### **Review Article**

# Social Entrepreneurship Initiatives Addressing Period Poverty: Mapping Strategies and Outcomes

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### **ABSTRACT**

This scoping review explores the landscape of social entrepreneurship initiatives targeting period poverty, a pressing issue affecting millions of individuals worldwide. The evaluation identifies diverse strategies social enterprises employ by systematically mapping existing programs, including producing and distributing affordable menstrual hygiene products, educational outreach on menstrual health, and community engagement initiatives. Through a comprehensive analysis of reported outcomes, this study highlights successful models and challenges entrepreneurs face in this field. Furthermore, it reveals significant gaps in the current literature, suggesting critical areas for future research and intervention. The findings aim to inform practitioners, policymakers, and researchers about effective approaches to combat period poverty. Ultimately, this review seeks to advocate for sustainable solutions that empower individuals and promote gender equity.

### **Keywords**

Period Poverty, Social Entrepreneurship, Menstrual Hygiene, Affordable Products, Educational Outreach, Community Engagement, Sustainable Solutions, Gender Equity, Literature Gaps, Intervention Strategies.

### INTRODUCTION

Period poverty, defined as inadequate access to menstrual hygiene products, education, and sanitation facilities, is a pressing global issue affecting millions of individuals' health, dignity, and education <sup>1</sup>. It is particularly acute in low- and middle-income countries (LMICs), where cultural stigma and economic barriers significantly hinder access to necessary menstrual health resources <sup>1,2</sup>. Patel et al. 2022 conducted a systematic review and estimated that approximately 500 million women and girls globally experience period poverty, leading to

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adverse health outcomes and increased gender inequality <sup>3</sup>. This situation not only affects physical health but also contributes to social exclusion, as menstruation-related

challenges can result in increased absenteeism in schools and workplaces <sup>4,5</sup>. The consequences of period poverty are depicted in Figure 1.

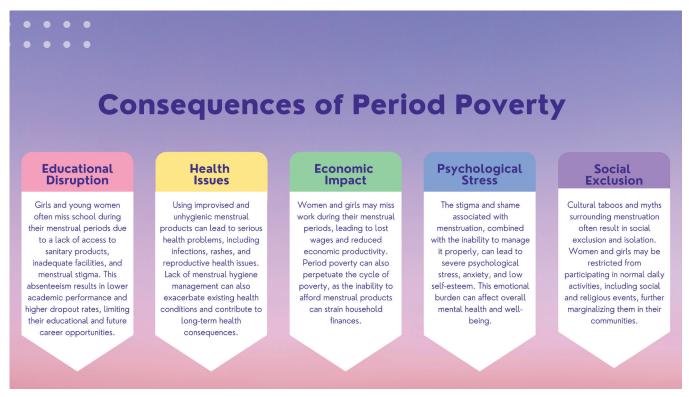


Figure 1: Consequences of Period Poverty.

Image Credit: Nor Faiza Mohd. Tohit

The World Health Organization (WHO) emphasizes that menstrual health is critical to sexual and reproductive health. Yet, millions lack the resources to manage their menstruation safely and with dignity <sup>6</sup>. Inadequate access to menstrual hygiene products can lead to various health problems, including urinary tract infections and reproductive health complications <sup>7</sup>. Moreover, the stigma surrounding menstruation often prevents open discussions about menstrual health, perpetuating a cycle of misinformation and shame <sup>8</sup>. Addressing these issues is vital for individual health and empowerment of women and girls, as improved menstrual health can enhance educational and economic opportunities <sup>9,10</sup>.

Social entrepreneurship has emerged as an innovative solution to combat period poverty, offering sustainable models that provide access to menstrual hygiene products while promoting education and awareness <sup>11</sup>. Social enterprises leverage business principles to create social impact, aiming to address the unmet needs

of marginalized communities <sup>12</sup>. Another research highlights the effectiveness of social entrepreneurship in bridging the gap in menstrual health services and fostering community dialogue <sup>13</sup>. Initiatives such as producing and distributing affordable menstrual products and educational programs about menstrual health have demonstrated positive outcomes in various settings <sup>14,15</sup>. The innovative solutions through social entrepreneurship to combat period poverty are shown in Figure 2.

