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Sociodemographic profile and gestacional aspects of women with hiv/aids in Curitiba, Brazil

Perfil sociodemográfico e aspectos gestacionais de mulheres com hiv/aids de Curitiba, Brasil

Perfil sociodemográfico y aspectos gestacionales de mujeres com vih/sida em Curitiba, Brasil

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ABSTRACT

Objective: To describe the sociodemographic and gestational profile of HIV-positive women in Curitiba-PR, years 2018-2020.

Method: Observational, cross-sectional research, with data obtained from the Information System of Diseases of Notification of Pregnant Women. Data were analyzed for consistency exploration, description and analysis.

Results: The sample consisted mostly of women aged 13-30 years, white and with incomplete elementary school. Prenatal care was performed by 93.8% of pregnant women, 66.1% of whom knew their serological status before prenatal care and 45% received notification in the first gestational trimester. Access to antiretroviral medication occurred for 82.4% of pregnant women and for 74.6% the pregnancy outcome was alive newborns. The statistical variables associated with prenatal care were pregnancy evolution, ART prophylaxis, type of delivery and ART at delivery ($p<0.00$).

Conclusion: The pregnant women in the sample presented desired gestational indicators. The collected data allowed describing the sample's profile and evaluating the performance of the health policy for pregnant women.

Keywords: HIV. Pregnant women. Infectious disease transmission, vertical. Prenatal care. Anti-retroviral agents. Health policy.

RESUMO

Objetivo: Descrever o perfil sociodemográfico e gestacional de mulheres HIV positivo de Curitiba-PR, anos 2018-2020.

Método: Pesquisa observacional, transversal, com dados do Sistema de Informação de Agravos de notificação das gestantes. Os dados foram analisados para exploração de consistência, descrição e análise.

Resultados: Amostra perfilou-se majoritariamente por mulheres brancas na faixa etária de 13-30 anos. Pré-natal foi realizado por 93,8% das gestantes, sendo que 66,1% sabiam sua condição sorológica antes do pré-natal e 45% receberam a notificação no 1º trimestre. O acesso à medicação antirretroviral ocorreu para 82,4% das gestantes e para 74,6% o desfecho da gestação foi bebê nascido vivo. As variáveis estatisticamente associadas ao pré-natal foram evolução da gravidez, profilaxia com antirretroviral, tipo de parto e antirretroviral no parto ($p<0,001$).

Conclusão: As gestantes da amostra apresentaram indicadores gestacionais desejados. Os dados coletados permitiram descrever o perfil da amostra e avaliar o desempenho da política de saúde para gestantes.

Palavras-chave: HIV. Gestantes. Transmissão vertical de doenças infecciosas. Cuidado pré-natal. Antirretrovirais. Política de saúde.

RESUMEN

Objetivo: Describir el perfil sociodemográfico y gestacional de mujeres VIH positivas en Curitiba-PR, años 2018-2020.

Método: Investigación observacional, de corte transversal, condatos obtenidos del Sistema de Información de Enfermedades de Notificación de la mujer embarazada. Los datos fueron analizados para exploración, descripción y análisis de consistencia.

Resultados: La muestra estuvo compuesta en su mayoría por mujeres de 13 a 30 años, blancas y con instrucción básica incompleta. El control prenatal fue realizado por el 93,8% de las gestantes, siendo que el 66,1% conocía su estado serológico antes Del control prenatal y el 45% recibió notificación en el 1er trimestre. El acceso a la medicación antirretroviral ocurrió para el 82,4% de las mujeres embarazadas y para el 74,6% el resultado del embarazo fue nacido vivo. Las variables asociadas estadísticamente al control prenatal fueron evolución del embarazo, profilaxis antirretroviral, tipo de parto y antirretroviral al parto ($p<0,001$).

Conclusión: Las gestantes de la muestra presentaron indicadores gestacionales deseados. Los datos recolectados permitieron describir el perfil de la muestra y evaluar El desempeño de la política de salud de las mujeres embarazadas.

