

UNIVERSIDADE ESTADUAL DE CAMPINAS  
SISTEMA DE BIBLIOTECAS DA UNICAMP  
REPOSITÓRIO DA PRODUÇÃO CIENTÍFICA E INTELLECTUAL DA UNICAMP

**Versão do arquivo anexado / Version of attached file:**

Versão do Editor / Published Version

**Mais informações no site da editora / Further information on publisher's website:**

<https://periodicos.ufba.br/index.php/enfermagem/article/view/52708>

**DOI: 10.18471/rbe.v37.52708**

**Direitos autorais / Publisher's copyright statement:**

©2023 by Universidade Federal da Bahia. All rights reserved.

DIRETORIA DE TRATAMENTO DA INFORMAÇÃO

Cidade Universitária Zeferino Vaz Barão Geraldo

CEP 13083-970 – Campinas SP

Fone: (19) 3521-6493

<http://www.repositorio.unicamp.br>

# REPERCUSSIONS OF PERIOD POVERTY FOR WOMEN AND PEOPLE WHO MENSTRUATE: AN INTEGRATIVE REVIEW

## REPERCUSSÕES DA POBREZA MENSTRUAL PARA AS MULHERES E PESSOAS QUE MENSTRUAM: REVISÃO INTEGRATIVA

## REPERCUSIONES DE LA POBREZA MENSTRUAL PARA LAS MUJERES Y LAS PERSONAS QUE MENSTRUAN: REVISIÓN INTEGRATIVA

Francine Silva Rodrigues Ferreira<sup>1</sup>

Talita Balamint<sup>2</sup>

Elenice Valentim Carmona<sup>3</sup>

Clara Fróes de Oliveira Sanfelice<sup>4</sup>

**How to cite this article:** Ferreira FSR, Balamint T, Carmona EV, Sanfelice CFO. Repercussions of period poverty for women and people who menstruate: an integrative review. Rev baiana enferm. 2023;27:e52708.

**Objective:** to investigate the repercussions of period poverty for women and people who menstruate. **Method:** an integrative review of the literature, performed in MEDLINE, Scopus, Web of Science and CINAHL databases. The sample included complete articles, in Portuguese, English and Spanish, and with a timeframe of seven years (2017-2023) to answer the guiding question: What are the repercussions of period poverty in the lives of women and people who menstruate? The inclusion of the articles was done by two independent reviewers and with consensus by a third party. **Results:** 15 articles were included and three main repercussions of period poverty were observed: school absenteeism, increased risk of genital tract infections and emotional repercussions. **Final considerations:** period poverty brings negative repercussions for women and people who menstruate, compromising physical, mental and social health, which is why the theme needs to be widely publicized and combated.

**Descriptors:** Women. Women's Health. Menstruation. Poverty. Vulnerable Populations.

*Objetivo: investigar as repercussões da pobreza menstrual para as mulheres e pessoas que menstruam. Método: revisão integrativa da literatura, realizada nas bases de dados MEDLINE, Scopus, Web of Science e CINAHL. Foram incluídos artigos na íntegra, nos idiomas português, inglês e espanhol e com recorte temporal de sete anos (2017-2023) para responder a pergunta norteadora: Quais são as repercussões da pobreza menstrual na vida das mulheres e pessoas que menstruam? A inclusão dos artigos foi feita por dois revisores independentes e com consenso por um terceiro. Resultados: foram incluídos 15 artigos e observou-se três principais repercussões da pobreza menstrual: absenteísmo escolar, aumento do risco de infecções do trato genital e repercussões emocionais. Considerações finais:*

Corresponding author: Clara Fróes de Oliveira Sanfelice, csanfelice@fenf.unicamp.br

<sup>1</sup> Universidade Estadual de Campinas, Campinas, SP, Brazil. <https://orcid.org/0000-0002-6853-9892>.

<sup>2</sup> Universidade Estadual de Campinas, Campinas, SP, Brazil. <https://orcid.org/0000-0002-9746-3102>.

<sup>3</sup> Universidade Estadual de Campinas, Campinas, SP, Brazil. <https://orcid.org/0000-0001-9976-3603>.

<sup>4</sup> Universidade Estadual de Campinas, Campinas, SP, Brazil. <https://orcid.org/0000-0003-1920-3193>.

*a pobreza menstrual traz repercussões negativas para as mulheres e pessoas que menstruam, comprometendo a saúde física, mental e a esfera social, motivo pelo qual o tema precisa ser amplamente visibilizado e combatido.*

*Descritores: Mulheres. Saúde da Mulher. Menstruação. Pobreza. Populações Vulneráveis.*

*Objetivo: investigar las repercusiones de la pobreza menstrual para las mujeres y las personas que menstruan. Método: revisión integrativa de la literatura, realizada en las bases de datos MEDLINE, Scopus, Web of Science y CINAHL. Se incluyeron artículos en su totalidad, en los idiomas portugués, inglés y español y con recorte temporal de siete años (2017-2023) para responder a la pregunta orientadora: ¿Cuáles son las repercusiones de la pobreza menstrual en la vida de las mujeres y personas que menstruan? La inclusión de los artículos fue hecha por dos revisores independientes y con consenso por un tercero. Resultados: se incluyeron 15 artículos y se observaron tres principales repercusiones de la pobreza menstrual: absentismo escolar, aumento del riesgo de infecciones del tracto genital y repercusiones emocionales. Consideraciones finales: la pobreza menstrual trae repercusiones negativas para las mujeres y personas que menstruan, comprometiendo la salud física, mental y la esfera social, por lo que el tema necesita ser amplamente visibilizado y combatido.*

*Descriptores: Mujeres. Salud de la Mujer. Menstruación. Pobreza. Poblaciones Vulnerables.*

## Introduction

Period poverty is a complex, transdisciplinary and multidimensional phenomenon experienced by girls, women and people who menstruate (transgender man). It is caused by the lack of access to knowledge and information about menstruation, menstrual hygiene resources and products, and basic sanitation infrastructure, so that they have full capacity to take care of their menstruation<sup>(1,2)</sup>. This scenario is pointed out as a generator of physical, mental and emotional challenges to people who experience period poverty. Moreover, the strong stigma surrounding menstruation prevents the theme from being freely addressed in different contexts<sup>(3)</sup>.