Despite the promising potential of social entrepreneurship to alleviate period poverty, significant challenges remain in scaling these initiatives and ensuring their sustainability. Cultural stigma, lack of infrastructure, and limited funding are barriers that can hinder the effectiveness of these models <sup>16</sup>. Additionally, there is a critical need for comprehensive data to assess and improve overall menstrual health outcomes that should impact social entrepreneurship initiatives <sup>17-19</sup>. Therefore, extensive research is required to map the



#### Social Entrepreneurship Solutions for **Period Poverty** Community Distribution **Advocacy** Use local women as sales Engage in policy advocacy agents or community hubs to to remove taxes on **Technology** distribute products and menstrual products, improve **Affordable** Solutions **Educational** information, creating job facilities, and include **Products Programs** menstrual health in curricula. opportunities. Create digital platforms and Develop and distribute low-Implement menstrual health apps to provide menstrual cost menstrual products education to dispel myths, health information and using local resources, reduce stigma, and connect users with local making them accessible to empower young people resources. underserved communities. with knowledge.

**Figure 2**: The Essential Role of Men and Boys in Combating Period Poverty. **Image Credit:** The innovative solutions through social entrepreneurship to combat period poverty.

## **Objectives of The Scoping Review**



#### **Identify Strategies**

Systematically identify and categorize the various strategies used by social entrepreneurship initiatives to tackle period poverty, including product distribution, education, advocacy, and community engagement.



#### **Evaluate Outcomes**

Assess the outcomes achieved by these initiatives, such as improvements in menstrual health, educational attainment, economic empowerment, and reductions in menstrual stigma and school absenteeism.



#### **Identify Challenges**

Identify the challenges and barriers faced by these initiatives, including cultural stigma, funding constraints, lack of infrastructure, and other socio-economic factors.



### Highlight Best Practices

Identify and highlight best practices and successful models that can be replicated or scaled in different contexts to address period poverty effectively.



#### Provide Recommendations

Offer actionable recommendations for policymakers, practitioners, and researchers to enhance the effectiveness and scalability of social entrepreneurship initiatives addressing period poverty.

Figure 3: Objective of the Scoping Review. Image Credit: Nor Faiza Mohd. Tohit

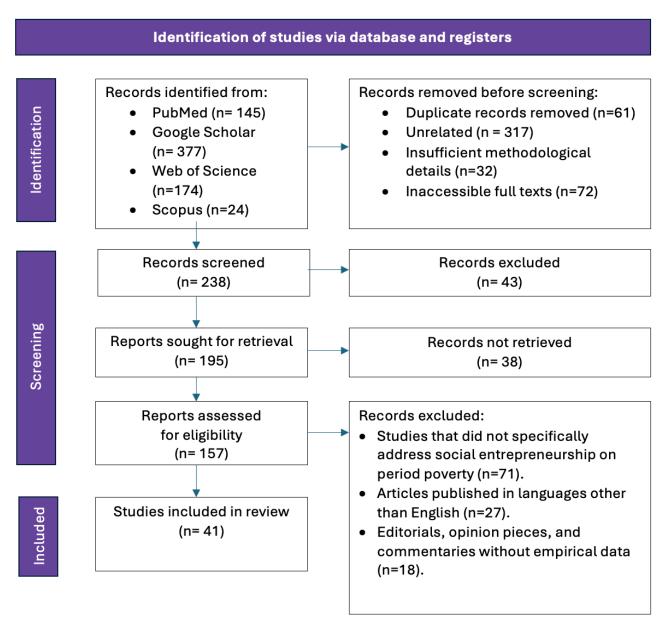


existing landscape of social entrepreneurship initiatives to alleviate period poverty <sup>19</sup>. This review will provide insights (Figure 3) into the strategies employed, outcomes achieved, and challenges social entrepreneurs face, ultimately guiding future research and policy efforts in this essential area.