Palabras clave: VIH. Mujeres embarazadas. Transmisión vertical de enfermedad infecciosa. Atención prenatal. Antirretrovirales. Política de salud.

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INTRODUCTION

The reality of the acquired immunodeficiency syndrome (AIDS) epidemic and of contamination by the human immunodeficiency virus (HIV) has been changing in Brazil and in the world, reflecting on the epidemiological profile of people living with HIV[1]. Around the 1980s, the literature reported a higher prevalence of infection in homosexual and bisexual men. Over the years, there has been an increase in cases among heterosexuals, which has increased the feminization of the epidemic[2,3].

The increase in HIV infection among women, most of whom are of childbearing age, is reflected in the increase in the number of pregnant women infected with the virus[4]. Most diagnoses of HIV infection in women occur during pregnancy, leading to the risk of vertical transmission, which is the main route of contamination for children. According to the 2019 clinical protocol of the Ministry of Health, in planned pregnancies, with interventions properly performed during prenatal care, delivery and breastfeeding, the risk of HIV transmission can be reduced to less than 2%[5,6]. However, the World Health Organization (WHO) warns that without this adequate planning, the risk ranges from 15% to 45%[7].

The inclusion of HIV testing during prenatal care provides an opportunity for prophylactic actions, since knowledge of the positive diagnosis guides health actions, such as choosing the appropriate antiretroviral therapy (ART), planning the type of delivery and early initiation of prophylaxis for exposed newborns. Obviously, all of this aims to minimize the risk factors for mother-to-child transmission and unfavorable postnatal outcomes[8,9].

Communicable diseases that have a great impact on the population, such as AIDS, must be brought to the attention of health authorities in order to guide public policies. This occurs through compulsory notification. The diagnosis of HIV infection and the establishment of AIDS are part of the national list of compulsory notification of diseases. AIDS reporting has been mandatory since 1986, HIV infection in pregnancy since 2000, and HIV infection since 2014. In Brazil, from 2000 to June 2021,141,025 pregnant women infected with HIV were notified[10].

The analysis of data from the epidemiological profile of HIV-positive pregnant women contributes to a better contextual understanding of the health of women and pregnant women, with impact on the health of their babies. The city of Curitiba, PR, has a well-structured prenatal program that includes HIV-positive pregnant women. However, in the literature search performed no study on data from these pregnant women was found allowing the description of a sociodemographic and gestational profile, capable of contributing to the refinement of public policies. Thus, the following guiding questions were proposed: what is the profile of HIV-positive pregnant women in Curitiba-PR? Are the gestational indicators favorable?

Therefore, the present study aimed to describe the sociodemographic and gestational profile of HIV-positive women in the city of Curitiba-PR, in 2018, 2019 and 2020.

METHOD

Observational epidemiological study, with a quantitative, cross-sectional approach, using secondary databases, i.e. from public health information systems.

The research project was approved by the Research Ethics Committee of PUCPR and by the Research Ethics Committee of Secretaria Municipal de Saúde, of Curitiba, under Protocol no 4,410,964.

The database used was the SINAN (Notifiable Diseases Information System) base with data referring to the notification forms of HIV-positive pregnant women and also the notification of AIDS for adults, which includes pregnant women. As these data are confidential, collection was only carried out after approval by the Research Ethics Committee. A single researcher went to the Municipal Health Department of Curitiba where a professional from the epidemiology sector accessed the SINAN database. Data were collected by the researcher directly from the SINAN spreadsheet.

Data were collected from all pregnant women diagnosed with HIV positive who were notified in 2018, 2019 and 2020, thus characterizing the study population. Inclusion criteria were having being notified as an HIV-positive pregnant women during the study period by the municipality of Curitiba-PR, and Curitiba is a reference in care for people living with HIV for some municipalities in the metropolitan region.