Estimates show that, globally, 500 million girls and women suffer from inadequate structures and equipment for the management of menstrual hygiene (MMH)<sup>(4)</sup>.

Although the theme is more widespread in underdeveloped countries<sup>(5)</sup>, period poverty also affects women and people who menstruate in developed countries, given the growing social inequality installed globally. In the United States of America (USA), considered the world's largest economic power, 11.2 million women were unable to purchase menstrual hygiene products in 2021 and more than half of them had to choose between hygiene products and

food<sup>(3)</sup>. Generalized menstrual inequality also occurs in Spain, especially among migrant, non-binary and transgender populations, which confirms that period poverty is also considered a significant barrier to achieving social and gender equity<sup>(6)</sup>.

Barriers to access menstrual rights can prevent the guarantee of dignity, body autonomy and sexual and reproductive rights, and may affect the lives of people who menstruate<sup>(2)</sup>.

Thus, improving menstrual health is a topic that has stood out in the global health agenda in recent years and gaining increasing political importance in this scenario. Efforts to ensure greater visibility of the issue translate into an attempt to promote the dignity, gender equality and protection of the reproductive health of people who menstruate worldwide<sup>(4)</sup>.

The World Health Organization (WHO) defines the management of menstrual hygiene or Menstrual Hygiene Management as a process in which women and adolescents make use of a clean menstrual management material to absorb or collect blood, which can be exchanged in privacy as many times as necessary, washing the body with soap and water, with access to facilities for disposal of materials used in menstruation<sup>(7)</sup>.



In the Brazilian scenario, the National Council of Rights recommended the creation of a National Policy for overcoming period poverty, with the aim of ensuring that items, such as feminine absorbents, are made available, in addition to increasing educational actions related to health and self-care for girls and women in their menstrual cycle<sup>(8)</sup>, taking into account that women are the majority of the Brazilian population<sup>(9)</sup>.

However, the lack of data and the limitation of studies on period poverty are identified as important challenges in the literature, requiring more research and engagement in this theme<sup>(3)</sup>.

Considering the magnitude and complexity of this event in society, this research aims to investigate the repercussions of period poverty for women and people who menstruate.

## Method

Integrative review study conducted in six stages: elaboration of the research question/guiding question; establishment of criteria for inclusion and exclusion of studies; categorization of studies; evaluation of studies included in the review; interpretation of results; presentation of the review/synthesis of knowledge<sup>(10)</sup>.

The guiding question of the research was structured according to the acronym PICO: P=participants (women); I=Phenomenon of interest (repercussions in life) and Co=context (period poverty)<sup>(11)</sup>. Thus, the guiding question of the review was: What are the repercussions of period poverty on the lives of women and people who menstruate? During the bibliographical research, carried out with the help of a librarian to define the search strategy, free terms were found, which were also used in the bibliographic research: period poverty, poor menstrual and poor menstrual hygiene. Thus, the search strategy was defined as: Menstruation AND (Poverty OR "Vulnerable Populations") OR ("Period poverty" OR "poor menstrual" OR "poor menstrual hygiene"). The search was performed in the US National Library of Medicine's

(MEDLINE), Scopus, Web of Science and Cumulative Index to Nursing and Allied Health Literature (CINAHL) databases. The inclusion criteria adopted for the selection of articles were: original and fully available studies, published in Portuguese, English and Spanish, and in a timeframe of seven years (2017 to 2023). Dissertations and theses, book chapters, literature reviews and articles with unavailable abstract were excluded.

The whole process was followed and described according to the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)<sup>(12)</sup>. The selected articles were inserted in an Excel for Windows spreadsheet to record the following data: authors, title, year of publication, country, journal, database, level of evidence of the studies, objective, methodology and main results.

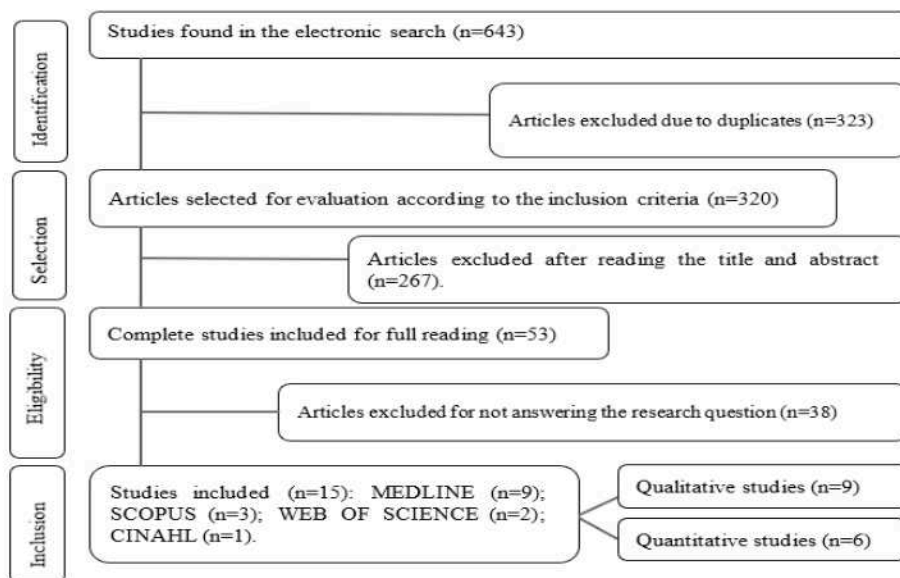
To assign the level of evidence, a classification was used, which characterizes the studies in levels: level 1 – evidence from systematic review or meta-analysis of randomized controlled trials or from clinical guidelines based on systematic reviews of randomized controlled trials; level 2 – evidence derived from at least one well-designed randomized controlled trial; level 3 – evidence obtained from well-designed trials without randomization; level 4 – evidence from well-designed cohort and case-control studies; level 5 – evidence originating from a systematic review of descriptive and qualitative studies; level 6 – evidence derived from a single descriptive or qualitative study; level 7 – evidence derived from the opinion of authorities and/or report of expert committees<sup>(13)</sup>.

