Original Article
Ramos DT, Silveira CR, Sanca AM, Paiva TS, Maffacciolli R, Riquinho DL.
Experiences of HIV pre-exposure prophylaxis users during the flood in Porto Alegre. Rev Gaúcha Enferm. 2025;46(spe):e20250019.
https://doi.org/10.1590/1983-1447.2025.20250019.en

Experiences of HIV pre-exposure prophylaxis users during the flood in Porto Alegre

Experiências de usuários de profilaxia pré-exposição ao HIV durante a inundação em Porto Alegre

Experiencias de usuarios de profilaxis pre-exposición al HIV durante la inundación en Porto Alegre

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How to cite this article

Ramos DT, Silveira CR, Sanca AM, Paiva TS, Maffacciolli R, Riquinho DL. Experiences of HIV pre-exposure prophylaxis users during the flood in Porto Alegre. Rev Gaúcha Enferm. 2025;46(spe):e20250019. https://doi.org/10.1590/1983-1447.2025.20250019.en

ABSTRACT

Objective: To understand the experiences of users of human immunodeficiency virus pre-exposure prophylaxis during the flood in Porto Alegre, Rio Grande do Sul, Brazil.

Method: This is a qualitative study. Twenty-five users participated, and data collection was conducted through semi-structured interviews held via telephone, from May to July 2024. Thematic content analysis was adopted.

Results: The findings were organized into two empirical categories: "Collective tragedy: repercussions for everyday life," which revealed feelings of loss, fear, and emotional instability in the face of the disaster; and "The PrEP is over: strategies and (dis)continuity," with one subcategory, "Relationship with the (Non)Service". Disruptions in access to

medication, failures in institutional communication, and a sense of insecurity regarding continuity of care were evident.
Conclusion: PrEP use continuity was compromised during the disaster, highlighting the need for public policies that ensure continuous care in adverse contexts, through emergency protocols and clear, accessible communication.
Descriptors: Pre-Exposure Prophylaxis; HIV; Floods; Natural Disasters.

RESUMO
Objetivo: Compreender as experiências de usuários de profilaxia pré-exposição ao vírus da imunodeficiência humana durante a inundação em Porto Alegre, Rio Grande do Sul, Brasil.
Método: Trata-se de uma pesquisa de natureza qualitativa. Participaram 25 usuários, e a coleta dos dados ocorreu por entrevistas semiestruturadas, realizadas por telefone, no período de maio a julho de 2024. Adotou-se a análise de conteúdo do tipo temática.
Resultados: Os resultados foram organizados em duas categorias empíricas: "Desgraça coletiva: repercussões para o cotidiano", que revelou sentimentos de perda, medo e instabilidade emocional diante do desastre, e "Acabou a PrEP: estratégias e (des)continuidade", com uma subcategoria, "Relação com o (Des)Serviço. Foram evidenciadas interrupções no acesso à medicação, falhas na comunicação institucional e sensação de insegurança em relação à manutenção do cuidado.
Conclusão: A continuidade do uso da PrEP foi comprometida durante o desastre, demonstrando a necessidade de políticas públicas que garantam o cuidado contínuo em contextos adversos, por meio de protocolos de emergência e de uma comunicação clara e acessível.
Descritores: Profilaxia Pré-Exposição; HIV; Inundações; Desastres Naturais.

RESUMEN
Objetivo: Comprender las experiencias de los usuarios de profilaxis preexposición al virus de la inmunodeficiencia humana durante la inundación en Porto Alegre, Rio Grande do Sul, Brasil.
Método: Investigación de naturaleza cualitativa. Participaron 25 usuarios y la recolección de datos se realizó mediante entrevistas semiestructuradas, realizadas por teléfono, entre mayo y julio de 2024. Se adoptó el análisis de contenido de tipo temático.
Resultados: Los resultados se organizaron en dos categorías empíricas: "Desgracia colectiva: repercusiones en la vida cotidiana", que reveló sentimientos de pérdida, miedo e inestabilidad emocional ante el desastre; y "Se acabó la PrEP: estrategias y (des)continuidad", con una subcategoría, "Relación con el (Des)Servicio". Se evidenciaron interrupciones en el acceso a la medicación, fallas en la comunicación institucional y una sensación de inseguridad respecto a la continuidad del cuidado.
Conclusión: La continuidad en el uso de la PrEP se vio comprometida durante el desastre, lo que muestra la necesidad de políticas públicas que garanticen el cuidado continuo en contextos adversos, mediante protocolos de emergencia y una comunicación clara y accesible.
Descriptors: Profilaxis Pre-Exposición; VIH; Inundaciones; Desastres Naturales.