The collected data were organized according to pre-established variables such as: sociodemographic (age, race/ethnicity, education, city of residence) and gestational factors (time of infection diagnosis, trimester in which notification was made, prenatal care, use of antiretroviral medication during pregnancy, type of delivery, whether antiretroviral medication was used during childbirth, what was the evolution of the pregnancy, when the baby started antiretroviral medication and how the pregnant woman became infected with HIV).

The data were recorded in a Microsoft Excel® spreadsheet, and participants' anonymity was guaranteed. Then, the data were exported to the SPSS statistical software (IBM Statistic 25.0®)[11] for consistency exploration, description and analysis. Tests were performed to verify possible associations or differences between proportions, especially regarding the aspect of prenatal care and other study variables. Pearson's

chi-square test was used followed by the two proportion Z-test to determine whether two proportions are different from each other with Bonferroni correction ($p<0.05$).

RESULTS

From 2018 to 2020, in the city of Curitiba, Paraná,307 HIV-positive pregnant women were notified on SINAN. According to the notifications, most of these pregnant women were aged 13-30 (58.3%); were white (74.6%) and had incomplete primary education (24.4%) (Table 1).

Most pregnant women (81.1%) lived in Curitiba (Table 1), and there were pregnant women residing in all 10 Sanitary Districts of the city (Table 2).

Regarding the obstetric variables of the 307 pregnant women in the sample, most of them discovered their

Table 1 – Frequency distribution of sociodemographic data of pregnant women in the sample (n=307). Curitiba, Paraná, Brazil, 2022

Variable	n	Percentage
Age		
13-30 years	179	58.3%
31- 49 years	127	41.4%
Did not answer	1	0.3%
Total	307	100.0%
Race/ethnicity		
White	229	74.6%
Black	62	20.2%
Yellow	7	2.3%
Did not answer	9	2.9%
Total	307	100.0%
Education		
Incomplete primary education	75	24.4%
Complete primary education	34	11.1%
Incomplete secondary education	42	13.7%
Complete secondary education	59	19.2%
Incomplete higher education	16	5.2%
Complete higher education	7	2.3%
Ignored	74	24.1%
Total	307	100.0%
Municipality of residence		
Curitiba	249	81.1%
Another municipality	56	18.2%
Did not answer	2	0.7%
Total	307	100.0%

Source: Research data, 2018-2020.

serological status before prenatal care (66.1%); was notified as an HIV-positive pregnant woman in the 1st trimester (45%); attended prenatal care (93.8%); took antiretroviral medication (82.4%); had an elective cesarean section (45%); used ART at the time of delivery (65.1%) and became sexually infected with HIV (68.1%) (Table 3).

Table 2 – Frequency distribution of pregnant women in the sample according to the Sanitary District of residence (n=307). Curitiba, Paraná, Brazil, 2022

Sanitary District	n	Percentage
Bairro Novo	39	12.7%
Boa Vista	39	12.7%
CIC	39	12.7%
Cajuru	30	9.8%
Tatuquara	25	8.1%
Matriz	20	6.5%
Boqueirão	19	6.2%
Pinheirinho	17	5.5%
Portão	15	4.9%
Santa Felicidade	6	2.0%
Not informed	2	0.7%
Another municipality	56	18.2%
Total	307	100%

Source: Research data, 2018-2020.

Table 3 – Frequency distribution of the obstetric variables of the pregnant women in the sample (n=307). Curitiba, Paraná, Brazil, 2022

Variable	n	Percentage
Diagnosis of HIV infection		
Before prenatal care	203	66.1%
During prenatal care	92	30.0%
During childbirth	9	2.9%
After delivery	3	1.0%
Total	307	100.0%
Notification as HIV positive pregnant woman		
1st trimester	138	45.0%
2nd trimester	84	27.3%
3rd trimester	78	25.4%
Unknown gestational age	7	2.3%
Total	307	100.0%

Table 3 – Cont.