### **MATERIALS AND METHODS**

This scoping review followed the framework established

by Arksey and O'Malley <sup>20</sup>, further enhanced by Levac et al. <sup>21</sup> recommendations and the Joanna Briggs Institute <sup>22</sup>. The review aimed to comprehensively map the landscape of social entrepreneurship initiatives addressing period poverty, identifying the strategies employed, outcomes achieved, and challenges encountered. Figure 4 provides the methodological flow for the scoping review.



**Figure 4**: A Flowchart Illustrated PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) steps of this review.

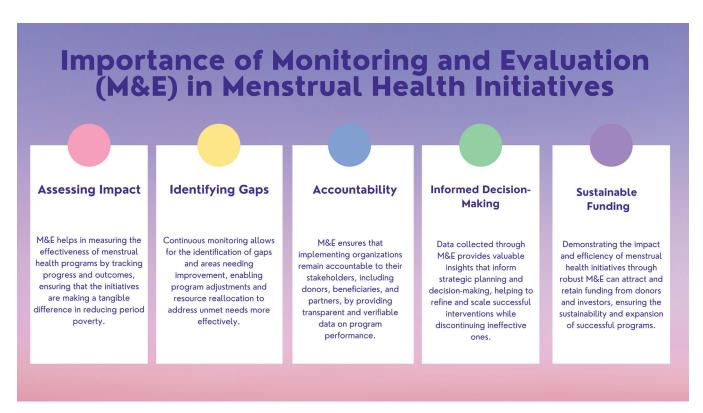
Image Credit: Nor Faiza Mohd. Tohit.



The inclusion and exclusion criteria were applied. To ensure the review's comprehensiveness and relevance, inclusion criteria encompassed articles published in peer-reviewed journals that focused on social entrepreneurship initiatives addressing period poverty, were published in English, conducted in both low- and high-income countries, and spanned from January 2000 to the present. Studies that included qualitative, quantitative, or mixed-methods research were considered. Exclusion criteria involved articles not available in full text, studies that did not specifically address social entrepreneurship on period poverty, articles published in languages other than English, and

editorials, opinion pieces, and commentaries without empirical data.

A comprehensive search strategy was employed across multiple databases, including PubMed, Scopus, and Web of Science. Keywords and MeSH terms were used to capture a wide range of relevant articles. The search terms included combinations of "period poverty," AND "menstrual hygiene management," AND "social entrepreneurship," "menstrual health," AND "sustainable development." Grey literature, including reports from organizations like the WHO, UNFPA, and CDC, was also searched (Figure 5).



**Figure 5**: Importance of Monitoring and Evaluation (M&E) in Menstrual Health Initiatives. **Image Credit:** Nor Faiza Mohd. Tohit.

All identified articles were imported into EndNote for reference management and duplicate removal. Two independent reviewers screened titles and abstracts against the inclusion criteria. Full texts of potentially relevant articles were retrieved and further assessed for eligibility. A standardized data extraction form was used to capture relevant information from the included studies, including study design, geographic location, target population, type of social entrepreneurship

initiative, outcomes, and challenges.

Several strategies were employed to minimize bias. Two reviewers conducted dual independent screening and data extraction. Any discrepancies between reviewers were resolved through discussion. If consensus could not be reached, a third reviewer was consulted. A detailed search strategy and inclusion/exclusion criteria were applied consistently across all studies. A PRISMA



flow diagram was used to document the study selection process <sup>23</sup>.

In cases where reviewers had contradictory views on the inclusion or exclusion of a study or data extraction, the reviewers discussed the specific points of disagreement. They attempted to reach a consensus through dialogue. If consensus could not be reached, the third reviewer independently assessed the study and made a final decision. All decisions and the rationale for inclusion or exclusion were documented to ensure transparency.

