (83,4%), la primera relación sexual se dio entre los 12 y 19 años, 74 (82,2 %) estaban en el periodo reproductivo y 36 (48,6%) usaban método anticonceptivo como el anticonceptivo hormonal y la ligadura de trompas. La media de partos fue de 4,6 para cada mujer; la media de edad del primer parto fue de 17,3 años (± SD 3,23); 23 de ellas (26,8%) tuvieron entre 1 y 3 abortos y 26 (31,2%) tuvieron una o más cesáreas. Se identificó alteraciones para atipias citológicas y enfermedades transmitidas sexualmente (Trichomonas vaginalis e Papilomavirus humano) en la copocitología de ocho mujeres (8,9%). Conclusión: Se observó condiciones de vulnerabilidad de las mujeres indígenas a partir de su perfil sexual y reproductivo con exposición para las enfermedades transmitidas sexualmente, el cáncer de cuello uterino, el inicio temprano de la vida sexual y poca accesibilidad a la información y la prevención.

**Descriptores:** Salud Sexual y Reproductiva; Salud de Poblaciones Indígenas; Neoplasias del Cuello Uterino; Indios Sudamericanos.

## INTRODUCTION

There are over three hundred indigenous populations of different ethnic groups. They are located in almost every state in the country, with a population totaling 817.9 thousand declared indigenous people. This number corresponds to 0.4% of the Brazilian population, with the largest population in Northern Brazil<sup>(1)</sup>.

The history of inequality and inequities experienced by the indigenous population fostered the establishment of the Decree No. 3156<sup>(2)</sup>, which provides for the conditions for the provision of healthcare services to indigenous populations in the *Sistema Único de Saúde – SUS* (Brazil's Unified Health System), and the Law No. 9836<sup>(3)</sup>, which provides for the conditions for health promotion, protection and recovery, and the organization and functioning of services, regulating the *Política Nacional de Atenção à Saúde dos Povos Indígenas – PNASPI* (National Policy for Indigenous Health).

Despite the regulations on indigenous health care, this population, which is included in the group of minorities, and particularly the indigenous woman, is vulnerable with regard to the access to health services and preventive exams<sup>(4,5)</sup>. The health policy targeted to these women has not presented effective results yet, and epidemiological information on their health conditions are still scarce. It is necessary to take into account their diversity, sociocultural specificities, and geographic isolation to create different strategies to provide the access to health promotion based on intercultural dialogue, enhancing the participation of indigenous women in the development of policies aimed at their sexual and reproductive health<sup>(6)</sup>.

The health promotion strategy, in a broader perspective, provides that health interventions should focus on aspects that determine individual's health-disease process in the community, taking health problems and needs as its object. To give visibility to factors that put people's health at risk, given the different needs, cultures, and territory, in order to reduce vulnerabilities<sup>(7)</sup>.

As indigenous women are at risk with regard to their sexual and reproductive health, health promotion strategies to meet their needs and cultural specificities must be prioritized. Also, special attention should be drawn to the production of knowledge in this field, which despite advances in recent years still needs broader and general studies to bring answers to the existing gaps in this population. Demographic and epidemiological studies available on this issue provide information that focus mainly on fertility patterns, mentioning health care during the reproductive period and the use of traditional and modern contraceptive methods in an incipient form<sup>(8)</sup>. Sexually transmitted diseases (STDs), reproductive system diseases, and particularly gynecological cancer are poorly addressed. Most of these studies focus on specific ethnic groups living in villages, especially in the Amazon region, which limits the generalizability of the results. Research on the health of indigenous women treated at reference centers is still rare in Brazil<sup>(5,8)</sup>.

The reproductive pattern of indigenous women in rural areas shows high levels of fertility in younger ages, ranging from 4-8 children per woman<sup>(1)</sup>. This number is considered high for the Brazilian national fertility rate of 1.9 children in 2010. In addition to short intergenesic intervals, there is evidence of early pregnancy and poor prenatal care<sup>(8-10)</sup>.

With regard to DSTs and cervical cancer, studies have pointed them as the most common diseases in indigenous women<sup>(4,5,11,12)</sup>. Several studies show the Human Papillomavirus (HPV) as the main risk factor for cervical

cancer. Other cofactors may also be associated with the onset of this type of cancer, such as early initiation of sexual activity, high parity, multiple sexual partners, poor hygiene habits, smoking<sup>(13)</sup>, and the difficult access to preventive exams and adequate treatment. In general, these risk factors are found in indigenous populations of South America<sup>(4,14)</sup>.

