

## Analysis of the impacts of the COVID-19 pandemic on people living with HIV/AIDS in a reference unit in Maceió – Alagoas



<https://doi.org/10.56238/globalhealthprespec-002>

### **Dalton Bernardino Santos Silva**

Graduating in Medicine from the State University of Health Sciences of Alagoas

UNCISAL

### **Camila Maria Beder Ribeiro Girish Panjwani**

Professor of General Pathology of the Medical Course of the State University of Health Sciences of Alagoas

UNCISAL

### **Juliana Maria Bulhões Ferreira**

Graduating in Medicine at the State University of Health Sciences of Alagoas

UNCISAL

### **Vitoria Cruz Torres**

Graduating in Medicine at the State University of Health Sciences of Alagoas

UNCISAL

### **Priscilla Cordeiro Barreto**

Graduating in Medicine at the State University of Health Sciences of Alagoas

UNCISAL

### **Jordanna Dayne Vieira dos Santos**

Graduating in Medicine at the State University of Health Sciences of Alagoas

UNCISAL

### **Paloma Pereira da Silva**

Graduating in Medicine at the State University of Health Sciences of Alagoas

UNCISAL

### **Maria Eduarda Lopes da Silva**

Graduating in Medicine at the State University of Health Sciences of Alagoas

UNCISAL

### **ABSTRACT**

**Introduction:** Due to social distancing due to the COVID-19 pandemic, the habit of sexual practices may have been affected, which impacts the alteration of the exposure of individuals to HIV infection. However, data on sexual behavior among Alagoas are still unknown. **Objective:** To analyze the impacts of the COVID-19 Pandemic on people living with HIV/AIDS in a Reference Unit of Maceió-Alagoas. **Methods:** This is an exploratory and descriptive study with a quantitative approach of the documentary type. The sample comprises 183 questionnaires applied from August 2021 to March 2022 to individuals undergoing HIV testing at the Specialized Care Service (SAE) of PAM Salgadinho, in addition to the analysis and comparison with the specialized literature. **Results:** The major cause of the search for the rapid test resulted from unprotected sexual intercourse, representing 36.00% of the cases. When asked if the pandemic affected the usual number of sexual partners, 78 (42.60%) answered yes, and 61 (78.21%) of them claimed that there was a decrease. Asked about the practice of sexual activity, it was observed that 34.43% of the interviewees said they had interrupted it. However, for 52.46% of those who remained sexually active, there was an increase in the number of unprotected sexual relations. **Conclusion:** It can be observed that, with the measures of social isolation, there was a reduction in the number of sexual contacts with different people among the interviewees. In addition, a significant number of individuals reported having ceased their sexual activities during the period. This may have had a positive impact on reducing HIV exposure.

**Keywords:** Coronavirus, HIV infections, Serology, Sexual behavior.



## 1 INTRODUCTION

SARS-CoV-2, a virus of the Coronavirus family, is an agent with a high rate of infectivity and human mortality. Identified in China in 2019, it is the protagonist of the health and economic crisis experienced in current times (FERGUSON, 2020; Mirzaei et al, 2020).

This pathogen triggered a series of social isolation measures by public agents aimed at containing the disease, aiming to reduce the burden on the global health system. However, such measures may have hurt the care of continuous users of the health service, such as, for example People Living with HIV/AIDS (PLWHA) and on the screening of new HIV infections through rapid tests (ESPANHA, 2020).

Because of this, the use of rapid tests for the screening and diagnosis of new HIV-infected individuals is fundamental for the fulfillment of the UNAIDS 90-90-90 goal, which aims to achieve the diagnosis, treatment and undetectable viral load of 90% of PLWHA. However, policy measures aimed at resolving COVID-19 and social isolation may have affected access to rapid tests, making it difficult to diagnose early and meet the 90-90-90 target (JIANG et al, 2020; John et al, 2015; Saharia et al, 2013).

Another aspect that may have been affected due to social distancing is sexual practices, which impacts on the alteration of individuals' exposure to HIV infection. Interim studies have shown that the COVID-19 pandemic has had effects on sexual behavior among Spaniards. However, data on the sexual behaviors of Brazilians, especially Alagoas, are still unknown, which highlights the importance of adding new knowledge and, thus, promoting policy proposals to combat HIV (BALLESTER-ARNAL, 2020).