INTRODUCTION

The production and emission of greenhouse gases and other air pollutants has been the main cause of climate change and global warming over the last two centuries[1]. The consequences of these changes include epidemics, volcano eruptions, earthquakes, droughts,

fires, and floods. Events such as intense rain and severe droughts have become more common, increasing the likelihood of natural disasters[2]. Climate change, associated to fast urbanization, which often takes place in areas that are not fit for human occupation, increase the risks and the dangerous situations associated to these events, especially for people in densely populated areas, and in developing countries that have no infrastructure or efficient public services[1,2].

These catastrophes clearly affect society, the environment, the economy, and public health, meaning that existing vulnerabilities and inequalities are even more visible[3-5]. Periods of public calamity bring several health risks, such as food shortages, failures in water and sewage treatment systems[1,3], while also compromising the health system.

One of the many aspects of public health that is affected by these settings is the response to the HIV/AIDS epidemic. Brazil stands out in Latin America in regard to the number of cases of the disease, and the state of Rio Grande do Sul has the highest national prevalence[6]. In Porto Alegre, the capital of the state, the epidemic is generalized, with high levels of HIV detection in pregnant women, and a death rate 1.8 times higher than the national average[6]. The Pre-Exposure Prophylaxis (PrEP), one of the main strategies of combined prevention, has been adopted in the country as a response to this epidemic, being recommended both for continuous and on-demand use[7].

However, although the PrEP is a significant step forward in the control of HIV, access to it, continuous or not, can be compromised by extreme environmental events. A revision study showed that there is a relationship between climate change and HIV prevention, which can exacerbate social inequality and significantly impact populations that are already at risk. The consequences of climate change, such as displacement and migration, food insecurity, and economic instability, pave the way for the dissemination of HIV and its impact. Displacement, for example, can lead to a disruption of social networks and support systems, which are essential to maintain health and the access to care. It also influences social and behavioral factors that increase vulnerability to HIV. Furthermore, in times of crises, traditional structures and social norms can be disrupted, increasing gender violence and exploitation[3].

This setting is particularly relevant in light of the environmental disaster that afflicted Rio Grande do Sul from April to May 2024. In this period, intense and long-lasting rain caused the largest flood ever recorded in the state. Estimates suggest that 2.4 million people were affected, with 600 thousand being displaced and 213 dead or confirmed missing.

Material losses affected both urban and rural areas, showing the severity of the hydrological risk[8].

The city of Porto Alegre, which is supposedly protected by a flood defense system with includes dikes, walls, floodgates, and pumps, built in the 1970s, was strongly affected[8]. The failure of this system, attributed to lack of proper maintenance from the city's administration, caused a series of interdependent collapses: electric energy and water distribution was interrupted, and the main roads to access the city were blocked for more than three weeks[9].

This collapse directly impacted the ability of health services to respond. Approximately 1,170 businesses and public institutions had their activities interrupted or impaired, including pharmacies, health units, Testing and Counseling Centers (CTA), and hospitals, which compromised their ability to provide medicine and enable access to preventive strategies, such as the PrEP[9].

Considering this setting, the following research question was created: What were the experiences of users of a testing and counseling center in Porto Alegre, which was affected by the floods, in regard to their continued use of PrEP for HIV? Our goal was to understand the experiences of the users of HIV pre-exposure prophylaxis during the climate emergency in Porto Alegre (RS, Brazil).