Seeking to guide and expand the provision of health care to indigenous women, the present study aimed to know the profile of sexual and reproductive health and sociocultural aspects of indigenous women.

#### **METHODS**

This is an observational and descriptive cross-sectional study conducted in the period from 2010 to 2013 at the *Ambulatório do Índio do Hospital São Paulo – HSP* (São Paulo Hospital Outpatient center for Indigenous people) of the *Universidade Federal de São Paulo – UNIFESP* (Federal University of São Paulo). This outpatient center is a reference in medium- and high-complexity care of indigenous patients from many regions of Brazil and counts on a multiprofessional team responsible for the user embracement and care coordination<sup>(15)</sup>.

The sample comprised 90 indigenous women waiting for care in the waiting room of the outpatient center as either patients or companions. The study included indigenous women with sexually active life, regardless of age, who accepted to participate as a volunteer in the research.

A staff member of the center selected the participants and explained them about the objective of the study. After that, women were referred to a gynecologist's office and signed the free informed consent form.

A semi-structured questionnaire was applied by a single researcher to collect sociocultural data (ethnicity, age, origin, place of residence, education, and marital status) and data on history of sexual and reproductive health (sexual activity, age at first sexual intercourse, number of sexual partners, use of male condom, pregnancy, parity, abortions, use of contraceptive methods, clinical and gynecological complaints).

Women underwent a gynecological examination to collect cervicovaginal smear for the cytology examination. Those who presented clinical and gynecological complaints, and abnormal test results were provided medical consultation.

Descriptive analysis of data was performed using mean and standard deviation (SD) for quantitative variables and absolute and relative numbers for qualitative variables in the Statistical Package for Social Sciences (SPSS) version 14. The research was approved by the Ethics Research Committee of the UNIFESP (Registration No. 15226) according to Resolution 466/12 of the National Health Council.

# **RESULTS**

The total study population was composed of 90 indigenous women, with a mean age of 36 years ( $\pm 13.4$ ), belonging to 35 ethnic groups and ten language families from all over the country. In all, 62 (69.0%) women were married, 35 (39.0%) lived in Southeastern Brazil, 71 (78.9%) lived in villages, 64 (71.1%) had attended school at some point in their life, and 51 (56.7%) were accompanying relatives during a consultation, as presented in Table I.

With regard to history of sexually active life and number of sexual partners, 62 indigenous women (69.0%) reported having up to three partners, 16 (17.7%) had more than three, and 12 (13.3%) did not know or did not want to inform. A total of 75 (83.4%) women reported having their first sexual intercourse at age 12-19 years, with a mean of 15.6 years ( $\pm$  2.8). As to the use of male condom in sexual relationships, 57 (63.3%) women reported they never used it, although 81 (90.0%) said they know it and 73 (81.1%) said they know its function (Table II).

Regarding the number of pregnancies, 47 indigenous women (52.2%) have had 1-5 pregnancies, with a mean of five pregnancies, and 23 (28.0%) have had 1-3 abortions. Concerning the number of births, 54 women (60.0%) have had 1-5 births, with a mean of 4.7 (± 1.1). Information on the place of delivery showed that 38 indigenous women (47.0%) gave birth in hospitals, 20 (24.7%) gave birth at home, and 23 (28.3%) had given birth in both hospital and home. Concerning the type of delivery, 26 women (32.1%) had 1-4 cesarean deliveries. As to the age at first delivery, most women gave birth at age 15-20 years, with a mean of 17.3 years (± 3.23). Importantly, 12 girls (14.8%) reported having their first delivery at age 11-14 years.

Of the 90 indigenous women in the study, 74 (82.2%) were of childbearing age, that is, they were between 10-49 years old; of these,, 36 (48.6%) used some type of contraceptive method, from the most modern ones to traditional ones like herbs and breastfeeding with sexual abstinence. Hormonal contraception was the most frequent method, used by 15 women (41.7%), followed by tubal sterilization, used by ten women (27.8%). A total of 16 women (17.8%) were in perimenopause or menopause (Table III).

In the present study, 59 indigenous women (65.6 %) presented some kind of clinical complaint, particularly

Table I - Sociocultural variables of indigenous women attending the *Ambulatório do Índio* of the Federal University of São Paulo (UNIFESP). São Paulo, 2010-2013.