A narrative synthesis was conducted to summarize the findings from the included studies. The synthesis focused on mapping the strategies employed by social entrepreneurship initiatives, the outcomes achieved, and the challenges encountered. Thematic analysis was used to identify common themes and patterns across the studies.

### **REVIEW OF LITERATURES**

## Overview of social entrepreneurship in addressing period poverty

Social entrepreneurship has emerged as a transformative approach to addressing period poverty, leveraging innovative business models to deliver sustainable solutions <sup>11,24</sup>. Social enterprises aim to bridge gaps in menstrual health services that traditional public and private sectors have often overlooked by focusing on social impact and financial viability <sup>25,26</sup>. These initiatives are particularly crucial in LMICs, where cultural stigma and economic barriers exacerbate the challenges associated with menstruation <sup>2,27,28</sup>.

One of the primary strategies social enterprises employ in this domain is producing and distributing affordable menstrual hygiene products <sup>15,29</sup>. For instance, enterprises like AFRIpads in Uganda produce reusable sanitary pads that are both cost-effective and environmentally friendly <sup>30</sup>. These products provide a sustainable solution to menstrual hygiene management and create local employment opportunities, thereby contributing to women's economic empowerment in the community <sup>31</sup>. Studies have shown that access to affordable menstrual products can significantly reduce school absenteeism among girls, thereby promoting educational attainment and gender equality <sup>32,33</sup>.

In addition to product provision, social enterprises often focus on education and awareness campaigns to combat the stigma and misinformation surrounding menstruation and require policy revolutions <sup>2,8,34,35</sup>.

Organizations like Days for Girls International conduct workshops and training sessions to educate girls and communities about menstrual health and hygiene <sup>31</sup>. These educational initiatives are crucial in breaking the silence around menstruation and fostering a more supportive and informed community environment <sup>2,36,37</sup>. Research indicates comprehensive menstrual health education can improve health outcomes and enhance adolescent girls' self-esteem <sup>38,39</sup>.

Social entrepreneurship in addressing period poverty also involves advocacy and policy engagement <sup>40,41</sup>. By collaborating with governments, NGOs, and international organizations, social enterprises work to influence policies that support menstrual health initiatives <sup>7</sup>. It has been reported that the Menstrual Health Hub (MH Hub) connects various stakeholders to advocate for policy changes and increased funding for menstrual health programs <sup>42</sup>. Such collaborative efforts are essential for creating a supportive policy environment to sustain and scale menstrual health initiatives <sup>43-45</sup>.

Despite the promising potential social entrepreneurship to alleviate period poverty, considerable challenges remain, especially in LMICs 7. Cultural stigma, lack of infrastructure, and limited funding are substantial barriers that can hinder the effectiveness of these models <sup>2,46,47</sup>. Additionally, there is a critical need for comprehensive data to assess the impact of social entrepreneurship initiatives on menstrual health outcomes. Rigorous evaluations and impact assessments are necessary to identify best practices and inform future interventions <sup>48</sup>.

To address these challenges, a scoping review was conducted to map the existing landscape of social entrepreneurship initiatives to alleviate period poverty. The review focused on identifying the strategies employed, outcomes achieved, and challenges social entrepreneurs face. The findings from this review provide valuable insights that can guide future research, policy efforts, and the scaling of successful models in this critical area.

### Mapping strategies and outcomes of initiatives

Social entrepreneurship initiatives addressing period poverty have employed various strategies to provide sustainable solutions and improve menstrual health outcomes <sup>15</sup>. One prevalent strategy involves producing



and distributing affordable menstrual hygiene products <sup>49</sup>. Social enterprises such as Sustainable Health Enterprises (SHE) in Rwanda produce affordable and eco-friendly sanitary pads from locally sourced banana fibers, reducing economic and environmental barriers to menstrual hygiene management <sup>50</sup>. Such social initiative enhances access to menstrual products and promotes local economic development by creating jobs for women in the community <sup>51</sup>. Studies have shown that access to affordable menstrual products can significantly reduce school absenteeism among girls, thereby improving their educational outcomes and contributing to gender equality <sup>5,52,53</sup>.