For this reason, it is valid to investigate the possible change in sexual behavior among Alagoas during the pandemic, as well as to analyze the presence of other sexual practices, such as online sex and masturbation. The aim is to investigate whether the confinement has made it possible to reduce the number of sexual partners or to act in the reduction of the number of different people with whom these contacts are made, directly implying in the reduction of the risk of HIV infection.

## 2 OBJECTIVE

### 2.1 GENERAL

To analyze the impacts of the COVID-19 Pandemic on people living with HIV/AIDS in a Reference Unit of Maceió-Alagoas.



## 2.2 SPECIFIC

Relate the pandemic with the possible change in sexual behavior among Alagoas, the number of sexual partners or the number of different people with whom contacts are made, determining the influence on the risk of HIV infection.

## 3 MATERIAL AND METHODS

Because it is a study with human beings, this research project was forwarded and approved by the Ethics and Research Committee (CEP) of the State University of Health Sciences of Alagoas (UNCISAL). In addition, it was necessary to recruit subjects and use the Free and Informed Consent Form (ICF).

*Type of study:* It is exploratory and descriptive, with a quantitative approach of the documentary type. Data are obtained through the application of questionnaires to individuals undergoing HIV testing, in addition to the analysis and comparison of specialized literature.

*Research location:* The research is linked to the State University of Health Sciences of Alagoas – UNCISAL, the researchers' link institution. Questionnaires were applied to individuals who underwent rapid HIV testing at the Specialized Care Service (SAE) in block I of PAM Salgado.

*Sample:* The sample consists of 183 questionnaires answered by people who sought the NCS between the periods of August 2021 and March 2022.

*Inclusion and exclusion criteria:* Questionnaires answered by individuals recruited from the NCS who underwent rapid HIV testing between August 2021 and March 2022 were included, and those who did not have an active sex life were excluded.

## 4 RESULTS AND DISCUSSION

A total of 183 questionnaires were applied to people who sought care for the rapid test at the Specialized Care Service (SAE) of PAM Salgado.

There was a greater search among people from 20 to 35 years old, totaling 108. Overall, there were 111 males and 72 females. Being 90 heterosexual, 63 homosexual, and 24 bisexual.

The major cause of the search for the rapid test resulted from unprotected sexual intercourse, representing 36.00% of the cases. While 26.00% claimed curiosity, being the second largest cause.

Table 1 – Reflection of the pandemic on the number of partners

Has the pandemic affected the number of partners you used to relate to? No. (%)		If so, what is the change in the number of partners? No. (%)	
Yes	78 (42,60)	Increased	14 (17,94)
No	36 (19,68)	Decreased	61 (78,21)
There was no change	46 (25,14)	NDR	03 (03,85)
NDR	23 (12,58)		
Total	183 (100,00)	Total	78 (100,00)



When asked if the pandemic affected the usual number of sexual partners, 78 (42.60%) answered yes, 61 (78.21%) of them claimed that there was a decrease. Similarly, BALLESTER-ARNAL and GIL-LLARIO (2020) showed that confinement reduced the number of sexual contacts or at least the number of different people with whom these contacts were made between Spaniards.

Table 2 – Means used to know possible sexual partners

Wherewithal	Before the pandemic No. (%)	During the pandemic No. (%)
Social networks, social networking sites and apps	69 (37,70)	105 (57,38)
Parties, bars and restaurants	35 (19,13)	00 (00,00)
Other	41 (22,40)	42 (22,95)
I don't want to answer	38 (20,77)	36 (19,67)
Total	183 (100,00)	183 (100,00)

According to BRODIE, WILSON and SCOTT (2019), technological progress has allowed a revolution in the media, providing the intimate approximation, emergence and maintenance of relationships between various individuals.

According to table 2, with the restrictive measures resulting from the pandemic, people stopped going to parties, bars and restaurants to meet and relate to others. In contrast, the 37.70% of respondents who used digital media (social networks, social networking sites and applications) in the search for partners increased to 57.38% during the pandemic period.

Table 3 – Sexual activity during the period of confinement

During the period of confinement No. (%)	
Stopped sexual activities	63 (34,43)
I didn't have relationships before the pandemic, I did during the pandemic	03 (01,64)
I maintained relationships only with people from the same household/house	66 (36,07)
I left home to have relationships with other people	36 (19,67)
I don't want to answer	15 (08,20)
Total	183 (100,00)

Asked about the practice of sexual activity during the period of confinement, it was observed that 34.43% of the interviewees said they had interrupted it. At the same time, 36.07% reported keeping it only with people from the same household.