METHOD

This is a qualitative research, a type of investigation that aims to address the universe of meanings, motives, attitudes, beliefs, and values of those involved in the phenomenon being considered[10]. This study is part of a larger project, whose goal is analyzing the experiences of starting and continuing PrEP use throughout a year (0, 30, 90, 180, and 360 days). The main research setting was the Testing and Counseling Center (TCC) located in Porto Alegre, which is a reference for the population in the city and the place responsible for health prevention strategies, such as fast HIV tests, PrEP, and Post-Exposure Prophylaxis (PEP) for HIV.

At first, we approached the participants in person, in the TCC, at the time they were included in prophylaxis. At that time, semi-structured interviews were conducted in a private room, only for the researcher and the participant, in order to ensure they were in a safe and comfortable environment. The instrument had 11 questions, in addition to a sociodemographic characterization. Later interviews, conducted after 30, 90, 180, and 360 days, were conducted via phone, and included 10 questions. There was no pilot test in any stage. The questions addressed the access to PrEP, its continuous use, the motivation for its

use, and user experiences in the health service. The information gathered over the year is still being compiled. This article uses information from the interview carried out after 90 days of PrEP use.

The first interview, at "moment zero", included 28 people. Inclusion criteria were being over 18, having scheduled the first use of the PrEP, and having an active phone number. There were no exclusion criteria. All those being attended were invited to participate in the study, consecutively. The number of participants was decided according to "information power", considering: the goal of the study, the specificity of the sample, the theory, the quality of the conversation, and the strategy of analysis[11]. Data collection continued until saturation was reached, which was determined when no new topics emerged.

The participants and the researcher did not know each other before the research; their first contact was at the time they were asked to participate, in the data generation stage. Participants were made aware that the interviewer was part of a research team that sought to understand aspects of pre-exposure prophylaxis. To generate the data, the main researcher, who is a nurse and, at the time, was a master's student, spent three days at the service, within a period of 60 days.

During the 90 days of prophylaxis use, the city was affected by an extreme climate event, with severe floods that directly impacted the life conditions of the participants. As a consequence, three participants were lost, after they did not answer three attempts of contact via phone call, carried out at different times and days over a week.

The reports of the situations experienced during the floods were striking. In their statements, 25 participants (Table 1) addressed the conditions they had to face to deal with the floods, the impossibility of accessing PrEP, and the implications of this situation. The analysis of the reports allowed creating two empirical categories and one subcategory, which are the focus of this article.

The data generated in regard to the 90 days of continuous PrEP referred to the months between May and July 2024. The main researcher conducted semistructured interview via cellphone calls. The privacy of participants was respected, and the calls were recorded in digital devices after their approval. Each interview lasted for a mean of 25 minutes, using a 10-question script. The script was elaborated beforehand and addressed aspects of their knowledge, and their experiences, acceptance, and obstacles to continue using the PrEP. Notes were taking during the calls. Considering the extreme climate event and the temporary closure of the TCC, the interview script was adapted to include specific questions about the experiences of the participants during the flood, actively listening to them and what they

perceived as obstacles to access the PrEP and continue their health care. This emergency context allowed us to better understand the challenges faced by users in situations when their vulnerability is increased, and socio-environmental crises increases the fragility of health services.

All participants signed a consent form before the interview. The ethical aspects of the study were respected according to the Regulatory Standards and Norms for Research with Human Beings in Resolution No. 466/12 of the National Health Council of the Ministry of Health[12]. No interviewed needed to be repeated. The interviews were transcribed using the app Transkriptor[13] and coded independently by two researchers using the Nvivo software[14]. A thematic content analysis was applied[10] in three stages: pre-analysis, material exploration, treatment and interpretation of the results.

The topics were derived from the data inductively, as opposed to being identified beforehand. Although there was no formal coding three, the process involved an interactive approach, and categories were refined as the data was analyzed. Discrepancies in coding were resolved by consensus between two coders, ensuring that the interpretation of the responses of participants was congruent. The transcriptions of the interviews were not sent back for participants for comments or corrections. After a close-reading, the statements were classified, and the units that would belong to each topic were separated and grouped according to convergence of ideas[10], originating two categories.

To ensure and guide the research, we followed the recommendations from the Consolidated Criteria for Reporting Qualitative Research[15]. The research was submitted to two Research Ethics Committee through Plataforma Brasil, being approved under CAAE No. 73048923.4.0000.5347 and No. 73048923.4.3001.5338. Participants were named using the letter P, followed by a numerical sequence (E.g. P01. P02).