Another key strategy is the implementation of educational and awareness campaigns aimed at dispelling myths and breaking the stigma associated with menstruation 8,54,55. Organizations like ZanaAfrica in Kenya conduct comprehensive menstrual health education programs targeting girls and boys, fostering a more informed and supportive community environment <sup>56</sup>. These educational initiatives are crucial in empowering girls with knowledge about their bodies and menstrual health, which can lead to improved health outcomes and increased self-esteem <sup>57-59</sup>. Research indicates that menstrual health education can influence community attitudes, leading to more supportive environments for girls and women <sup>39,60,61</sup>.

Social entrepreneurship initiatives have also focused on advocacy and policy engagement to create a supportive environment for menstrual health programs 62,63. The Pad Project, which gained international recognition through the documentary "Period. End of Sentence", advocates for policy changes and increased funding for menstrual health initiatives 64. Social entrepreneurship NGOs. collaborating with governments, international organizations, social enterprises work to influence policies that support sustainable menstrual health solutions 41,63,65. Such advocacy efforts are essential for creating a conducive policy environment to sustain and scale menstrual health initiatives 66.

Despite the promising potential of social entrepreneurship to address period poverty, significant challenges remain <sup>11</sup>. Cultural stigma, lack of infrastructure, and limited funding are substantial barriers regarding menstrual hygiene that can hinder the effectiveness of these models <sup>67-69</sup>. Additionally, there is a critical need for comprehensive data to assess

the impact of social entrepreneurship initiatives on menstrual health outcomes <sup>70</sup>. Rigorous evaluations and impact assessments are necessary to identify best practices and inform future interventions <sup>71-74</sup>.

### Identifying gaps and challenges in the literature

Despite the considerable progress made by social entrepreneurship initiatives in addressing period poverty, several gaps and challenges persist in the literature. These gaps hinder effective interventions' complete understanding and scalability, limiting the potential impact on menstrual health outcomes.

One significant gap in the literature is the lack of comprehensive data on the long-term impact of social entrepreneurship initiatives. While numerous case studies and pilot projects document immediate positive outcomes, such as increased school attendance and improved menstrual hygiene practices <sup>5,75-77</sup>, longitudinal studies are scarce to assess these initiatives' sustained impact over time <sup>78</sup>. This gap makes it challenging to determine whether short-term successes translate into long-term benefits for the target populations <sup>79,80</sup>.

Another critical gap is the limited focus on the intersectionality of period poverty. Most studies tend to treat period poverty as a standalone issue without adequately considering how it intersects with other social determinants of health, such as poverty, gender inequality, and education <sup>62,81</sup>. For instance, rural and marginalized communities often face compounded challenges exacerbating period poverty (Figure 6), such as lack of access to clean water and sanitation facilities <sup>82-84</sup>. Addressing these intersecting factors is crucial for developing holistic and sustainable solutions.

The literature also reveals a gap in the geographic distribution of research on period poverty. Most studies and interventions are concentrated in specific regions, primarily sub-Saharan Africa and South Asia <sup>85,86</sup>. This regional focus leaves significant gaps in understanding period poverty in other parts of the world, such as Latin America, the Middle East, and Eastern Europe <sup>87-89</sup>. Expanding research to these underrepresented regions is essential for developing a global understanding of period poverty and tailoring interventions to diverse cultural and socio-economic contexts <sup>46,90</sup>.