Since this is an integrative review study, it was not referred to the Research Ethics Committee.

## Results

The study selection flow chart is presented in Figure 1, following the recommendations of PRISMA<sup>(12)</sup>

**Figure 1** – Flowchart of the process of identification, selection and inclusion of studies, prepared based on the recommendation of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. Campinas, São Paulo, Brazil – 2023



Source: created by the authors.

The first selection resulted in 643 articles. The articles were exported to the Intelligent Systematic Review (Ryyan®) platform, a free application available on the internet and used for organization, verification of duplication of references and blind selection of articles among reviewers.

Initially, duplicate articles were excluded (n=323), leaving 320 articles. Subsequently, the titles and abstracts were read by two reviewers, blindly and independently. Articles that did not meet the study inclusion criteria were excluded (n=267). During this phase, six articles presented

a conflict of opinion among the reviewers, requiring the evaluation of a third reviewer to determine whether the study would be included in the sample. After the resolution of the conflict of opinion among the reviewers, the articles that seemed to answer the study question, through the reading of the title and abstract, were selected for full reading (n = 53).

After reading all the articles included, 15 articles answered the study question and were included in the final research sample. These articles are presented in Chart 1.

**Chart 1** – Characterization of the articles included in the integrative review on the impacts of menstrual poverty for women. Campinas, São Paulo, Brazil – 2017-2023. (N=15) (continued)

Authors/ year	Journal/ Country	Type of Study (n)	Results	Level of Evidence
Alam M-L, Luby SP, Halder AK, Islam K, Opel A, Shoab AK, et al; 2017 <sup>(14)</sup>	BMJ Open. India	Cross-sectional study (n=2332).	Around 5% of girls report missing school during their menstrual period due to the lack of a place to exchange menstrual materials.	6



**Chart 1** – Characterization of the articles included in the integrative review on the impacts of menstrual poverty for women. Campinas, São Paulo, Brazil – 2017-2023. (N=15) (continued)

Authors/ year	Journal/ Country	Type of Study (n)	Results	Level of Evidence
Girod C, Ellis A, Andes KL, Freeman MC, Caruso BA; 2017 <sup>(15)</sup>	J Urban Health. Kenya	Qualitative study (n not available in the article).	Due to the non-availability of sanitary pads in private schools, girls report that they stop going to school due to lack of money to buy sanitary pads. Furthermore, they report anxiety and fear of staining their clothes due to the lack of sanitary pads.	6
Lahme AM, Stern R, Cooper D; 2018 <sup>(16)</sup>	Global Health Promotion. Zambia	Qualitative study (n=51).	The difficulty of supplying water at home and in schools is stressful and inconvenient, as girls have to walk long distances to access water and store it in buckets. These long walks cause them to lose time from going to school and studying, making learning difficult, in addition to walking long distances with vaginal cloths that cause friction.	6
Shallo SA, Willi W, Aubeker A; 2018 <sup>(17)</sup>	Risk Manag Healthc Policy. Ethiopia	Mixed method cross-sectional study (n=364).	School absenteeism due to lack of basic sanitation in schools. Around 32% of women use homemade alternatives to stem menstrual flow, such as rags from old clothes, which can put them at risk of infection and genital allergic reactions.	6
Wall LL, Teklay K, Desta A, Belay S; 2018 <sup>(18)</sup>	BMC Women's Health. Ethiopia	Qualitative ethnographic study (n=240 participants in focus groups and n=80 local interviewees).	Menstruation is called a "financial catastrophe", as girls do not have access to disposable pads due to their high price, leading them to miss school and use strips of cloth torn from old dresses, pieces of old mattresses, or any absorbent materials that may be at hand as an alternative to contain menstrual flow. Leading to school absenteeism due to the lack of sanitary pads and even the lack of cloth.	6
Vashist A, Pathak R, Agarwalla R, Patavegar BN, Panda M; 2018 <sup>(19)</sup>	Journal of Family and Community Medicine. India	Mixed method: combined cross-sectional study and qualitative research (n=600).	School absenteeism during menstruation due to lack of water supply, private place to manage menstruation and place to dispose properly sanitary pads.	6

**Chart 1** – Characterization of the articles included in the integrative review on the impacts of menstrual poverty for women. Campinas, São Paulo, Brazil – 2017-2023. (N=15)

(continued)

Authors/ year	Journal/ Country	Type of Study (n)	Results	Level of Evidence
Torondel B, Sinha S, Mohanty JR, Swain T, Sahoo P, Panda B, et al; 2018 <sup>(20)</sup>	BMC Infectious Diseases. India	Quantitative study (n=558).	Lack of access to water at home, as there is no bathroom, causing difficulty in hygiene during the menstrual period, being associated with infections, such as bacterial vaginosis, candidiasis and trichomoniasis.	6
Chakravarthy V, Rajagopal S, Joshi B; 2019 <sup>(21)</sup>	Indian Journal of Gender Studies. India	Qualitative study (n=45).	The lack of privacy and a suitable place for women to change their pads leads them to reduce the number of times they change, making them susceptible to infections in the reproductive tract. Many women, due to the lack of money to buy sanitary pads, use paper tissues as an alternative to contain the flow.	6
Rheinländer T, Gyapong M, Akpakli DE, Konradsen F; 2019 <sup>(22)</sup>	Health Care for Women International. Ghana	Qualitative study (n=33).	Due to unsanitary conditions in school bathrooms or because they do not have a bathroom at home, many girls use the woods around the school as an alternative bathroom during menstruation. They use sand or dig holes to hide the blood, leading to negative emotions, a feeling of dirt, shame, fear of being “punished” and “insulted”.	6
Briggs A; 2020 <sup>(23)</sup>	Journal of Poverty and Social Justice. England	Qualitative study. (n=15).	Embarrassment, emotional impact and humiliation are some of the feelings experienced when girls do not have money to buy sanitary pads and have to ask for products or ask for money or even deal with “leaks”. In addition to missing school and having their education compromised.	6
Kemigisha E, Rai M, Mlahagwa W, Nyakato VN, Ivanova O; 2020 <sup>(24)</sup>	International Journal of Environmental Research and Public Health. Uganda	Qualitative study (n=28).	Some girls interviewed, for having inadequate hygiene materials, prefer to isolate themselves for fear of staining their clothes or being embarrassed. Furthermore, due to insufficient hygiene and disinfection of cloths, when there were no disposable products, girls reported fear of contracting infections.	6

