MedCrave
Step into the World of Research

International Journal of Pregnancy & Child Birth

Research Article

Open Access

CrossMark

Menstrual poverty in a public school in the Northeast of Brazil

Abstract

Objective: To describe the reality of menstrual poverty found from a public school in the Northeast of Brazil.

Methods: A cross-sectional study was carried out including girls aged 11 to 15 from a public school in the city of Recife, Pernambuco, Brazil, from November 2023 to April 2024. The exclusion criteria were the absence of signatures on the Free and Informed Assent Form or the Free and Informed Consent Form and people who do not menstruate. After receiving approval from the Research Ethics Board (CAAE: 65626722.6.0000.5201), data collection was initiated through a questionnaire.

Results: From 165 participants, 35 were considered in period poverty. Most of them were in the ninth grade of elementary school, had an average age of 14 and had a family income of approximately one to two minimum wages. School absenteeism due to lack of sanitary pads was one in four students, similar to national context, although 72% of participants chose to receive sanitary pads from the local government program, which reveals a flaw in it. 46 girls used alternative methods to contain bleeding, and the most prevalent method was toilet paper. 58% discuss menstruation only with female figures, preventing the process of disseminating information necessary to break taboos.

Conclusion: Low family income was a major factor in the precarious access to basic menstrual hygiene products affecting school attendance during the menstrual period despite the local government program. A lack of knowledge of this subject was also observed, preventing the taboo of misinformation from being broken.

Keywords: poverty, absenteeism, menstruation, menstrual hygiene products

Volume 11 Issue 3 - 2025

Barbra El Florencio Nunes,[1] Marcos Vinícius Teixeira Araújo,[1] Beatriz de Melo Oliveira Rodrigues,[2] Flavio Xavier da Silva[1]

[1]Departamento de Medicina, Faculdade Pernambucana de Saúde (FPS), Brazil

[2]Departamento de Psicologia, Faculdade Pernambucana de Saúde (FPS), Brazil

Correspondence: Flávio Xavier da Silva, Faculdade Pernambucana de Saúde, 4861 Avenida Mal. Mascarenhas de Morais, Imbiribeira, Recife, PE, 51150000, Brazil

Received: November 1, 2025 | **Published:** November 25, 2025

Introduction

An estimated 500 million women worldwide do not have access to adequate facilities and menstrual hygiene products, such as sanitary pads.[1] The lack of access to menstrual hygiene products and clean, safe and private bathrooms, a condition defined as menstrual poverty, emerges as a segregating and gender-specific barrier that is associated with school absenteeism and low financial status, generating a cycle that determines a low status of women in society.[1,2] The women's health is also affected by the period poverty, since in the absence of adequate supplies, menstruating women resort to methods suited to their conditions, such as old cloths, tissues and leaves.[3] These materials, in addition to causing discomfort, increase the risk of infections in the reproductive tract.[3]

It is believed that poverty is a broad condition due to the various settings in which it is embedded.[4] It depends on the local socio-political structure, the degree of satisfaction of needs or the level of bearable deprivation. In general, poverty is the lack of what is considered indispensable for material well-being, including menstrual hygiene.[4]

Despite significant advances in quality of life and life expectancy worldwide, issues such as menstruation continue to be surrounded by taboos and prejudices, which negatively impacts debates and public health actions related to this topic.[2,5] According to this perspective, the mean of menstruation depends on the local culture: it can be portrayed as "disgusting", "dirty", or even "contaminated".[5] In addition, feelings of fear and anxiety in women and adolescents occur due to the risk of sexual harassment and exploitation when performing menstrual hygiene.[2] In Brazil, 713,000 girls live without access to a bathroom or shower in their homes and more than four million do not have access to basic menstrual care items at school.[6] Among the regions of Brazil, the North and Northeast have up to four times greater risk of a girl being in this situation when compared to the Southeast region.[1]

The result of the precarious sanitary conditions of public schools, associated with deficient menstrual education and difficult financial conditions, is a potential impediment to the acquisition of disposable sanitary pads, often considered a trivial product for families on limited budgets.[1,6] However, data from people impacted by menstrual poverty and its repercussions for the family and school are scarce.