Variables	n	%
Marital status		
Married	62	69.0
Single	23	25.5
Widowed	04	4.4
Separated	01	1.1
Origin/Region		
Southeast	35	39.0
Central-West	30	33.3
North	18	20.0
Northeast	05	5.5
South	02	2.2
Place of residence		
Rural area (village)	71	78.9
Urban área	19	21.1
Attended school		
Yes	64	71.1
No	26	28.9
Consultation		
Companion	51	56.7
Patient	39	43.3
Total	90	100.0

Table II - Sexual profile of indigenous women attending the *Ambulatório do Índio* of the Federal University of São Paulo (UNIFESP). São Paulo, 2010-2013.

Variable	n	%
Number of partners		
Up to 3	62	69.0
More than 3	16	17.7
Not informed	12	13.3
First sexual intercourse (age)		
12-14	33	36.7
15-19	42	46.7
20-24	05	5.5
25-29	01	1.1
Not informed	09	10.0
Has already used condom		
Yes	33	36.7
No	57	63.3
Knows the condom		
Yes	81	90.0
No	09	10.0
Knows the function of the condom		
Yes	73	81.1
No	17	18.9
Total	90	100.0

Table III - Reproductive profile of indigenous women attending the *Ambulatório do Índio* of the Federal University of São Paulo (UNIFESP). São Paulo, 2010-2013.

Variables	n	0/0
Number of pregnancies		
0	08	9.0
1-5	47	52.2
6-10	28	31.1
>11	07	7.7
Number of births		
0	09	10.0
1-5	54	60.0
6-10	24	26.7
> 11	03	3.3
Total	90	100.0
Age at first delivery		
11-14	12	14.8
15-20	51	63.0
21-26	12	14.8
Did not know to inform	06	7.4
Total	81	100.0
Current contraceptive method		
Hormonal contraceptive	15	41.7
Tubal sterilization	10	27.8
Condom	05	14.0
Herbs	03	8.3
Intrauterine device-IUD	02	5.5
Breastfeeding with sexual abstinence	01	2.7
Total	36	100.0

gynecological ones: pelvic pain in 21 (41.1%) and dyspareunia in 11 (21.5%).

Patients were asked about their concerns regarding health in the indigenous communities where they live. Of all the reported concerns, the most prevalent were STDs/AIDS and cancer, reported by 25 women (26.1%) each (Table IV).

Regarding the prevention of cervical cancer, most of the Pap tests results were negative, and eight cases (8.9%) presented abnormal cytology. There were 4 women (3.3%) with low-grade squamous intraepithelial lesion (LSIL), 2 (2.2%) with atypical squamous cells of undetermined significance (ASC-US), 1 (1.1%) with atypical squamous cells - cannot exclude high-grade squamous intraepithelial lesion (ASC-H) and 1 (1.1%) with high-grade intraepithelial lesion (HSIL), as presented in Table V.

Table IV - Health complaints and concerns reported by indigenous women attending the *Ambulatório do Índio* of the Federal University of São Paulo (UNIFESP). São Paulo, 2010-2013.

Variables	n	0/0
Complaints during consultation		
Yes	59	65.6
No	31	34.4
Total	90	100.0
Gynecological complaints		
Pelvic pain	21	41.1
Dyspareunia	11	21.5
Dysmenorrhea	05	9.8
Dysuria	04	7.8
Increased vaginal discharge	04	7.8
Menstrual irregularity	02	4.0
Urinary incontinence	01	2.0
Infertility	01	2.0
Low sex drive	01	2.0
Bleeding after intercourse	01	2.0
Total	90	100.0
Health concerns		
STDs/AIDS	25	26.1
Cancer	25	26.1
Cervical cancer	08	12.5
Diabetes	08	8.3
Diarrhea in children	06	6.3
Flu	06	6.3
Malaria	04	4.2
Headache	03	3.2
Pelvic pain	02	2.1
Alcohol and Drugs	02	2.1
Hypertension	02	2.1
Fever	02	2.1
Hepatitis	02	2.1
Urinary tract infection	01	1.0
Teen pregnancy	01	1.0
Reduced number of children	01	1.0
Marital infidelity	01	1.0
Incurable disease	01	1.0
Rheumatism	01	1.0
Lack of health care in the village	01	1.0
Living close to town	01	1.0
Young dating	01	1.0
Total	96	100.0

STDs/AIDS: Sexually Transmitted Diseases/Acquired Immunodeficiency Syndrome

Table V - Distribution of the results of Pap tests of indigenous women attending the *Ambulatório do Índio* of the Federal University of São Paulo (UNIFESP). São Paulo, 2010-2013.