**Chart 1** – Characterization of the articles included in the integrative review on the impacts of menstrual poverty for women. Campinas, São Paulo, Brazil – 2017-2023. (N=15)

(conclusion)

Authors/ year	Journal/ Country	Type of Study (n)	Results	Level of Evidence
Cardoso LF, Scolese AM, Hamidaddin A, Gupta J; 2021 <sup>(25)</sup>	BMC Women's Health. USA	Descriptive quantitative study (n=471).	Definition of period poverty as purchasing power for menstrual products. It was most reported by Latina women, followed by black women and, lastly, white women. Period poverty is an experience lived every month and is associated with more cases of depression.	6
Gruer C, Hopper K, Smith RC, Kelly E, Maroko A, Sommer M; 2021 <sup>(26)</sup>	Reprod Health. USA	Qualitative study (n=37).	Securing menstrual products can mean running out of medication or food, thus some girls opt for improvised solutions, such as wearing cut-off t-shirts due to the difficulty of purchasing sanitary pads.	6
Habtegiorgis Y, Sisay T, Kloos H, Malede A, Yalew M, Arefaynie M, et al. 2021 <sup>(27)</sup>	PLOS ONE. Ethiopia	Cross-sectional study (n=546).	12.5% of the interviewees reported being absent from school due to the lack of sanitary pads to contain their menstrual flow.	6
Lukindo M, Price V, Pike M; 2022 <sup>(28)</sup>	Paediatric Child Health. Canada	Cross-sectional study (n=420).	65% of the interviewees do not always have enough money to purchase menstrual products, leading them to engage in unsafe menstrual hygiene practices, such as using alternatives to menstrual products (e.g., rags), washing disposable menstrual products, and/or using products longer than intended. 40% of the interviewees reported the lack of accessibility of menstrual products as a cause of school absenteeism and lack of participation in sports/social activities. 70% of the interviewees felt embarrassed asking for products, even when they are provided free of charge, and almost all supported the idea of having menstrual products available for free in public restrooms.	6

Source: created by the authors.

All included studies presented level of evidence 6, according to the classification of hierarchy of evidence adopted<sup>(13)</sup>.

Considering Chart 1, the findings were categorized into three main impacts of period poverty: school absenteeism, increased risk of allergies and genital tract infections, and emotional repercussions.

## Discussion

The analysis of the articles revealed that period poverty is multifactorial, with a relevant impact on the lives of women and people who menstruate. Menstruation is a physiological phenomenon of the reproductive cycle, but the meanings of menstruation are deeply rooted in



culture and religion<sup>(29)</sup>, which can interfere with the way it is experienced.

In patriarchal societies, for example, the body that menstruates is subjected to stigma, shame and trivialization, and menstruation is considered depressing and repulsive. Attitudes such as these have manifested themselves over time and the perpetuation of these prejudices is closely related to religious and cultural institutions<sup>(30)</sup>.

Therefore, the act of menstruation can be considered a stressful event in some societies, and, when associated with period poverty, girls, women and people who menstruate face even more challenges that cause direct impacts on quality of life. These challenges were synthesized and analyzed in this review, based on the evidence available in the literature. The results point to a greater impact of period poverty on women's education and physical and emotional health.

Access to key elements for the management of healthy menstrual hygiene is considered a basic condition for health, mobility and dignity of people who menstruate. These elements include Water, Sanitation and Hygiene (WASH). These elements should be available in the sanitary facilities, ensuring opportunity to exchange menstrual products (pads), as well as adequate place for the disposal of these products and availability of water for intimate and hand hygiene<sup>(2)</sup>.

The absence of any of these elements directly affects the lives of people who menstruate, especially in the school context, a scenario that was widely addressed in studies on period poverty and MMH.

In view of the first impact of period poverty, the studies found in this review show that the absence of one of these elements is a direct cause of school absenteeism, since girls miss school, since many of them do not offer adequate water supply, or appropriate place to perform the exchange and/or disposal of the absorbent<sup>(14-15,23-24,26)</sup>. In Brazil, current data from the United Nations Children's Fund, in

partnership with the United Nations Population Fund, showed that 38.1% of Brazilian students, between 10 and 19 years old, attend schools in which there is absence of at least one of these elements in the bathrooms<sup>(2)</sup>.

When it comes to questions about menstrual hygiene in Venezuelan migrant adolescents and young women, 61% are unable to wash their hands whenever they want, and most (75.9%) do not feel safe to use the bathrooms<sup>(31)</sup>.

In this scenario, some girls end up using other spaces for exchange and disposal of pads, such as the bush around the school, and use sand or dig holes to hide blood<sup>(24)</sup>.

Another aspect pointed out in the studies that implies school absenteeism refers to the fact that, in certain situations, girls and women need to travel long distances to get water and store it in buckets for the purpose of home intimate hygiene. This need makes them spend many hours of the day on these routes, preventing them from going to school and harming their education<sup>(23)</sup>.

The absence of hygiene products for use during menstruation, caused by precarious socioeconomic condition, associated with the high value of products or their free distribution, was also pointed out in studies as a cause of school absenteeism. Almost half (46.4%) of Venezuelan migrants who menstruate did not receive any menstrual hygiene kit<sup>(31)</sup> and 65% of Canadian adolescents reported that they do not always have enough money to buy menstrual products<sup>(28)</sup>. Thus, the absence of menstrual hygiene products provides opportunities for many girls to miss classes during the bleeding period<sup>(16,19,21,27-28)</sup>.