The purpose of this study is documenting the reality of menstrual poverty found from a public school in the Northeast of Brazil.

Methods

This is a cross-sectional study conducted at the Brigadeiro Eduardo Gomes public school, located in the city of Recife, Pernambuco, Brazil. The study population consisted of girls enrolled between 11 and 15 years old. Those who did not sign the Free and Informed Assent Form or the Free and Informed Consent Form and those who did not menstruate were excluded. The data were collected between November 1, 2023, and April 30, 2024, by the researchers themselves, after approval by Human Research Ethics Committee from Faculdade Pernambucana de Saúde (FPS) (CAAE: 65626722.6.0000.5201). All ethical principles outlined in resolution Nº 466/12 of Brazilian National Health Council were followed.

First, students from sixth grade of elementary school to the first year of high school, in both morning e afternoon shifts, were informed about the objectives and procedures. Second, the Free and Informed Assent Form and the Free and Informed Consent Form were signed by

participants and parents, respectively. Finally, the form for applying the questionary was administered. We collected information on family income, number of pads used per period, absenteeism per period, absenteeism due to cramps, access to the topic of menstruation, use of alternative methods to disposable pads, access to pads, knowledge about the menstrual cycle, access to basic hygiene items and knowledge about menstrual poverty.

We defined major and minor criteria for menstrual poverty adapted from a UNICEF study.[1] The major criteria include income below two minimum wages, school absenteeism due to lack of sanitary pads, and lack of access to hygiene. The criterion of lack of access to hygiene was answered according to the individuals' perception of their own hygiene conditions. The minor criteria include the use of alternative methods to control menstrual bleeding, the need to borrow sanitary pads, and the number of people using sanitary pads at home exceeding two. We determined that to be classified as being in a situation of menstrual poverty, two major criteria must be present or the income criterion with three minor criteria.

After collection, data were entered into a spreadsheet created in Microsoft Excel® database, version 2016, and analysed in Epi Info™, version 7.2.2.6. The statistical tests used for analysing associations were the chi-square test and Fisher's exact test, when applicable, both with a significance level of 5% ($p < 0.05$).

Results

The sample was composed for 242 students who were enrolled for Brigadeiro Eduardo Gomes school from sixth grade of elementary school to first year of high school. Of these, 165 (68%) students were included and analised (Figure 1). The median age was 14 years. Most of them was enrolled in the nineth grade (54%) and had a household income between one and two minimum wages (47%), as show in Table 1. Thirty-five girls (21%) were in period poverty, as previously defined (Table 2).

Table 1 Sociodemographic and academic characteristics*

		Median or count	%
Sociodemographic			
Age (year)		14	
Family income (minimum wage)	Below one[1]	47	28
	One to two[1]	77	47
	Three to four	19	11
	More than four	7	4
Lack of access to hygiene[1]		1	1
Need to borrow sanitary pads[2]		114	69
Receive sanitary pads from government distribution program		119	72
Using alternative methods to control menstrual bleeding	Appropriate (tampons or menstrual cups)	5	8
	Toilet paper[2]	36	60
	Cloths[2]	3	5
	Nappies[2]	2	3
	Nobody	1	0.6
Number of people who use sanitary pads at home	Just me	15	9
	Me and 1 more	86	52
	Me and 2 more[2]	56	33
Academic			
Education	1st year high school	25	15
	9th year of elementary school	89	54
	8th year of elementary school	11	6
	7th year of elementary school	20	12
	6th year of elementary school	20	12
Absenteeism due to lack of sanitary pad[1]		47	28
Absenteeism due to colic		121	73
Repeating the year		16	10

*165 participants; [1] Major criterion [2] Minor criterion

Period poverty: 2 major criteria or the income criterion with the three minor criteria.