Cultural stigma and taboos surrounding menstruation pose another challenge that is insufficiently addressed in the literature. While some studies highlight the



# Challenges Exacerbating Period Poverty in Rural and Marginalized Communities

### Limited Access to Menstrual Products

Rural and marginalized areas often lack retail outlets or supply chains for affordable menstrual hygiene products, forcing women and girls to use unsafe alternatives.

### Inadequate Sanitation Facilities

Many communities lack proper sanitation facilities, such as clean toilets and running water, making it difficult to manage menstrual hygiene safely and discreetly.

### Cultural Stigma and Taboos

Deep-rooted cultural beliefs and taboos surrounding menstruation can lead to social exclusion and discrimination, preventing open discussion and education about menstrual health.

### **Economic Constraints**

High levels of poverty in these communities make it difficult to afford menstrual products, prioritizing basic needs like food and shelter over menstrual hydiene.

### Lack of Education

Insufficient education on menstrual health and hygiene perpetuates myths and misinformation, leading to poor menstrual practices and increased health risks.

**Figure 6**: Challenges exacerbating period poverty in rural and marginalized communities. **Image Credit:** Nor Faiza Mohd. Tohit

# Strategies to Combat Cultural Beliefs About Menstruation

# Community Education Programs

Implement comprehensive education programs that involve men, women, and adolescents to dispel myths and provide accurate information about menstruation, promoting a culture of understanding and support.

### Engage Local Leaders

Work with community leaders, religious figures, and influencers to advocate for menstrual health and challenge harmful beliefs. Their endorsement can help shift community attitudes and norms.

### Peer Education

Train local women and girls as peer educators to spread accurate information and share personal experiences about menstrual health, creating a ripple effect of knowledge and acceptance within the community.

### Media Campaigns

High levels of poverty in these communities make it difficult to afford menstrual products, prioritizing basic needs like food and shelter over menstrual hygiene.

### Support Groups and Safe Spaces

Establish support groups and safe spaces where women and girls can discuss menstrual health openly, share experiences, and seek advice. These environments foster mutual support and reduce stigma.

Figure 7: Strategies to Combat Cultural Beliefs About Menstruation.

Image Credit: Nor Faiza Mohd. Tohit



detrimental effects of menstrual stigma on girls' psychological well-being and educational outcomes <sup>91,92</sup>, there is a lack of comprehensive strategies to effectively combat these deeply rooted cultural beliefs <sup>93</sup> (Figure 7). Social entrepreneurship initiatives must incorporate culturally sensitive approaches to education and advocacy to overcome these barriers and foster a supportive environment for menstrual health <sup>94</sup>.

Funding constraints and sustainability are additional challenges frequently cited in the literature. Many social entrepreneurship initiatives rely on short-term funding from grants and donations, limiting their ability to scale and sustain their operations 95. There is a need for innovative financing mechanisms that ensure the long-term viability of these initiatives. For instance, impact investing and social impact bonds could provide more stable and sustainable funding sources <sup>96,97</sup>.

The literature also points to a lack of standardized metrics for evaluating the effectiveness of menstrual health interventions. Without consistent and comparable measures, assessing the relative success of different initiatives and identifying best practices is complex <sup>98</sup>. Developing standardized evaluation frameworks and metrics would enable more rigorous assessment and comparison of interventions, thereby facilitating the identification and replication of successful models <sup>99</sup>.

Moreover, the role of men and boys in addressing period poverty is an area that remains underexplored (Figure 8). Engaging men and boys are crucial for challenging and changing the cultural norms and stigmas associated with menstruation <sup>8,100</sup>. However, most interventions and research focus primarily on women and girls, neglecting the potential impact of involving men and boys as allies in menstrual health advocacy <sup>101,102</sup>.