RESULTS

To present the results, two empirical categories were considered. These were "Collective tragedy": repercussions for everyday life; and "The PrEP is over": strategies and (dis) continuity, which had a subcategory: "Relationship with the (non) service".

User characterization

The 25 participants (Table 1) had a minimum age of 20 and a maximum age of 57, with a mean of 30. 21 (84%) self-declared white; 23 (92%) declared having more than 12 years of formal education. As for their gender identity, 22 (88%) self-declared cis men. Regarding the floods, 19 (76%) stated they were affected. 14 (56%) needed to leave their

homes; 10 (40%) had the medication with them and continued its use; 6 (24%) did not have the medication; and 9 (36%) decided to stop using the PrEP. The 25 interviewees lived in Porto Alegre, and most (49%) lived in the center of the city.

Table 1 - Profile of the users of HIV pre-exposure prophylaxis during the flood, Porto Alegre, RS, Brazil, 2024.

Name	Age	Ethnicity/ color	Educational level	Gender	Affected by the floods	Displaced from home	Access status/ PrEP continuity
P01	35	Black	12 years or older	Cisgender Man	Yes	Yes	No access to PrEP
P02	20	White	12 years or older	Transgender Woman	Yes	Yes	No access to PrEP
P03	37	White	12 years or older	Cisgender Man	Yes	No	Continues using PrEP
P04	26	White	12 years or older	Cisgender Man	No	No	Discontinued the PrEP
P05	26	White	12 years or older	Cisgender Woman	Yes	No	No access to PrEP
P06	21	White	From 4 to 7 years	Cisgender Man	No	No	Discontinued the PrEP
P07	23	White	From 8 to 11 years	Cisgender Man	No	No	Discontinued the PrEP
P08	23	White	12 years or older	Cisgender Man	Yes	Yes	No access to PrEP
P09	29	White	12 years or older	Cisgender Man	Yes	Yes	Discontinued the PrEP
P10	35	Black	12 years or older	Cisgender Man	Yes	No	No access to PrEP
P11	30	White	12 years or older	Cisgender Man	Yes	Yes	Discontinued the PrEP
P12	24	White	12 years or older	Cisgender Man	Yes	Yes	Discontinued the PrEP
P13	40	Brown	12 years or older	Cisgender Man	No	No	Continues using PrEP
P14	40	White	12 years or older	Cisgender Man	No	No	Continues using PrEP
P15	20	White	12 years or older	Cisgender Man	Yes	Yes	Discontinued the PrEP
P16	32	White	12 years or older	Cisgender Man	No	No	Discontinued the PrEP
P17	39	White	12 years or	Cisgender	Yes	Yes	No access to PrEP

			older	Man			
P18	47	White	12 years or older	Cisgender Man	Yes	No	Continues using PrEP
P19	28	White	12 years or older	Cisgender Man	Yes	No	Continues using PrEP
P20	29	White	12 years or older	Cisgender Man	Yes	Yes	Continues using PrEP
P21	23	White	12 years or older	Cisgender Man	Yes	No	Continues using PrEP
P22	27	Brown	12 years or older	Cisgender Man	Yes	No	Continues using PrEP
P23	26	White	12 years or older	Cisgender Man	Yes	Yes	Continues using PrEP
P24	37	White	12 years or older	Cisgender Man	Yes	Yes	Continues using PrEP
P25	53	White	12 years or older	Transgender Woman	Yes	No	Discontinued the PrEP

Source: Elaborated by the main author, 2024.

"Collective tragedy": repercussions for everyday life

Table 2 was built including the experiences reported by the participants. The analysis showed that the floods forced the participants to leave their homes and find shelter in the homes of relatives and friends. Many of those who stayed in their homes had no energy and/or water, affecting their immediate safety and stability.

Table 2- Summary of the reports, grouped according to the experiences of users of HIV pre-exposure prophylaxis during the floods in Porto Alegre, RS, Brazil, 2024.