Pap test	n	0/0
Negative	82	92.3
Negative LSIL	04	3.3
ASC-US	02	2.2
ASC-H	01	1.1
HSIL	01	1.1
Total	90	100.0

LSIL: low-grade squamous intraepithelial lesion, ASC-US: Atypical squamous cells of undetermined significance, ASC-H: Atypical squamous cells – cannot exclude high-grade squamous intraepithelial lesion, HSIL: high-grade squamous intraepithelial lesion.

# **DISCUSSION**

Most of Brazilian indigenous populations live in villages, a fact that is corroborated by the results of the present study; additionally, most of them are originally from Northern Brazil<sup>(1)</sup>. However, a great number of women were originally Southeastern Brazil, from the state of São Paulo. This may be explained by the fact that Guarani people who live in villages near the city of São Paulo and coastal region was the most prevalent ethnic group of women; therefore, it is easier for them to seek the outpatient center. The state of São Paulo ranks seventh in the number of self-declared indigenous people<sup>(1)</sup>.

The growing indigenous populations in territories near urban areas is a reality that demands a different care in health care services that respects the inter-ethnic diversity of indigenous peoples<sup>(16)</sup>. The *Ambulatório do Índio do Hospital São Paulo — UNIFESP* (São Paulo Hospital Outpatient Care for Indigenous People) is a reference in health care for indigenous people, constituting a different gateway to this population. Another important aspect of this service is the sociocultural diversity of patients, who may come from isolated regions such as the Amazon or a big city like São Paulo<sup>(17)</sup>. This reflects the complexity of health care for the indigenous population in Brazil.

With regard to education, the majority of women had attended school at some point in their life. However, data show that indigenous people from Brazil have lower education levels compared to the non-indigenous population<sup>(1)</sup>.

In the present study, the majority of women started sexual activity early in life. This finding is similar to those found in published literature, which show that in many indigenous peoples it is common for the girl to start sexual life very early, sometimes shortly before menarche<sup>(8,18)</sup>. As to the number of partners, the information collected may not express the reality, as it has been noticed during the application of the form that women did not feel comfortable

answering questions about sexuality. The sexual behavior of indigenous peoples is generally characterized by the early initiation of sexual relations and freedom of sex partner exchange, even among married people<sup>(19)</sup>.

The indigenous population is vulnerable to STDs due to their particular sociocultural situation. Some vulnerability factors are highlighted: lack of access to information and prevention, greater transit of these people in urban areas and whorehouses, use of alcohol and illicit drugs, sexual behavior, invasion of indigenous lands by mineral and timber exploiters, construction of dams and roads, indigenous lands located in border regions, and indigenous populations living in urban areas<sup>(11,20)</sup>.

The reproductive cycle of Brazilian indigenous women tends to start very early, around 11-13 years old and ends before the age of 44<sup>(8)</sup>. The findings of this research point to the early initiation of reproductive life, which is common in many indigenous peoples of Brazil, with a mean age at first pregnancy ranging 19.4-21.1 years(19). The majority of women had a mean of 4.6 births, which is similar to the findings of other studies(1,21). Regarding the place of delivery, the majority of women said that they only gave birth at the hospital, differing from a research conducted with Guarani indigenous women from Mato Grosso do Sul<sup>(22)</sup>. The increased number of hospital deliveries has been observed in other ethnic groups, particularly in regions where the indigenous populations have greater contact with the surrounding society. Other issues such as the reduced number of midwives in villages and young people's lack of interest in learning such practice, coupled with the insecurity about giving birth in the village, have contributed to the increased demand for hospital deliveries<sup>(8)</sup>.

Although young indigenous women accept hospital delivery well, they have reported some uncomfortable aspects of it: horizontal position, which is uncomfortable for delivery, given they assume a squatting position for delivery in the village; loss of autonomy in choosing the type of delivery, culminating in cesarean sections; distance

from the family during delivery; women's difficulty to follow the care and special rules of their culture in a hospital environment (special diet, care of the placenta and newborn, use of herbs); discomfort during pelvic exam; feeling of discrimination<sup>(10)</sup>.