Table 4 – Habits that have increased during the pandemic

	Has the habit of masturbating and there has been an increase during the pandemic No. (%)	Have practiced virtual sex and there has been an increase during the pandemic No. (%)	It has already had an unprotected relationship and there has been an increase during the pandemic No. (%)
Yes	87 (47,54)	48 (26,23)	96 (52,46)
No	78 (42,62)	120 (65,57)	72 (39,34)
I don't want to answer	18 (9,84)	15 (8,20)	15 (8,20)
Total	183 (100,00)	183 (100,00)	183 (100,00)



In contrast to the isolation in the pandemic period, there was an increase in masturbation for people who already had the habit of this practice, in addition to the growth of virtual sex. What TURBAM, KEUROGUILIAN and MAYER (2020) see as an important fact, given the fulfillment of human needs for intimacy necessary for the preservation of individual and collective mental health. For, sexuality is a fundamental piece of human development (PONTES, 2011).

However, for 52.46% of the interviewees, there was an increase in the number of unprotected sexual relations. A relevant fact, however, its motives were not explored in the questionnaire applied.

Table 5 – Protection methods used before and during the Pandemic

Methods	Before the pandemic No. (%)	During the pandemic No. (%)
Men's/women's condom	120 (65,57)	105 (57,38)
Coitus interruptus	09 (4,92)	10 (5,46)
Male / female condom – Coitus interruptus	06 (3,28)	05 (2,73)
Contraceptive	05 (2,73)	04 (2,19)
Male / female condom – Coitus interruptus – Contraceptive	05 (2,73)	03 (1,64)
SAYS	00 (00,00)	00 (00,00)
None	26 (14,21)	49 (26,78)
Other	00 (00,00)	00 (00,00)
I don't want to answer	12 (6,56)	07 (3,82)
Total	183 (100,00)	183 (100,00)

There was a reduction from 120 (65.57%) to 105 (57.38%) condom users, when compared to the current period before the pandemic. Another important data was the 12.57% increase in the number of people who said they used no protective method during the pandemic.

## 5 CONCLUSION

One can Note that with the social isolation measures resulting from the pandemic period, there was a reduction in the number of sexual contacts with different people among the interviewees. In addition, a significant number of individuals reported having ceased their sexual activities during the turbulent period. Thus, these findings may have had a positive impact on reducing exposure to the human immunodeficiency virus (HIV), given that the pathogen is more commonly transmitted through unprotected sexual intercourse and the exchange of body fluids. However, it was observed that among people who maintained an active sexual life, there was an increase in the number of unprotected sexual relations, largely among those from the same household. Other characteristics of sexual behavior observed by the study are the growth in the use of digital media in the search for partners, virtual sex, as well as increased masturbation.



## REFERENCES

- BALLESTER-ARNAL, Rafael; GIL-LLARIO, Maria Dolores. The virus that changed Spain: Impact of COVID-19 on people with HIV. *AIDS and behavior*, v. 24, n. 8, p. 2253-2257, 2020.
- BRODIE, Z.P; WILSON, C; SCOTT, G.G. Sexual Intercourse: Considering Social–Cognitive Predictors and Subsequent Outcomes of Sexting Behavior in Adulthood. *Archives of Sexual Behavior*, v. 48, p.2367–2379, 2019
- ESPAÑA, Ministerio da Saúde 2020. Informes técnicos. [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/20200404\\_ITCoronavirus](https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/20200404_ITCoronavirus). Acesso em 12 de abril de 2021.
- FERGUSON, Neil et al. Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand. Imperial College London, v. 10, n. 77482, p. 491-497, 2020.
- JIANG, Hongbo; ZHOU, Yi; TANG, Weiming. Maintaining HIV care during the COVID-19 pandemic. *The Lancet HIV*, v. 7, n. 5, p. e 308 e 309, 2020.
- PONTES, A.F. Sexualidade: vamos conversar sobre isso? Promoção do Desenvolvimento Psicossexual na Adolescência: Implementação e Avaliação de um Programa de Intervenção em Meio Escolar. Dissertação de Mestrado. Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto, 2011.
- TURBAN, J. L.; KEUROGHLIAN, A. S.; MAYER, K. H. Sexual Health in the SARS-CoV-2 Era. *Annals of Internal Medicine*, 2020. Disponível em: <https://doi.org/10.7326/M20-2004> Acesso em 25 de fevereiro de 2021.