Variable	n	Percentage
Received prenatal care		
Yes	288	93.8%
No	13	4.2%
Did not answer	6	2.0%
Total	307	100.0%
Didantiretroviral prophylaxis		
Yes	253	82.4%
No	26	8.5%
Did not answer	19	6.2%
Unknown	9	2.9%
Total	307	100.0%
Type of delivery		
Elective cesarean section	138	45.0%
Vaginal	84	27.4%
Emergency cesarean section	16	5.2%
Not applicable	11	3.6%
Did not answer	58	18.8%
Total	307	100.0%
Route of contamination of the pregnant woman		
Sexual	209	68.1%
Could not inform	95	31.0%
Drugs	1	0.3%
Transfusion	1	0.3%
Vertical	1	0.3%Va
Total	307	100.0%
Antiretroviral use in childbirth		
Yes	200	65.1%
No	42	13.7%
Unknown	65	21.2%
Total	307	100.0%

Source: Research data, 2018-2020.

Regarding the babies, for 74.6% of the pregnant women, the outcome was live births and 71% started ART in the first 24 hours after delivery (Table 4).

The results demonstrated a statistical significance between the performance of prenatal care and the positive evolution of the pregnancy, prophylaxis with ART, type of delivery and use of ART at the time of delivery (p<0.001) (Table 5).

Table 4 – Frequency distribution of obstetric variables related to the babies of pregnant women in the sample (n=307). Curitiba, Paraná, Brazil, 2022

Variable	n	Percentage
Evolution of pregnancy		
Born alive	229	74.6%
Stillbirth	2	0.7%
Miscarriage	16	5.2%
Not applicable	6	2.0%
Unknown	54	17.5%
Total	307	100.0%
Beginning ART baby		
Within the first 24 hours	218	71.0%
After the initial 24 hours	2	0.7%
Not applicable	19	6.2%
Not performed	4	1.3%
Unknown	8	2.6%
Not answered	56	18.2%
Total	307	100.0%

Source: Research data, 2018-2020.

Table 5 – Tests of differences in obstetric variables of pregnant women with HIV, according to prenatal care (n=307). Curitiba, Paraná, Brazil, 2022

Variables	Total	Received prenatal care		P value
	n (%)	yes (%)	no (%)	
Evolution of pregnancy				
Born alive	229 (74.6%)	220a (96.1%)	9b (3.9%)	
Stillbirth	2 (0.7%)	1a (50%)	1b (50%)	
Miscarriage	16 (5.2%)	12a (75%)	4b (25%)	<0.001
Not applicable	6 (2.0%)	6a (100%)	0a (0%)	
Unknown	54 (17.5%)	49a (90.7%)	5b (9.3%)	
Antiretroviral prophylaxis				
Yes	253 (82.4%)	253a (100%)	0b (0%)	
No	26 (8.5%)	26a (100%)	0a (0%)	< 0.001
Unknown	9 (2.9%)	9a (100%)	0a (0%)	
Not answered	19 (6.2%)	0a (0%)	19b (100%)	
Type of delivery				
Vaginal	84 (27.4%)	77a (91.7%)	7a (8.3%)	
Elective cesarean section	138 (45.0%)	137a (99.3%)	1b (0.7%)	
Emergency cesarean section	16 (5.2%)	14a (87.5%)	2a (6.3%)	< 0.001
Not applicable	11 (3.6%)	7a (63.6%)	4b (36.4%)	
Not answered	58 (18.8%)	53a(91.4%)	5b (8.6%)	
ART at birth				
Yes	200 (65.1%)	196a (98%)	4a,b(2.0%)	
No	42 (13.7%)	32a (76.2%)	10b (23.8%)	< 0.001
Unknown	65 (21.2%)	60a(92.3%)	5b(7.7%)	

Source: Research data, 2018-2020.
Pearson's chi-square test followed by two-proportion Z-test with Bonferroni correction (p<0.05).
Equal letters indicate statistically non-significant difference between the columns for each category of the variable in the lines.