Thus, studies show that school absenteeism is one of the main impacts of period poverty for school age girls, which, in turn, generates other repercussions, such as poor performance in exams and impaired socio-emotional development, in addition to contributing to greater stress, less motivation and less feeling of belonging to the school<sup>(32)</sup>. In the case of adult women from Bangladesh,

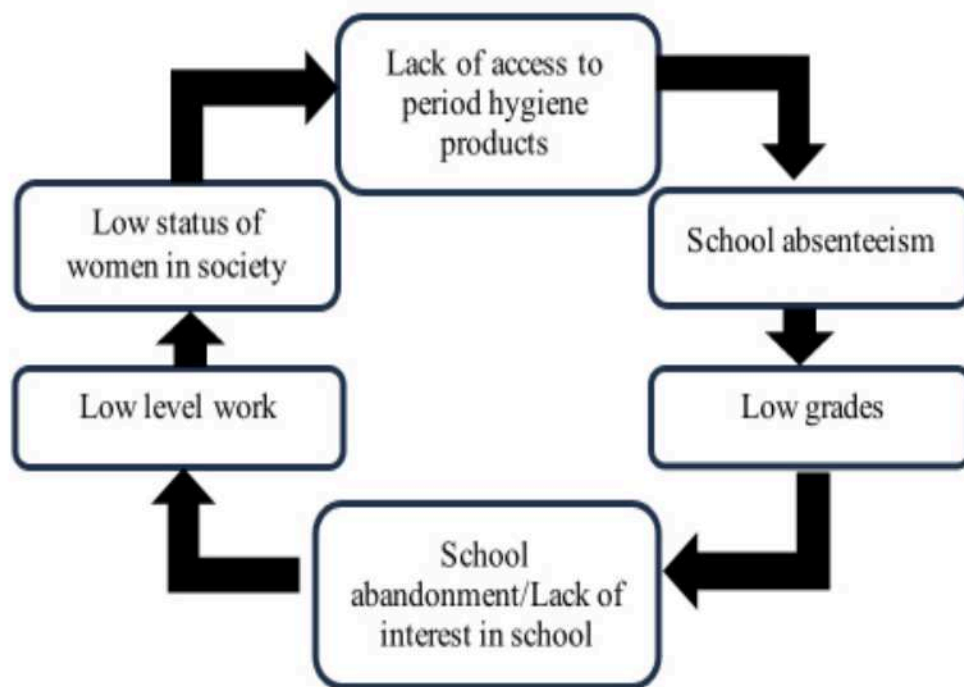
there was an average of six days of absence from work per month due to the absence of menstrual hygiene products<sup>(33)</sup>.

Therefore, the literature points out that the free supply of these products<sup>(33)</sup> or community actions and policies focused on reducing the price of menstrual products<sup>(34)</sup> translate into strategies capable of favoring proper menstrual

management and, consequently, reducing absenteeism.

A study conducted in the USA presented schematically how period poverty can affect the lives of school-age girls and cause long-term repercussions<sup>(3)</sup>. This diagram is shown in Figure 2:

**Figure 2** – How period poverty can affect the lives of school girls



Source: Michel J, Mettler A, Schönenberger S, Gunz<sup>(3)</sup>. Authors' translation.

The context of period poverty, related to the high price of disposable pads, makes this phenomenon even more complex, since, in these conditions, women and people who menstruate seek inadequate home strategies in an attempt to contain the menstrual flow, as the inappropriate use of pieces of cloth, clothes, old mattresses and T-shirt strips<sup>(20,27-28)</sup>.

The price of pads is the factor that most hinders their purchase, causing girls and women to use inferior products, to remain with the pads for longer than indicated or use unsuitable products to contain the flow, as toilet paper or rags<sup>(28,34)</sup>. However, the ineffectiveness of these substitutions results in overflow, leakage and

embarrassment, worsening the condition of these people<sup>(35)</sup>.

This scenario was aggravated during the COVID-19 pandemic, since financial difficulties became even more intense and contributed to the loss of access to hygiene products, including pads, tampons, menstrual cups and soaps<sup>(36)</sup>.

The economic barrier is a condition that is increasing globally, however, the repercussions and economic uncertainties resulting from the pandemic have exacerbated these obstacles, as many women have had to prioritize food and water over personal hygiene products<sup>(36)</sup>. The prioritization of food and medicines was also described in one of the articles in this review<sup>(20)</sup>, even outside the pandemic context.



Despite the need to reduce the costs of menstrual products, in part for the sake of social justice, price reductions may not be sufficient to ensure accessibility<sup>(37)</sup>, since the whole society needs a broad investment in information and awareness of aspects related to menstruation.

Menstruation, and especially equal access to menstrual hygiene products, are understood as a matter of equity. And menstrual equity is a question of human rights and public health, in which racial, socioeconomic and sexual disparities are interconnected<sup>(35)</sup>.

Health professionals and administrators need to put themselves at the forefront of a growing movement to ensure that all women and people who menstruate have access to safe and hygienic menstrual control, ensuring healthy menstrual health<sup>(35)</sup>.

The stigma associated with menstruation perpetuates a culture of silence that can keep the issue hidden from policymakers and other people positioned to address it<sup>(35)</sup>. Thus, breaking taboos and silence about menstruation includes educating young people who menstruate, their parents and communities about this normal physiological process. Health organizations and associations can play a key role as reliable sources of information about menstruation, which positively influences the fight against period poverty<sup>(35)</sup>.

Another impact of period poverty, identified in the studies, was the increased risk of allergic conditions and infections in the genital tract<sup>(14,18,22-23,25)</sup>. This risk is mainly justified by the use of inadequate menstrual hygiene inputs to contain menstrual flow, such as pieces of old cloths, clothes, mattresses and T-shirt strips or any other absorbent material that can be used and that usually does not undergo a disinfection/cleaning process before use<sup>(20,22,27)</sup>.

Issues such as lower education, low economic level and residence in rural areas are some of the conditions associated with the use of reusable materials to contain menstrual flow, such as the use of cloths. This condition hinders individual cleanliness and, consequently, leaves users

susceptible to genital infections<sup>(38)</sup>. In addition, lack of access to water at home and in schools leads to difficulty in intimate and hand hygiene during the menstrual period, which is also associated with infections such as bacterial vaginosis, candidiasis and trichomoniasis<sup>(25)</sup>.