This study draws attention to the high percentage of indigenous women who underwent cesarean delivery (31.2%). This finding highlights the risk for future generations, exposes the intensification of the medicalization of childbirth, and points to the need to qualify prenatal and delivery care for this population, who is accustomed to traditional delivery performed in the villages by experienced midwives as reported by studies conducted with the general population<sup>(23)</sup>. It is important to qualify prenatal care in primary care, involving the community and traditional midwives.

The institutionalization of childbirth, with the increasing number of cesarean deliveries among indigenous women, has drawn the attention of researchers who attribute this phenomenon to the increased access of this population to health care in the villages. This situation has increased the number of referrals of pregnant women to attend prenatal care and give birth in nearby municipalities, hindering selfcare practices of indigenous pregnant women and midwives who have their own knowledge and care to ensure a healthy pregnancy and childbirth<sup>(24)</sup>. In addition, insecurity and the lack of preparation of multidisciplinary teams of indigenous health care in assisting women during pregnancy and postpartum contribute to the increased medicalization of childbirth<sup>(10)</sup>. Another highlighted factor is the economic incentive provided to reference hospital services for the care of this population, culminating in greater access to medical technology during pregnancy and childbirth<sup>(25)</sup>.

Knowing the traditional practices of sexual and reproductive health prevention of this population, such as the use of herbs, eating behaviors and sexual rules, is of utmost importance for the dialogue between health professionals and indigenous women, allowing the exchange of knowledge on body care. This involves the preparation of health professionals to develop cultural competence to valorize aspects of indigenous culture and stimulate self-care.

The use of contraceptive methods in this population was superior to that of indigenous women from Xingu<sup>(8)</sup>, which may be explained by the greater access to health services and the villages located near urban areas. There was a greater use of hormonal contraceptives, which is similar to the results found in the Krenak indigenous people<sup>(26)</sup>; there was also a great use of tubal sterilization as a contraceptive method. Importantly, the use of traditional methods such as herbs and breastfeeding with sexual abstinence are

also highlighted, and they can be observed in other ethnic groups<sup>(21)</sup>.

Indigenous women who do not wish to become pregnant usually use drinks made from herbs and roots that must be prepared by an experienced and older person in the village; in addition, they must follow strict rules to ensure an effective treatment. Increasingly, young women have been using hormonal contraceptive instead of traditional methods, as they say they do not work anymore and put them at risk of unintended pregnancy<sup>(8,27)</sup>. Other types of birth control, used by the Suyá people, are the postpartum sexual abstinence until the child is able to walk, extended breastfeeding, and herbal abortion<sup>(8)</sup>.

Results similar to those of the present research, which found that pelvic pain and dyspareunia are the most common gynecological complaints of indigenous women, have been reported in the published literature<sup>(8)</sup>. Importantly, the main health concerns of women in their communities are STDs/AIDS and cancer. Other health problems that have been reported in a lower frequency, such as diabetes, alcohol and drugs, hypertension, decreased number of children, and teen pregnancy, have also been reported by other studies<sup>(8,28,29)</sup>. These findings show that indigenous women have been noticing important changes that affect health in their communities as a result of the contact process and inequalities in their relationship to the surrounding society, which can have a negative influence on the living conditions of the population.

Indigenous women are exposed to cervical cancer risk factors, have little access to information and preventive exams, and present a high prevalence of cervical cancer precursor lesions<sup>(4,5,11)</sup>. The present study found a presence of five (4.4%) premalignant lesions (LSIL: 3.3% and HSIL: 1.1%) in the Pap test, which have also been found by other researchers(4,5,11,12). Histopathological diagnosis identified one case of cervical intraepithelial neoplasia grade III (CIN III) and one of adenocarcinoma in situ through biopsy during colposcopy. Both cases received surgical treatment at the Hospital Sao Paulo of UNIFESP and were monitored by the team of the Ambulatório do Índio (Outpatient Center for Indigenous People). There were 13 women (14.4%) with Gardnerella vaginalis infection, four (4.4%) with Trichomonas vaginalis, and other four (4.4%) infected by the human papillomavirus (HPV), findings that are similar to those of published literature<sup>(30)</sup>. It should be highlighted how important it is to create opportunities for indigenous women to access preventive examinations with educational practices(4).