Summary of results	
Category	**Statements**
"Collective tragedy": repercussions for everyday life	*My apartment is on the tenth floor, so I didn't lose anything. But the ground floor of the building was flooded. We had no energy nor water. I found a home to stay, of a friend, but I ran out of water too, so I went to the coast.* (P08)
	It was a tragedy, my Lord, a collective tragedy for all of us. No one would ever imagine what happened. I felt in a war, there were helicopters, ambulances, people on the streets with backpacks on their back, it looked like a war. (P14)

	I had to go out on a boat, I had to be rescued, me and everyone here in my neighborhood. I went out bad, really bad, I went out with something I had never had in my life. I couldn't stand, I was literally carried. (P17)
	We really wanted to stay in the apartment, so even with the floods, we stayed here, we had to walk up 14 floors of stairs, we had no water or energy, but since I worked many days, I had water, light, and food there, so I bathed at work, we bought water, we went to a square where they were distributing water, we bought flashlights and candles. It was hard, but compared to other people, we were dry. (P10)

Source: Elaborated by the main author, 2024.

"**The PrEP is over": strategies and (dis)continuity**

The second category, "The PrEP is over": strategies and (dis)continuity, includes statements about how the catastrophe affected the intake of prophylaxis during the calamity, and even after it was over. *The subcategory: "Relationship with the (non) service" focuses on access, showing that the participants had doubts about the place where they had to go in order to get consultations and the medication; were worried about going to a different, temporary place where they did not know for certain what would be the treatment/reception; and had to deal with the lack of information, as Table 3 shows.*

Table 3 - Summary of the main results, grouped according to the experiences of users of HIV pre-exposure prophylaxis during the floods in Porto Alegre, RS, Brazil, 2024.

Summary of results	
Category	**Statements**
"The PrEP is over": strategies and (dis)continuity	*With this confusion due to the floods, I couldn't take it for two or three days, after that I ound the medication I had lost and started taking it normally again.* (P20)
	I stopped the treatment because in the region where I live there was no energy for nearly 20 days. So I had to stay in the South. That was my PrEP was over and I couldn't continue taking it, but I want to continue the treatment. (P02)
	I stopped taking it because, you know, the floods and all. I ended up staying more at home. (P16)

	So I bought the PrEP during this period. I bought a box with 30 tablets. And it's what I'm using now, because my four-month box was over about 20 days ago. Basically I went to a pharmacy and asked for the medication, that's it. The clerk told me I didn't need a prescription, so what I did was look at the medication I had been using, see what were its components, and ask for the same ones in the pharmacy. (P08)
	I didn't have any more tablets, so my fiancée got to find care and they gave him three or four boxes, so he lent me one for now. (P10)
Sub-category:	**Statements**
"Relationship with the (Non)Service"	*I had an exam scheduled for the beginning of May, I had to undergo an exam, but since the center of Porto Alegre flooded and everything is flooded, I can't even get there.* (P20)
	I think I'll have to go elsewhere, because it's still flooded, I don't know if they're open, it's terrible there. I'll try to get my medication there, because I just went there to get four months worth of medication, but when I went to get it the person said they could only give me two months worth, because they didn't have much on stock. (P22)
	After these 20 days out of home, almost at the beginning of June, I came back home, but I went to the place [Primary Health Unit] and I couldn't get a consultation, I tried twice, once there were two prenatals happening there at the time and I couldn't get it that day, and the other time it was crowded and they couldn't let anyone else in and I should go there another day. So I couldn't do the exams anymore, nor my consultation. I want to do it whenever, it's my priority. But it will be hard to stop the medication, unfortunately, I'll see if I get someone to help me, because I remember that I'll have to do it from the beginning to be able to get the PrEP again. (P02)
	I got worried because I thought it could be a generalist team that would receive me at this temporary location and that they could resist prescribing or giving me the medicine. But no, I think there were people from the team there who were incorporated to the service, the service was more superficial. But this problem, having to go somewhere else to be attended, got me a bit uncertain. (P14)
	It was really fine, I thought it was really great, it surprised me a lot, I had never been to that clinic and I thought that, for something that was temporary, let's say, it was really