Another aspect is the lack of privacy and adequate place for women to change their absorbents, leading them to reduce the number of exchanges and, consequently, increasing the susceptibility to infections in the reproductive tract<sup>(18)</sup>. Management of menstruation in public space is considered "uncomfortable" and "annoying" due to the lack of adequate facilities, associated with health problems, as menstrual products cannot be exchanged or due to lack of space for MMH, like the presence of sink and trash<sup>(34)</sup>.

Finally, the friction caused by the strips of cloth used by women who travel long distances seeking piped water is also responsible for the increased risk of infectious and allergic conditions, being another impact of period poverty on women's health<sup>(23)</sup>.

In addition to the impacts already described, there were emotional repercussions of period poverty<sup>(15,17,19,22,24)</sup>. Situations related to socioeconomic difficulties, such as not having money to buy pads, having to ask for products or money to buy them, were described as situations of great embarrassment, emotional impact and humiliation for girls<sup>(16)</sup>. A higher incidence of depression was described in women who experience period poverty<sup>(17)</sup>.

Moreover, feelings of anxiety, fear and social isolation due to fear of staining clothes with blood in a school environment were reported by girls who do not have adequate menstrual hygiene products<sup>(19,22)</sup>. Sociocultural aspects were also described, such as place of residence and religious beliefs, which relate menstruation with impurities, leading to negative attitudes, such as isolation and exclusion of spaces such as churches and shrines, culminating in emotional impacts,



self-confidence and ability to manage menstrual hygiene<sup>(39)</sup>.

In the scenario in which girls need to make use of land for exchange and disposal of pads, since the available bathrooms do not have adequate facilities, negative emotions, a sense of dirt, shame, fear of being “punished” and “insulted” also appear<sup>(24)</sup>.

Therefore, the impact of menstrual inequality seems to be far-reaching. Public health policies should be focused on favoring menstrual education in schools and health services, ensuring access to menstrual products and adequate menstrual management facilities. The qualification of the training of health professionals, such as nurses, is also necessary to improve access to information on menstrual health.

One of the reasons for menstrual concealment among girls and some taboos that still prevail is the fact that menstrual education is usually done by families<sup>(36)</sup>. The literature indicates that health professionals rarely pay attention to menstrual inequality and menstrual health, thus menstrual hygiene is often disregarded in health care and not included in public health strategies<sup>(34)</sup>.

In this sense, the Nursing professional, with important performance in the process of health education, becomes essential to incorporate actions related to menstrual health, in order to clarify doubts, to naturalize menstruation and mitigate inadequate information and practices of this period, since the stigma and attitudes of society in relation to menstruation also need to change<sup>(40)</sup>, in order to fight period poverty.

The synthesis of knowledge about the impacts of period poverty may favor greater visibility of the theme for nursing professionals working in reproductive health, especially in reinforcing the need for this agenda to be included as a priority in the actions developed in health services.

The findings can also support strategies to combat period poverty that can be performed by nursing professionals, in order to improve the quality of life and ensure the right to menstrual dignity and body autonomy of girls, women and people who menstruate. Some strategies

that can be adopted by nursing are: awareness in health spaces about the existence of period poverty; education for girls, women and people who menstruate about self-care, dignity and menstrual health; encouraging Public Policies to ensure access to menstrual hygiene products; combating social stigmas with concrete actions, such as events, groups and conversation circles that naturalize menstruation in collective spaces.

A limitation of the research concerns the fact that the search for the articles in the bases was carried out by a single researcher, although the selection was made by two evaluators independently. Moreover, all primary studies found in this review were classified with low level of evidence (Level 6 - Evidence derived from a single descriptive or qualitative study), which decreases the strength of the findings compiled.

In addition, this research collaborates with the visibility of the theme in the national literature, since no Brazilian publications were found in the review.

## Final Considerations

Period poverty negatively interferes in the lives of women, girls and people who menstruate, generating social repercussions, especially in school life, and damage to physical and mental health. Three impacts of period poverty were identified: school absenteeism, the risk of developing infections and allergies of the genital tract and negative emotional repercussions.

Therefore, period poverty is a multidimensional problem that affects incisively the right to menstrual dignity, body autonomy and women's ability to live a normal life.

Nursing can play a key role in the fight against period poverty, through health education actions, focusing on the spread of information on health and management of the menstrual period, self-care and promotion of the naturalization of menstruation.

The publications of this review focused on the international scene, especially in countries of

the African continent, demonstrating that more research on the subject should be carried out, including in Brazil, in order to give visibility to this context, favoring planning and implementation of interventions for its coping.

### Collaborations:

1 – conception and planning of the project: Francine Silva Rodrigues Ferreira and Clara Fróes de Oliveira Sanfelice;

2 – analysis and interpretation of data: Francine Silva Rodrigues Ferreira, Talita Balaminit, Elenice Valentim Carmona and Clara Fróes de Oliveira Sanfelice;

3 – writing and/or critical review: Talita Balaminit, Elenice Valentim Carmona and Clara Fróes de Oliveira Sanfelice;

4 – approval of the final version: Francine Silva Rodrigues Ferreira and Clara Fróes de Oliveira Sanfelice.

### Competing interests

There are no competing interests.