Indigenous communities have different social realities, ranging from isolated communities, with little or no contact with society, to those located near urban areas, with decades of contact with society. Thus, it is necessary

to understand the national health picture better in order to establish prevention strategies and health goals and indicators consistent with the reality of indigenous women. Enhancing intersectoral public health policies targeted to this population, taking into account its cultural specificities and social roles, is a way to contribute to the strengthening of indigenous peoples as a whole.

# **CONCLUSION**

The data on the profile of sexual and reproductive health and sociocultural aspects of indigenous women reveal a sexual and reproductive pattern characterized by vulnerable conditions due to early initiation of sexual life and little use of condoms in sexual intercourses. Additionally, they are exposed to STDs and cervical cancer, high fertility, multiparity, and medicalization of childbirth.

### REFERENCES

- Instituto Brasileiro de Geografia e Estatística IBGE. Censo demográfico 2010: características gerais dos indígenas [accessed 23 Jan 2015]. Available at: ftp:// ftp.ibge.gov.br/Censos/Censo\_Demografico\_2010/ Caracteristicas\_Gerais\_dos\_Indigenas/pdf/ Publicacao\_completa.pdf
- 2. Ministério da Saúde (BR). Decreto nº 3.156, de 27 de Agosto de 1999. Dispõe sobre as condições para a prestação de assistência à saúde dos povos indígenas, no âmbito do Sistema Único de Saúde, pelo Ministério da Saúde. Diário Oficial da União; Brasília 1999 Ago 28 [accessed 23 Jan 2015]. Available at: http://www.planalto.gov.br/ccivil\_03/decreto/D3156.htm
- 3. Ministério da Saúde (BR). Lei nº 9.836, de 23 de setembro de 1999. Acrescenta dispositivos à Lei nº 8.080, de 19 de setembro de 1990, que "dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências", instituindo o Subsistema de Atenção à Saúde Indígena. Diário Oficial da União; Brasília 1999 Ago 24 [accessed 25 Jan 2015]. Available at: http://www.planalto.gov.br/ccivil 03/leis/19836.htm
- Speck NMG, Pereira ER, Schaper M, Rodrigues D, Almeida P, Sakano CR, et al. Cytopathological screening in indigenous women from Parque Indigena do Xingu. Eur J Gynaec Oncol. 2009;30(5):512-3.
- Fonseca AJ, Amorim LDC, Murari RSW, Arcoverde LC, Ferreira LCL. Prevalência de alterações citológicas cervicais em indígenas do Extremo Norte da Amazônia Brasileira. Rev Bras Cancerol. 2014;60(2):101-8.

- Maggi RS. A saúde indígena no Brasil. Rev Bras Saúde Mater Infant. 2014;14(1):13-4.
- Ministério da Saúde (Brasil), Secretaria de Vigilância em Saúde, Secretaria de Atenção à Saúde. Política Nacional de Promoção da Saúde. 3ª ed. Brasília: Ministério da Saúde; 2010.
- Pagliaro H, Mendonça S, Baruzzi R. Fecundidade e saúde reprodutiva das mulheres Suyá (Kisêdjê): aspectos demográficos e culturais. Cad CRH. 2009;22(57):479-90.
- Souza LG, Santos RV, Pagliaro H, Carvalho MS, Flowers NM, Coimbra CE Jr. Demography and health of the Xavante Indians of Central Brazil. Cad Saúde Pública. 2011;27(10):1891-905.
- Moliterno ACM, Borghi AC, Orlandi LHSF, Faustino RC, Serafim D, Carreira L. Processo de gestar e parir entre as mulheres Kaingang. Texto Contexto & Enferm. [periódico na Internet]. 2013 [accessed 25 Jan 2015];22(2):293-301. Available at:http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S0104-07072013000200004
- Rodrigues DA, Pereira ER, Oliveira LSS, Speck NMG, Gimeno SGA. Prevalência de atipias citológicas e infecção pelo papilomavírus humano de alto risco em mulheres indígenas Panará, povo indígena do Brasil Central. Cad Saúde Pública. 2014;30(12):2587-93.
- 12. Vasilevska M, Ross SA, Gesink D, Fisman DN. Relative risk of cervical cancer in indigenous women in Australia, Canada, New Zealand, and the United States: a systematic review and meta-analysis. J Public Health Policy. 2012;33(12):148-64.
- Vinodhini K, Shanmughapriya S, Das BC, Natarajaseenivasan K. Prevalence and risk factors of HPV infection among women of various provinces of the world. Arch Gynecol Obstet. 2012; 285(3):771-7.
- Kightlinger RS, Irvin WP, Archer KJ, Huang NW, Wilson RA, Doran JR, et al. Cervicalcancer and human papillomavirus in indigenous Guyanese women. Am J Obstet Gynecol. 2010; 202(6):626-7
- 15. Pereira ER, Biruel EP, Oliveira LSS, Rodrigues DA. A experiência de um serviço de saúde especializado no atendimento a pacientes indígenas. Saúde Soc. 2014;23(3):1077-90.
- Langdon EJ. Diversidade cultural e os desafios da política brasileira de saúde do índio. Saúde Soc. 2007;16(2):7-9.
- 17. Pereira ER, Bastos NSW, Silva LM, Oliveira LSSO. Perfil de morbidade de indígenas em serviço especializado. RIES. 2014;3(1):144-57.