DISCUSSION

In Curitiba, from 2018 to 2020,307 HIV-positive pregnant women were notified on SINAN. There is no information regarding the vertical transmission rate in the notifications. However, according to the Epidemiological Bulletin of Curitiba, the HIV infection rate in children under 18 months ranged from 2.1% in 2018, 1.1% in 2019 to zero in 2020[5].

As for race/ethnicity (self-declared skin color, according to IBGE criteria), for cases registered nationally in SINAN from 2007 to June 2018, there was a higher prevalence of HIV-positive white pregnant women (46.1%)[8], as among the pregnant women in the sample of the present study. Although most of the Brazilian population (47%) is self-declared brown, according to the 2021 National Household Sample Survey (PNAD)[12], this prevalence can be explained by the fact that the Southeastern and Southern regions, where there is a greater predominance of white population, are the regions with the highest prevalence of HIV-positive pregnant women in Brazil, with 37.4% and 29.5%, respectively[8].

Most (58.3%) of the pregnant women in the sample are aged between 13 and 30 years. Although this data is alarming because it concerns young women, it is expected as the referred age group corresponds to the reproductive age, and is consistent with national data in which the age group with the highest prevalence of HIV-positive pregnant women is 20-24 years old (27.5%)[8].

Notification forms for adults with AIDS, as well as for HIV-positive pregnant women, do not collect income-related data. However, studies claim that young women with low socioeconomic status and few years of education are a vulnerable group for perinatal infection, both due to lack of knowledge about factors related to infection and lack of recognition of the importance of prenatal care[1,2,13].

Regarding the City of Curitiba, specifically, it is divided into 10 Health Districts. They are geographic and administrative areas composed of population groups with different epidemiological and social characteristics, which define social inequalities reflected in general health and care needs, as well as the health resources to meet such needs. The Bairro Novo, Boa Vista and CIC districts each had 39 pregnant women notified with HIV, representing together 38.1% of the sample. In the evaluation of the average income indicator of families in the Districts, in 2010, the average income of these three Districts were below the average income of the municipality of Curitiba (BRL 3,774.19). Also, the income of Bairro Novo and CIC Districts were two lowest incomes among the 10 Districts[14].

According to data from the Institute for Research and Urban Planning of Curitiba (IPPUC) [14], Boa Vista District is the most populous and, although Bairro Novo District is the least populated, it was the one with the highest growth (16.97%) in the 2000-2010 period. Some studies also report low education and low income as indicators that impact the evolution of diseases, both due to the difficulty in understanding the information provided by professionals and the few opportunities for these people to have a paid job that improves their quality of life[1,13,15,16].

The vulnerability of women to HIV infection can be influenced by objective and subjective factors, with emphasis in some cases on the low level of education, irregular use of condoms, or multiple partners. Women are at a particular risk of HIV infection and disease progression due to a set of biopolitical factors that still affect their bodies and sexuality[17]. Biological factors that contribute to women's special vulnerability include hormonal, developmental, and immunological characteristics. Social and political factors such as poverty, gender power relations and violence interact with biological factors to create a risk profile for HIV among women[18].

In a national hospital-based study called "Nascer no Brasil" on HIV-positive pregnant women, of the 74 pregnant women in the sample, 84.0% were diagnosed with HIV before and during prenatal care, 95.8% attended at least one prenatal consultation. -natal and 74.9% used antiretroviral medication during pregnancy[6]. In the sample of the present study, the following data related to the diagnosis: having occurred before and during the prenatal period (96.1%) and pregnant women having used ART (82.4%) were better than the national data, however, although the rate of pregnant women who underwent prenatal care in Curitiba (93.8%) was very good, it was slightly below the national study, but above other studies, such as a study in Amapá[19] which was 81 .8%, a study in Alagoas[2] which was 84.7% and from the study in Paraíba[20] which was 89%.