### References

- United Nations Children's Fund. Menstruation shouldn't get in the way of a girl's education [Internet]. New York: UNICEF; 2022 [cited 2022 Jul 21]. Available from: <https://www.unicef.org/senegal/en/stories/menstruation-shouldnt-get-way-girls-education>
- Fundo de População das Nações Unidas. Fundo das Nações Unidas para a Infância. Pobreza menstrual no Brasil: desigualdade e violação de direitos [Internet]. Brasília (DF): UNFPA/UNICEF; 2021 [cited 2022 Aug 12]. Available from: <https://www.unicef.org/brazil/relatorios/pobreza-menstrual-no-brasil-desigualdade-e-violacoes-de-direitos>
- Michel J, Mettler A, Schönenberger S, Gunz D. Period poverty: why it should be everybody's business. *J Glob Health Rep.* 2022;6:e2022009. DOI: <http://doi.org/doi:10.29392/001c.32436>
- Word Bank. Menstrual Hygiene Management Enables Women and Girls to Reach their Full Potential [Internet]. Washington, DC: Word Bank; 2018 [cited 2022 Feb 06]. Available from: <https://www.worldbank.org/en/news/feature/2018/05/25/menstrual-hygiene-management>
- Rossouw L, Ross H. Understanding Period Poverty: Socio-Economic Inequalities in Menstrual Hygiene Management in Eight Low- and Middle-Income Countries. *Int J Environ Res Public Health.* 2021;18(5):2571. DOI: <https://doi.org/10.3390/ijerph18052571>
- Medina-Perucha L, López-Jiménez T, Jacques-Aviñó C, Holst AS, Valls-Llobet C, J Munrós-Feliu J, et al. Menstrual inequity in Spain: a cross-sectional study. *Eur J Public Health.* 2022;32(Suppl 3):125-35. DOI: <https://doi.org/10.1093/eurpub/ckac129.307>
- United Nations Children's Fund. Guidance on Menstrual Health and Hygiene [Internet]. New York: UNICEF; 2019 [cited 2022 Nov 01]. Available from: <https://www.unicef.org/documents/guidance-menstrual-health-and-hygiene>
- Conselho Nacional dos Direitos. Recomendação Nº 21, de 11 de dezembro de 2020. Recomenda ao Presidente da República, ao Presidente da Câmara dos Deputados e ao Presidente do Senado Federal, a criação de um marco legal para superar a pobreza menstrual e a garantia de isenções de impostos de produtos [Internet]. Brasília (DF); 2020 [cited 2022 Mar 29]. Available from: [www.gov.br/mdh/pt-br/aceso-a-informacao/participacao-social/conselho-nacional-de-direitos-humanos-cndh/SEL\\_MDH1638484Recomendacao21.pdf](http://www.gov.br/mdh/pt-br/aceso-a-informacao/participacao-social/conselho-nacional-de-direitos-humanos-cndh/SEL_MDH1638484Recomendacao21.pdf)
- Instituto Brasileiro de Geografia e Estatística. Quantidade de homens e mulheres [Internet]. Rio de Janeiro; 2021 [cited 2021 Apr 29]. Available from: <https://educa.ibge.gov.br/jovens/conheca-o-brasil/populacao/18320-quantidade-de-ho%20mens-e-mulheres.html>
- Mendes KDS, Silveira RCCP, Galvão CM. Integrative literature review: a research method to incorporate evidence in health care and nursing. *Texto contexto - enferm.* 2008;17(4):758-64. DOI: <https://doi.org/10.1590/S0104-07072008000400018>
- Stern C, Lizarondo L, Carrier J, Godfrey C, Rieger K, Salmond S, et al. Methodological guidance for the conduct of mixed methods systematic reviews. *JBIS Evid Synth.* 2020;18(10):2108-18. DOI: <http://doi.org/10.11124/JBISRIR-D-19-00169>



12. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. 2021;372(71). DOI: <http://doi.org/10.1136/bmj.n71>
13. Melnyk BM, Fineout-Overholt E. Evidence based practice in nursing & healthcare. A guide to best practice. Philadelphia: Lippincott Williams & Wilkins; 2005.
14. Alam M-U, Luby SP, Halder AK, Islam K, Opel A, Shoab AK, et al. Menstrual hygiene management among Bangladeshi adolescent schoolgirls and risk factors affecting school absence: results from a cross-sectional survey. *BMJ Open*. 2017;7(7):e015508. DOI: <http://dx.doi.org/10.1136/bmjopen-2016-015508>
15. Girod C, Ellis A, Andes KL, Freeman MC, Caruso BA. Physical, Social, and Political Inequities Constraining Girls' Menstrual Management at Schools in Informal Settlements of Nairobi, Kenya. *J Urban Health*. 2017;94:835-46. DOI: <https://doi.org/10.1007/s11524-017-0189-3>
16. Lahme AM, Stern R, Cooper D. Factors impacting on menstrual hygiene and their implications for health promotion. *Glob Health Promot*. 2018;25(1):54-62. DOI: <https://doi.org/10.1177/1757975916648301>
17. Shallo SA, Willi W, Aubeker A. Factors Affecting Menstrual Hygiene Management Practice Among School Adolescents in Ambo, Western Ethiopia, 2018: A Cross-Sectional Mixed-Method Study. *Risk Manag Healthc Policy*. 2020;13:1579-87. DOI: <https://doi.org/10.2147/RMHP.S267534>
18. Wall LL, Teklay K, Desta A, Belay S. Tending the 'monthly flower': a qualitative study of menstrual beliefs in Tigray, Ethiopia. *BMC Women's Health*. 2018;18:183. DOI: <https://doi.org/10.1186/s12905-018-0676-z>
19. Vashisht A, Pathak R, Agarwalla R, Patavegar BN, Panda M. School absenteeism during menstruation amongst adolescent girls in Delhi, India. *J Family Community Med*. 2018;25(3):163-8. DOI: [http://doi.org/10.4103/jfcm.JFCM\\_161\\_17](http://doi.org/10.4103/jfcm.JFCM_161_17)
20. Torondel B, Sinha S, Mohanty JR, Swain T, Sahoo P, Panda B, et al. Association between unhygienic menstrual management practices and prevalence of lower reproductive tract infections: a hospital-based cross-sectional study in Odisha, India. *BMC Infect Dis*. 2018;18:473. DOI: <https://doi.org/10.1186/s12879-018-3384-2>
21. Chakravarthy V, Rajagopal S, Joshi B. Does Menstrual Hygiene Management in Urban Slums Need a Different Lens? Challenges Faced by Women and Girls in Jaipur and Delhi. *Indian J Gend Stud*. 2019;26(1-2):138-59 DOI: <https://doi.org/10.1177/0971521518811174>
22. Rheinländer T, Gyapong M, Akpakli DE, Konradsen F. Secrets, shame and discipline: School girls' experiences of sanitation and menstrual hygiene management in a peri-urban community in Ghana. *Health Care Women Int*. 2019;40(1):13-32. DOI: <https://doi.org/10.1080/07399332.2018.1444041>
23. Briggs A. 'Period poverty' in Stoke-on-Trent, UK: new insights into gendered poverty and the lived experiences of austerity. *J Poverty Soc Justice*. 2021;29(1):85-102. DOI: <https://doi.org/10.1332/175982720X16050132762411>
24. Kemigisha E, Rai M, Mlahagwa W, Nyakato VN, Ivanova O. A Qualitative Study Exploring Menstruation Experiences Practices among Adolescent Girls Living in the Nakivale Refugee Settlement, Uganda. *Inter J Environ Res Public Health*. 2020;17(18):6613. DOI: <http://doi.org/10.3390/ijerph17186613>
25. Cardoso LF, Scolese AM, Hamidaddin A, Gupta J. Period poverty and mental health implications among college-aged women in the United States. *BMC Women's Health*. 2021;21(14). DOI: <https://doi.org/10.1186/s12905-020-01149-5>
26. Gruer C, Hopper K, Smith RC, Kelly E, Maroko A, Sommer M. Seeking menstrual products: a qualitative exploration of the unmet menstrual needs of individuals experiencing homelessness in New York City. *Reprod Health*. 2021;18(77). DOI: <https://doi.org/10.1186/s12978-021-01133-8>
27. Habtegiorgis Y, Sisay T, Kloos H, Malede A, Yalew M, Arefaynie M, et al. Menstrual hygiene practices among high school girls in urban areas in Northeastern Ethiopia: A neglected issue in water, sanitation, and hygiene research. *PLoS ONE*. 2021;16(6):e0248825. DOI: <https://doi.org/10.1371/journal.pone.0248825>
28. Lukindo M, Price V, Pike M. Estimating the impact of period poverty on adolescents in Nova