- 18. Junqueira C, Camargo CPF, Pagliaro H. Reflexões acerca do mundo cultural e do comportamento reprodutivo dos Kamaiurá ontem e hoje. In: Pagliaro H, Azevedo MM, Santos RV, organizadores. Demografia dos Povos Indígenas no Brasil. Rio de Janeiro: Fiocruz e Associação Brasileira de Estudos Populacionais/ Abep; 2005. p. 119-34.
- Pagliaro H, Azevedo H. Comportamento reprodutivo de povos indígenas no Brasil, interface entre a demografia e a antropologia. In: Wong LR, organizador. Población y salud sexual y reproductiva em América Latina. Rio de Janeiro: Série Investigaciones; 2008. p. 415-33.
- Carvalho NS, Cho R, Flores LP. DST em populações indígenas no Brasil: análise crítica e revisão da literatura. DST J Bras Doenças Sex Transm. 2011;23(3):142-5.
- Pagliaro H, Junqueira C. Recuperação populacional e fecundidade dos Kamaiurá, Povo Tupi do Alto Xingu, Brasil Central, 1970-2003. Saúde Soc. 2007;16(2):37-47.
- Picoli RP, Carandina L, Ribas DLB. Saúde maternoinfantil e nutrição de crianças Kaiowá e Guaraní, Área Indígena de Caarapó, Mato Grosso do Sul, Brasil. Cad Saúde Pública. 2006;22(1):223-7.
- 23. Freitas PF, Savi EP. Desigualdades sociais nas complicações da cesariana: uma análise hierarquizada. Cad Saúde Pública. 2011;27(10):2009-20.
- 24. Ferreira LO. Saúde e relações de gênero: uma reflexão sobre os desafios para a implantação de políticas públicas de atenção à saúde da mulher indígena. Ciênc Saúde Coletiva. 2013;18(4):1151-9.
- Freitas PF, Drachler ML, Leite JCC, Grassi PR. Desigualdade social nas taxas de cesariana em primíparas no Rio Grande do Sul. Rev Saúde Pública. 2005;39(5):761-7.

- 26. Dias Junior CS, Verona APA, Pena JL, Moreira LE, Machado-Coelho GLL. Fecundidade e usos de métodos contraceptivos entre as mulheres Krenak, Minas Gerais, Brasil [accessed 27 Jan 2015]. Available at: http://web.cedeplar.ufmg.br/cedeplar/seminarios/ecn/ecn-mineira/2012/arquivos/Fecundidade%20 e%20usos%20de%20m%C3%A9todos%20 contraceptivos%20entre%20as%20mulheres%20 Krenak.pdf
- 27. Azevedo M. Saúde reprodutiva e mulheres indígenas do Alto Rio Negro. Cad CRH. 2009;22(57):463-77.
- Oliveira RCC, Silva AO, Maciel SC, Melo JRF. Situação de vida, saúde e doença da população indígena Potiguara. REME Rev Min Enferm. 2012;16(1):81-90.
- Maciel SC, Oliveira RCCM, Felix JR. Alcoolismo em Indígenas Potiguara: representações sociais dos profissionais de saúde. Psicol Ciênc Prof. 2012;32(1):98-111.
- Speck NMG, Pereira ER, Schaper M, Tso FK, Freitas VG, Ribalta JC. Uterine cervical neoplasia prevention in Parque Indígena do Xingu. Eur J Gynaec Oncol. 2009; 30(4):415-7.

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