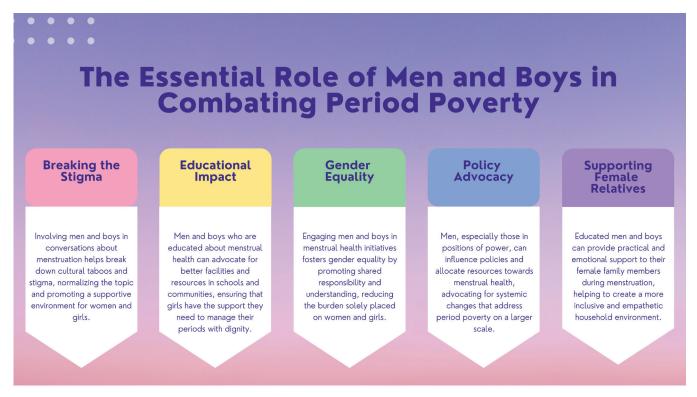


Figure 8: The Essential Role of Men and Boys in Combating Period Poverty.

Image Credit: Nor Faiza Mohd. Tohit

To address these gaps and challenges, future research should prioritize longitudinal studies that assess the sustained impact of social entrepreneurship initiatives on menstrual health outcomes. Researchers should also adopt an intersectional approach considering the multiple and overlapping factors contributing to period

poverty. Expanding the geographic focus of research to include underrepresented regions will provide a more comprehensive understanding of the global landscape of period poverty. Additionally, culturally sensitive strategies to combat menstrual stigma, innovative financing mechanisms, standardized evaluation metrics,



and the engagement of men and boys are essential components for advancing the field.

Addressing these gaps and challenges, the literature on social entrepreneurship and period poverty can provide more robust evidence to inform policy and practice. This, in turn, will enhance the effectiveness and scalability of interventions, ultimately improving menstrual health outcomes for women and girls worldwide.

## Recommendations for Policy, Practice, and Future Research

Addressing period poverty through social entrepreneurship requires a multifaceted approach that includes policy changes, practical interventions, and focused research. The following recommendations aim to guide policymakers, practitioners, and researchers in enhancing the effectiveness and sustainability of menstrual health initiatives.

### **Policy recommendations**

Policymakers should prioritize menstrual health as a critical component of public health and gender equality agendas. Governments need to implement policies that ensure universal access to affordable menstrual products. For example, tax exemptions on sanitary products, often called "tampon tax" removal, can make these essentials more accessible to women and girls 103-<sup>105</sup>. Additionally, policies should mandate the inclusion of menstrual health education in school curricula to ensure that girls and boys receive comprehensive information about menstruation 39,106. Governments should also invest in improving water, sanitation, and hygiene (WASH) facilities in schools and public places, as adequate facilities are essential for managing menstruation with dignity 107-109. Collaboration between government bodies, NGOs, and private sectors is crucial for successfully implementing menstrual health policies. Public-private partnerships can mobilize resources and expertise to scale successful social entrepreneurship models 62,110. Moreover, international organizations should advocate for menstrual health to be included in global development agendas, such as the Sustainable Development Goals (SDGs), to ensure that it receives the attention and funding it deserves 9,111.

#### **Practice recommendations**

Practitioners should adopt a holistic approach

to menstrual health beyond product provision. Comprehensive programs should include education, advocacy, and community engagement to address the multifaceted nature of period poverty 112. Social enterprises should leverage local resources and knowledge to develop culturally sensitive and contextspecific solutions. For instance, using locally available materials for menstrual products can reduce costs and increase community acceptance 14,113,114. Training and capacity-building initiatives are essential for empowering local communities to sustain menstrual health programs. Practitioners should work with community leaders, health workers, and educators to build their capacity to deliver menstrual health education and services 2,115,116. Engaging men and boys in menstrual health programs is also crucial for challenging and changing cultural stigmas associated with menstruation 117,118. Monitoring and evaluation (M&E) should be integral to all healthcare programs. including menstrual health initiatives <sup>119,120</sup> (Figure 8). Practitioners need to establish robust M&E systems to track progress, assess impact, and identify areas for improvement. Standardized metrics and frameworks for evaluating menstrual health interventions will facilitate comparing and replicating successful models 99,121.