Citation: Nunes BEF, Araújo MVT, Rodrigues BMO, et al. Menstrual poverty in a public school in the Northeast of Brazil. *Pregnancy & Child Birth.* 2025;11(3):90–94. DOI: 10.15406/ipcb.2025.11.00328

Table 2 Characteristics with and without menstrual poverty

Characteristic	Menstrual poverty (n = 35) n (%)	No menstrual poverty (n =130) n (%)	*P*
Nº of packages of sanitary pads per month			
1	6 (17)	39 (30)	
2	18 (51)	54 (41)	0.508
3	6 (17)	23 (18)	
More than 3	4 (11)	14 (11)	
Receives sanitary pads from government distribution program			
Yes	35 (100)	79 (61)	<0.001
Talks about menstruation with someone			
Yes	4 (11)	21 (16)	0.489
Conversation opening			
Only female figure	21 (60)	74 (57)	
Only male figure	-	1 (1)	0.902
Female and male figures	8 (23)	24 (18)	
Nobody	6 (17)	25 (19)	
Knows the meaning of menstrual poverty			
Yes	10 (28)	24 (18)	0.465
Education			
1st year high school	9 (26)	16 (10)	
9th year of elementary school	19 (54)	70 (42)	
8th year of elementary school	3 (8)	8 (5)	0.130
7th year of elementary school	3 (8)	17 (10)	
6th year of elementary school	1 (3)	19 (11)	
Access to toilet paper in the school bathrooms			
Yes	7 (20)	19 (15)	0.509
Access to soap in the school bathrooms			
Yes	11 (31)	26 (20)	0.196
Absenteeism due to colic			
Yes	33 (94)	88 (68)	0.002
Repeating the year			
Yes	2 (6)	14 (11)	0.393

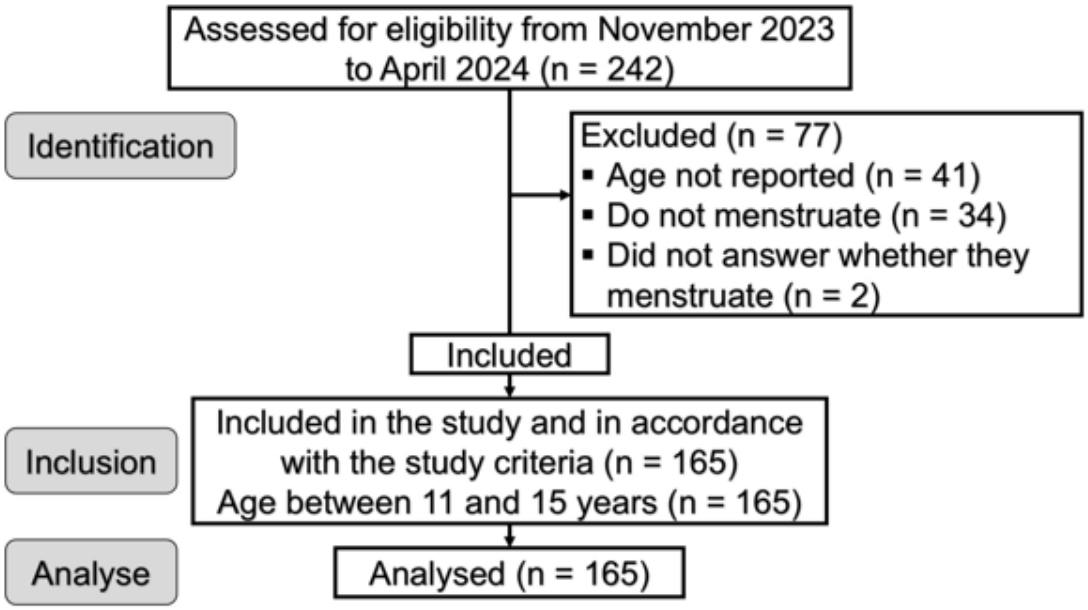

Figure 1 Participant recruitment flowchart.