- Scotia. *Paediatr Child Health*. 2022;27(7):421-28. DOI: <https://doi.org/10.1093/pch/pxac062>
29. Maharaj T, Winkler IT. 'You don't just do it because someone else said so': Menstrual practices and women's agency in the Hindu diaspora of Trinidad. *Cult Health Sex*. 2022;24(6):827-41. DOI: <http://doi.org/10.1080/13691058.2021.1887938>
  30. Kamat S, Tharakan K. The Sacred and the Profane: Menstrual Flow and Religious Values. *J Hum Val*. 2021;27(3):261-8. DOI: <http://doi.org/10.1177/09716858211006529>
  31. Soeiro RE, Rocha L, Surita FG, Bahamondes L, Costa ML. Period poverty: menstrual health hygiene issues among adolescent and young Venezuelan migrant women at the northwestern border of Brazil. *Reprod Health*. 2021;18(238). DOI: <https://doi.org/10.1186/s12978-021-01285-7>
  32. Ansari A, Gottfried MA. The Grade-Level and Cumulative Outcomes of Absenteeism. *Child Dev*. 2021;92(4):e548-64. DOI: <https://doi.org/10.1111/cdev.13555>
  33. Tull K. Period poverty impact on the economic empowerment of women [Internet]. Brighton (UK): Institute of Development Studies; 2019 [cited 2023 Ago 05]. Available from: <https://assets.publishing.service.gov.uk/media/5c6e87b8ed915d4a32cf063a/period.pdf>
  34. Holst AS, Jacques-Aviñó C, Berenguera A, Pinzón-Sanabria D, Valls-Llobet C, Munrós-Feliu J, et al. Experiences of menstrual inequity and menstrual health among women and people who menstruate in the Barcelona area (Spain): a qualitative study. *Reprod Health*. 2022;19(1):45. DOI: <https://doi.org/10.1186/s12978-022-01354-5>
  35. Sommer M, Mason DJ. Period Poverty and Promoting Menstrual Equity. *JAMA Health Forum*. 2021;2(8):e213089. DOI: <http://doi.org/10.1001/jamahealthforum.2021.3089>
  36. United Nations Children's Fund. Periods in the pandemic: 9 things we need to know. COVID-19 is having a global impact on menstrual health and hygiene [Internet]. New York: UNICEF; 2020 [cited 2022 Aug 22] Available from: <https://www.unicef.org/coronavirus/covid-19-periods-in-pandemic-9-things-to-know>
  37. Abreu-Sánchez A, Parra-Fernández ML, Onieva-Zafra MD, Fernández-Martínez E. Perception of Menstrual Normality and Abnormality in Spanish Female Nursing Students. *Int J Environ Res Public Health*. 2020;17(17):6432. DOI: <http://doi.org/10.3390/ijerph17176432>
  38. Anaba EA, Udofia EA, Manu A, Daniels AA, Aryeetey R. Use of reusable menstrual management materials and associated factors among women of reproductive age in Ghana: analysis of the 2017/18 Multiple Indicator Cluster Survey. *BMC Women's Health*. 2022;22(92). DOI: <https://doi.org/10.1186/s12905-022-01670-9>
  39. Kpodo L, Aberese-Ako M, Axame WK, Adjui M, Gyapong M. Socio-cultural factors associated with knowledge, attitudes and menstrual hygiene practices among Junior High School adolescent girls in the Kpando district of Ghana: A mixed method study. *PloS One*. 2022;4;17(10):e0275583. DOI: [10.1371/journal.pone.0275583](https://doi.org/10.1371/journal.pone.0275583)
  40. Cousins S. Rethinking period poverty. *The Lancet*. 2020;395(10227):857-8. DOI: [https://doi.org/10.1016/S0140-6736\(20\)30605-X](https://doi.org/10.1016/S0140-6736(20)30605-X)

Received: January 30, 2023

Approved: September 13, 2023

Published: October 26, 2023



The *Revista Baiana de Enfermagem* use the Creative Commons license – Attribution -NonCommercial 4.0 International. <https://creativecommons.org/licenses/by-nc/4.0/>

This article is an Open Access distributed under the terms of the Creative Commons (CC BY-NC). This license lets others remix, adapt and create upon your work to non-commercial use, and although new works must give its due credit and can not be for commercial purposes, the users do not have to license such derivative works under the same terms.