It should be noted, though, that despite the high percentage of pregnant women who underwent prenatal care, this is not necessarily synonymous with quality, as there are criteria such as number of consultations, carrying out laboratory tests, etc. for assessing this quality[19]. However, SINAN data only informs whether or not a woman had prenatal care. It does not allow assessing the quality of prenatal care.

Regarding prenatal data, it was found that a considerable percentage of pregnant women had prenatal care, but 13 pregnant women (4.2%) did not and this is also relevant. In addition to contributing to the identification of gestational risk and the adequate monitoring of pregnant women, such

data may be related to the lack of knowledge of pregnant women about their serological condition[21]. These 13 pregnant women who did not undergo prenatal care were mostly (76.9%) aged 31-49 years, white (53.8%), with incomplete/complete primary education (30.8%), lived in the CIC health district (38.5%), 53.8% underwent vaginal delivery, and in 61.5% of the pregnancies the outcome was a live birth, and in 76.9% ART was not performed at the time of delivery. It should be stressed that more than half of these pregnant women had a vaginal delivery and 76.9% did not receive antiretroviral medication at the time of delivery, conditions directly related to the risk of vertical transmission.

In the 2016 United Nations[22] General Assembly Political Declaration on Ending AIDS, the commitment of countries to implement the 90-90-90 treatment target was signed. According to this target by 2020, 90% of all people living with HIV would know their serological status, 90% of people with a positive HIV diagnosis would be receiving continuous ART, and 90% of people receiving ART would have suppressed viral loads. Regarding the pregnant women in the present sample, this goal was achieved in terms of knowledge of the serological status, as 96.1% of the pregnant women found out about their infection before and/or during prenatal care; however, the goal of using antiretroviral medication was not reached by 90% of the sample.

SINAN data do not report the viral load of pregnant women, which prevents the assessment of compliance with the latest WHO target. The absence of this data makes it impossible to assess another condition, as the clinical protocol of the Ministry of Health[23] advises that pregnant women who have an undetectable viral load close to delivery should not undergo an elective cesarean section, and that the mode of delivery be chosen by obstetric indication. The percentage of elective cesarean sections in the present study was the highest (45%) among the modes of delivery, but without viral load data, it cannot be affirmed that the indications were correct. This situation was also described in other studies [1,2,4,20,24].

As for laboratory evidence, most pregnant women already knew about their HIV infection before prenatal care (66.1%) or learned about their diagnosis during prenatal care (30%). This is valuable and reinforces the importance of monitoring the pregnancy, as it facilitates the initiation of ART to control the viral load and reduce the risk of vertical transmission. However, it is also important to reflect on the pregnant women who found out about their serological status during childbirth[9] and after childbirth[3] and seek to identify where the fragility or failure is in the care network in terms of prenatal coverage and rapid HIV tests[13,24].

Although for most HIV-positive pregnant women notification was made in the 1st trimester of pregnancy, it should be noted that more than half of them, 52.5%, made the notification in the 2nd and 3rd trimesters, which contributes to a delay in the initiation of ART and can be perceived as a late search for these pregnant women, impacting not only the management of HIV infection but also other systemic conditions of pregnancy[13,24].

The results showed statistical significance between receiving prenatal care and positive evolution of the pregnancy, prophylaxis with ART, type of delivery and use of ART at the time of delivery. This shows that prenatal care contributes to a favorable pregnancy outcome (baby born alive) and access to antiretroviral medication, and is essential for the search for actions and services that support the health of HIV-positive pregnant women and their children, as the use of ART, both during pregnancy and at the time of delivery, is essential to ensure a low or undetectable viral load in pregnant women, so that they are healthy and at little or no risk of transmitting the virus to their babies[s4,13]. However, it should be noted that all 26 pregnant women who did not use ART during pregnancy received prenatal care, that is, this could mean both a failure in service management and in filling out the notifications.