Citation: Nunes BEF, Araújo MVT, Rodrigues BMO, et al. Menstrual poverty in a public school in the Northeast of Brazil. *Pregnancy & Child Birth.* 2025;11(3):90–94. DOI: 10.15406/ipcb.2025.11.00328

Discussion

The most important criterion for defining people living in menstrual poverty was family income of up to two minimum wages (75% of participants). Low socioeconomic status is the result of multiple factors that impact the quality of life of women, girls and people who menstruate, corroborating current findings that point to menstrual poverty as a multifactorial and persistent issue in vulnerable contexts.[7] Menstrual poverty continues to be a global problem affecting socially disadvantaged populations, aggravated after the COVID-19 pandemic, becoming a social and health problem, highlighting the need to develop standardized instruments to identify this condition.[8–10]

In Brazil, especially in the Northeast region, structural social inequality manifests itself in significant deficits in access to basic hygiene and sanitation items, as evidenced both in this study, which showed that one person did not have access to basic hygiene conditions, and in reports from international agencies, such as UNICEF and WHO.[10] As showed by do Nascimento et al.,[8] many women live in conditions of scarce or non-existent access to water, meaning they have to make a choice about how to use the water they obtain, which often involves giving up personal hygiene in favor of using it for drinking and cooking.

Schools, hospitals, and non-profit organizations can be spaces that promote social dignity and health, but they can also be spaces that exacerbate existing vulnerabilities. At the participating school, despite providing bathrooms, the lack of toilet paper and soap was a contributory factor in period poverty as 133 girls (80%) reported not having access to toilet paper in the bathrooms. Of these, 28 were experiencing period poverty. Regarding soap, 122 participants (74%) reported it was absent from the school bathrooms. The lack of these supplies to carry out basic hygiene is an extremely deficient condition in Brazil, as approximately 121,000 schools in the country, especially in the Northeast region, do not have bathrooms, or when they do exist, they lack materials such as toilet paper and soap.[7,11]

The lack of open dialogue about menstruation, evidenced by the fact that only 25 participants had discussed the topic, highlights a cultural barrier that contributes to stigma and lack of knowledge about menstrual health. This finding is in line with other studies that point to the need to include the topic in the school and family environment of all genders to demystify and disseminate reliable information.[11,12] Regarding absenteeism due to menstrual cramps, it was more associated with menstrual poverty. Experts agree that menstrual cramps affect more than 50% of women of reproductive age, and they can interfere with daily activities.[13] This point contributes to the impacts of menstruation affecting girls' lives, since in addition to the lack of sanitary pads, the lack of access to painkillers and medications that reduce the pain of menstrual cramps corroborates the failure to remain in school.[12]

Our study reveals that one in four students reported absenteeism during their period. This data is consistent with the national context, where one in four girls also miss school due to lack of sanitary pads.[14] Due to the Free Distribution Program of Sanitary Absorbents established by State Law 18,258/2023 of the State of Pernambuco, a decrease in this ratio was expected when compared to the Brazilian scenario, however the similarity of the data shows a failure in the functioning of this law.[14] The failure may be related to the demand being greater than the supply of sanitary pads, as well as to the irregularity in the distribution of pads, directly affecting menstrual health and, consequently, the academic performance of people who have access to the benefit that this program offers.[15] On the other hand, the importance of the program is indisputable, as 70% of the interviewees chose to receive the sanitary pads offered by Government and among those who were in a situation of menstrual poverty, 100% chose to benefit from this program.

Another worrying aspect concerns the situation in which girls are unable to perform the recommended number of pad changes, which ranges from three to six daily. These girls remain with the same pad for many hours, since the cost of sanitary pads can compromise a significant budget of the poorest families.[7,10] In this scenario where access to safe means of containing menstrual bleeding is difficult, girls resort to alternative methods, such as toilet paper, just as shown in our study, which can increase the risk of infections and allergies.[7,10,12]

Finally, our study reinforces the importance of knowledge about menstrual poverty, considering that information empowerment is a crucial tool, as many participants did not recognize the concept, making it very difficult to identify the condition, combat menstrual vulnerability, and promote more effective public policies.[7,12,15]

Conclusion

Period poverty remains a relevant vulnerability among school-age adolescents, even in the face of public policies aimed at mitigating it. This condition is directly associated with school absenteeism, suggesting a potential limitation in the effectiveness or coverage of the state sanitary pad distribution program. Furthermore, a substantial portion of participants were unaware of the concept of menstrual poverty, revealing gaps in access to information on the topic.