	organized. They gave a piece of paper with the WhatsApp number so I could always check before going, to see whether they were already back to the old place. (P01)
	I didn't find the information easily. I tried, tried. And couldn't find it. There was no clear information or announcement, and then, when I really started searching for it, that limited period started, when the elections start [election period], and all useful pages, like the Health Department one, and the profiles in social networks, become a more general thing without that much information. And, since I didn't want to go there, I searched for news on-line and found the WhatsApp number of the Health Department. And they told me where I should send a message, and they were really great, they informed that at that time the care was being provided in a different place and asked me to call the day before I wanted to go, to check whether they were still there or had gone back to the regular place. I thought it was a bit optimistic on their part, since it got really flooded there. (P03)
	I'm someone that has access to information, I'm not a lay person, so I went after it, but maybe someone who did not have this type of access, who did not work in the field of health, could even stop using medication, because we felt like not doing anything, no type of treatment or medication, because you're afraid of leaving home, let's say, a lot of emotions. (P14)

Source: Elaborated by the main author, 2024.

DISCUSSION

This study was the first to reveal the experiences of its participants, showing that environmental disasters, such as the floods in Porto Alegre, directly affect the continuity of health care, especially the use of HIV pre-exposure prophylaxis. The narratives showed that the impact is not only physical, but also psychological and social, reflecting the many layers of vulnerability faced by the users.

In Porto Alegre, the number of people who lost their homes or were displaced kept increasing, and not only because of the floods themselves. This is because the multiple effects of the floods went beyond material damage, profoundly harming their psychological well-being[9]. When these tragedies resulted in the loss of housing, with a sudden departure from home, significant physical, emotional, and mental harm take place. The home, in this context, is more than shelter; it keeps an important part of one's identity standing, placing their lives in both geographical and symbolic space[16].

Although we did not find any studies in literature that evaluate the specific consequences of floods on the continued health care of PrEP users, research has shown ho natural disasters affect care, and can have devastating effects for health, especially in those who live with HIV. This population was found to be a group that is vulnerable to severe weather conditions[17-18].

A recent survey from California evaluated the impact of forest fires in the health results of people living with HIV, finding that users of antiretroviral therapy (ART) had trouble accessing their medicine, especially due to the fact that many local pharmacies closed their doors. Health teams also reported that their ability to reach patients was limited and there wasa decrease in the continuous HIV prevention care, since many users searched for emergency care to evaluate their exposure. In addition to access barriers, factors such as fire-related depression and stress, sudden changes to daily life, emergency evacuations, and forgetting the medicine, caused damage to mental health[18].

The interruption of health services and the lack of contingency planning for emergency situations were critical points. In a review, researchers pointed out that the lack of an appropriate public health infrastructure for emergencies leads to the discontinuity of the treatment[3]. This corroborates the results found by the present study, in which the suspension of TCC activities and the flood played a large role in distancing the users from their regular use of PrEP. The number of strategies adopted by the users to continue their prophylaxis, such as buying the medication themselves, counting on the support of partners, or searching for other services, shows their individual resilience, but also that the health system had frailties that prevented it from providing continuous access to preventive treatment in emergency settings[3,9]. International literature emphasizes that the continuity of PrEP in emergency contexts is a critical issue to ensure the success of HIV prevention policies[19].

In the setting of this study, especially in the field of health, the floods exposed the negligence of the administration of the state of Rio Grande do Sul, of the capital Porto Alegre, and of several other municipalities, which adopt policies that strangle the public sector and privatize public interest sectors[20]. The Single Health System (SUS) had to redirect primary care into collective shelters, implementing field hospitals to operate as health care backup[9,20]. Trouble finding access to the care was made worse by damage to the health infrastructure, the scarcity of professionals, and limited resources, increasing the pressure on a system that was already overloaded[21].

Attention was moved into areas that had not been affected, but these changes were not always informed to the population. The testing and counseling centers for the users had to be

redirected and fragmented. The results of this study show a recurring shortcoming in public management during emergencies: their difficulties providing the population with clear, accessible, and updated information. This lack of communication has also been highlighted by other research[17,18], which shows how the lack of information can generate feelings of insecurity and frustration, making it more difficult to find access to health services in due tome, delaying new prescriptions, and compromising the quality of treatment. When these barriers remain, they become determinants that lead to the abandonment of prophylaxis, as some participants reported and showed by stopping their use of PrEP.