Of all HIV-positive pregnant women, 65.1% received antiretroviral medication at delivery and 71% of newborns received ART within the first 24 hours. This result was worse than that obtained by a national hospital-based study[6], but better than the results of studies in Rio de Janeiro[25] and Santa Catarina[26].

The main route of HIV contamination informed by the pregnant women in the sample was sexual, which is the main route of contamination reported in the literature[1,27], and 31% of the pregnant women said they did not know how to inform how they became infected. The diagnosis of HIV is still associated with behavioral taboos, according to which women cannot enjoy their sexuality freely. When they find out they are seropositive, they can be stigmatized for not following the norms established by the patriarchal society, being seen as "deserving" of the infection. Moreover, women living with HIV may be experiencing contexts of social vulnerability and violence as one of the characteristics of the dynamics of HIV/AIDS in the female universe, suggesting that this infection is part of a context of gender inequality and social exclusion already experienced previously[27–29].

Vertical transmission of HIV is the main route of contamination of children, and its elimination is essential in the management of the epidemic and one of the objectives of prenatal care programs. According to the guide for certification

of elimination of mother-to-child transmission of HIV and/or syphilis from the Ministry of Health[30], the following minimum criteria must be met for obtaining the certification: achieve and maintain the goals of impact indicators for at least one year (last year) and the goals of the process indicators for at least two years (last two years); have a surveillance and monitoring system; implement an investigation committee for the prevention of vertical transmission of HIV and/or syphilis; prove that all appropriate preventive measures have been taken; safeguard fundamental human rights, including the right to health and its social determinants.

In December 2017, Curitiba was the first city in Brazil to receive the certificate of elimination of mother-to-child transmission of HIV. It can be said that this certification process began with the "Mãe Curitibana Vale a Vida" Program implemented in March 1999, as it was in this program that the HIV testing protocol was instituted. Another innovative initiative was to make HIV testing in all health units available for the general population, starting in 2001. In 2007, the rapid test was included in maternity hospitals and HIV infection managed in primary care. Also, with the notification of HIV infection, it was possible to understand more quickly and assertively the paths of the epidemic, as well as to implement better approach strategies[5].

Curitiba's AIDS/HIV Epidemiological Bulletin, dated December 2021, which includes data up to December 2020, informs that in 2019 the city was reassessed and certification was maintained based on data from 2017 and 2018. It is also stressed there that according to the criteria or for maintenance of certification, cases of vertical transmission through breastfeeding or of pregnant women who underwent prenatal care in another municipality are not considered[5].

The limitations of this study concern the use of secondary data that may contain underreporting, inconsistencies and incompleteness due to inadequate completion of the reporting forms and the system feed, in addition to the absence of relevant information. However, previous care was taken, whether in data extraction or in the final consistency of the analyzed base so that the information generated was reliable and relevant to the purpose of the study.

CONCLUSION

Pregnant women from Curitiba, Paraná, diagnosed with HIV had desirable gestational indicators, such as undergoing prenatal care, reporting HIV infection in the 1st trimester, taking antiretroviral medication during pregnancy and at the time of delivery, as well as obtaining certification of elimination of mother-to-child transmission of HIV. In any case, knowing and analyzing in more detail the data related to these pregnant women made it possible to establish their sociodemographic profile more clearly, which can help in making decisions about more inclusive measures for that group identified as the most vulnerable. Gestational data made it possible to assess the effectiveness of prenatal care, but mainly to observe pregnant women who were unable to receive the best line of care, and thus guide the necessary public policy measures for the inclusion of these women, seeking the best social and epidemiological outcomes.

More detailed knowledge about data from smaller groups of HIV-positive pregnant women, in addition to helping in the evaluation of the prenatal program, allows these data to be discussed with the results of other studies and other prenatal programs, and thus contribute to the refinement of public policies, raising interest in the development of new studies with this group of patients.

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