Declaration

Author contribution

BEFN, MVTA, BMOR and FXS, were responsible for planning the study, including design of the protocol and data collection tools. BEFN and MVTA contributed data, database and carried out the study. BEFN, MVTA, BMOR and FXS drafted the manuscript. All authors approved the final version of the manuscript.

Acknowledgement

The authors thank Dalmir Cavalcante dos Santos for his assistance with statistical analysis as well as the Faculdade Pernambucana de Saúde (FPS) for providing scholarship for scientific initiation to Barbra El Florencio Nunes.

Ethical statement

This research was approved by Human Research Ethics Committee from Faculdade Pernambucana de Saúde (FPS) (CAAE: 65626722.6.0000.5201) on October 19, 2023.

Conflict of interest

The authors declare that they have no conflicts of interest.

Funding

The study was not funded by any agency.

References

1. Fundo de População das Nações Unidas (UNFPA), Fundo das Nações Unidas para a Infância (UNICEF). Pobreza menstrual no Brasil: desigualdades e violações de direitos. 2021. p. 1–51.
2. Soeiro R, Rocha L, Surita F, et al. Period poverty: menstrual health hygiene issues among adolescent and young Venezuelan migrant women at the northwestern border of Brazil. *Reprod Health*. 2021;18:238.

3. Cardoso L, Scolese A, Hamidaddin A, et al. Period poverty and mental health implications among college-aged women in the United States. *BMC Womens Health*. 2021;21(14):1–7.

4. Crespo A, Gurovitz E. A pobreza como um fenômeno multidimensional. *RAE eletrônica*. 2002;1(2):1–12.

5. Winkler I, Roaf V. Taking the bloody linen out of the closet - menstrual hygiene as a priority for achieving gender equality. In: Forthcoming (2015) *Cardozo Journal of Law and Gender*. 2015. p. 1–54.

6. UNICEF. No Brasil, milhões de meninas carecem de infraestrutura e itens básicos para cuidados menstruais [Internet]. 2021.

7. Ferreira F, Balaminut T, Carmona E, et al. Repercussions of period poverty for women and people who menstruate: an integrative review. *Rev Baiana Enferm*. 2023;27:e52708.

8. do Nascimento M, Costa A, da Silva G, et al. Menstrual poverty: a systematic review to identify vulnerable populations and measurement tools. *O Mundo da Saúde*. 2024;48:e16152024.

9. Lucarelli A, da Silva A. Analysis to assess menstrual poverty in vulnerable and non-vulnerable populations served in a public service in Brazil. *J Heal Biol Sci*. 2024;12(1):1–5.

10. Bourne M, Ahsan K. Parallel plights in advancing menstrual equity: a scoping review of period poverty in India and the United States. *Health Promot Pract*. 2025;5:15248399241308900.

11. WHO/UNICEF Joint Monitoring Programme (JMP) for water supply S and H (WASH). Progress on drinking water, sanitation and hygiene in schools 2015-2023: Special focus on menstrual health. 2025.

12. Prado I. Public Policies on menstrual health in Brazil: Perspectives through the lens of menstrual social movements. *MEDIAÇÕES, Londrina.* 2024;29(1):1–17.

13. Troncon J, Rosa-e-Silva A, dos Reis R. Dismenorreia: abordagem diagnóstica e terapêutica. *Femina*. 2020;48(9):519–523.

14. Secretaria de Educação e Esportes de Pernambuco (SEE). SEE distribui absorventes higiênicos nas escolas estaduais e beneficia mais de 250 mil estudantes [Internet]. Governo de Pernambuco. 2025.

15. Lima P. O que é pobreza menstrual e por que ela afasta estudantes das escolas [Internet]. Brasil, Agência Senado; 2021.2025.

Citation: Nunes BEF, Araújo MVT, Rodrigues BMO, et al. Menstrual poverty in a public school in the Northeast of Brazil. *Pregnancy & Child Birth.* 2025;11(3):90–94. DOI: 10.15406/ipcb.2025.11.00328