Literature highlights the potential of digital technologies and remote health services to mitigate the lack of communication during calamities[19,22]. Research carried out in the United States and South Africa suggests that consultations via phone and digital platforms could help maintain adherence to PrEP when in-person services are interrupted, as shown in a study about the use of phones to follow-up on patients during pandemics[22]. Additionally, marketing strategies that leverage social media platforms, announcement via posts, and a hot-line specifically for PrEP, are necessary[23]. In this regard, adapting the interview instrument in this study to include questions about the impact of the floods was an attempt to capture the needs of the participants as related to the emergency, being a resource to mediate care in times of crises, in an attempt to inform and help their search for health care.

The concern with the continuity of care in adverse contexts is in conversation with the vulnerability of HIV prevention services, which can be the target of programmatic cuts or be limited in their scope or capacity[24]. Although these services provide basic interventions, they often cannot deal with deeper issues, such as the stigma, which means that it is essential to invest in more complete approaches[25,26]. The users felt insecure and concerned about the attention provided due to the limits imposed on the Primary Health Care (PHC), since it was troublesome to conciliate the scheduled and spontaneous demands, especially in regard to sex-related and prenatal demands.

A study from South Africa investigated the impact of drought on HIV treatment, showing that the adherence to ART decreased, and the social vulnerabilities that were already in place became worse – especially generalized poverty. This led many to prioritize basic health needs, such as access to water and food. This reality may have had a negative influence on their care for HIV and adherence to treatment[27].

The findings of this study suggest that, although PrEP users search for alternatives to continue their treatment, public health structures must integrate more flexible and resilient approaches, that consider not only the access to medication, but also the continuous support to

health care, especially in contexts of social vulnerability and environmental disasters[3]. World literature reiterates that PrEP programs must be able to rapidly adapt to crises, incorporating both virtual and in-person care, in order to ensure that individuals at risk remain protected against HIV infections, even in adverse conditions[19].

The interruption in the use of PrEP is a threat to the health of individuals, as it increases the risk of HIV infections and affects the long-term continuity of the treatment. Thus, states and municipalities must develop plans to manage the risk of disasters, involving the different sectors and actors of society. More than measures to prepare the responses to catastrophes, we must prevent against future threats that may impair the mitigation of the risks that already exist, as well as rehabilitation and reconstruction policies[20].

Finally, we recognize that this study has limitations, since its sample was formed by participants in a specific area affected by the floods in Rio Grande do Sul. Still, our results provide valuable support for the elaboration of public policies that show awareness of the context of disasters and HIV prevention.

FINAL CONSIDERATIONS

Considering the experiences of HIV pre-exposure prophylaxis users during a climate emergency in Porto Alegre, we found that the use of PrEP was discontinued. Thus, public policies are clearly necessary that can ensure continuous care in adverse contexts, through emergency protocols and effective and accessible communication between health care services and users.

This study provides an original and relevant contribution, as it points out some impacts of a socio-environmental disaster in the access to HIV prevention. Social, structural, and institutional vulnerabilities that become worse in case of crises call attention to our need to improve management and communication systems of public health services, especially during emergencies.

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Data and material availability

The dataset may be accessed upon request to the corresponding author, to ensure the protection of the confidentiality of the participants and the ethical use of the information. This measure allows us to assess the purpose of the request and ensure that the data is shared responsibly, in accordance with ethical and regulatory guidelines applicable to the research.

Acknowledgements

This work was carried out with the support of the Institution for Higher Education Personnel Improvement – Brazil (CAPES) – Financing Code 001. Thanks to the *Universidade Federal do Rio Grande do Sul* (UFRGS) for the institutional and academic support during this research. We would also like to recognize and sincerely thank research participants, whose availability and trust were essential for this work.

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The authors declare that there is no conflict of interest.

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Received: 01.28.2025
Approved: 05.12.2025

Associate editor:
Carlise Rigon Dalla Nora

Editor-in-chief
João Lucas Campos de Oliveira