### **Future Research Recommendations**

Future research should address the gaps identified in the literature by prioritizing longitudinal studies that assess the sustained impact of social entrepreneurship initiatives on menstrual health outcomes. These studies will provide <sup>26,122</sup>. Valuable insights into different interventions' long-term benefits and challenges Researchers should also adopt an intersectional approach that considers the multiple and overlapping factors contributing to period poverty, such as poverty, gender inequality, and education <sup>123</sup>.

Expanding the geographic focus of research to include underrepresented regions, such as Latin America, the Middle East, and Eastern Europe, is essential for developing a global understanding of period poverty. Comparative studies across cultural and socioeconomic contexts will help identify best practices and context-specific solutions <sup>124</sup>. Cultural sensitivity is a critical aspect of menstrual health research. Researchers must develop and validate culturally appropriate tools



and methods for studying menstrual health in diverse populations. Participatory research approaches that involve community members in the research process can enhance the relevance and acceptability of findings <sup>125</sup>. Future research should also focus on innovative financing mechanisms for menstrual health initiatives. Studies examining the effectiveness of impact investing, social impact bonds, and other financing models will provide insights into sustainable funding strategies for menstrual health programs <sup>126</sup>.

Finally, there is a need for research on the role of men and boys in menstrual health initiatives. Understanding their perspectives and experiences can inform strategies for engaging them as allies in promoting menstrual health and challenging cultural stigmas <sup>8,62,113,127</sup>. By addressing these policy, practice, and future research recommendations, stakeholders can enhance the effectiveness and sustainability of social entrepreneurship initiatives to alleviate period poverty. A coordinated and comprehensive approach is essential for ensuring that all women and girls can manage their menstruation with dignity and without barriers.

### Strengths and Limitations of the Scoping Review

This scoping review offers several strengths in understanding social entrepreneurship initiatives addressing period poverty. One of the primary strengths is the comprehensive and systematic methodology employed, which adheres to established frameworks by Arksey and O'Malley and recommendations from Levac et al. <sup>20,21</sup>. By rigorously following these methodologies, the review ensures a thorough and transparent search process, capturing a wide range of relevant studies across multiple databases and grey literature sources. This breadth of coverage provides a robust foundation for mapping the landscape of social entrepreneurship in menstrual health.

Another significant strength is the dual independent screening and data extraction process. By having two reviewers independently assess each study for inclusion and extract data, the review minimizes the risk of bias and increases the reliability of the findings. Any reviewer discrepancies were resolved through discussion or consultation with a third reviewer, ensuring the final dataset was as accurate and comprehensive as possible. Additionally, standardized data extraction forms

facilitated consistent data collection across studies, enhancing the comparability of findings.

The review also benefits from its interdisciplinary approach, incorporating studies from public health, social sciences, and development literature. This interdisciplinary lens allows for a more holistic understanding of the multifaceted issue of period poverty and the various strategies social entrepreneurs employ to address it. The review captures diverse insights and perspectives by considering qualitative, quantitative, and mixed-methods research, enriching the overall analysis.

Despite these strengths, the scoping review also has several limitations that should be acknowledged. One limitation is the exclusion of non-English language articles, which may have resulted in the omission of relevant studies conducted in non-English-speaking regions. This language bias could limit the generalizability of the findings to a global context. Another limitation is the reliance on published and grey literature accessible through specific databases and organizational websites. Some relevant initiatives and outcomes may not be documented in these sources, leading to potential gaps in the review.

Additionally, the review focused on studies published from January 2000 onwards, which may exclude earlier initiatives that contributed to the foundational understanding of menstrual health and social entrepreneurship. While this timeframe was chosen to capture recent developments and innovations, it may overlook valuable historical context.

Lastly, the scoping review's broad inclusion criteria, while beneficial for capturing a wide range of studies, may also result in the inclusion of studies with varying levels of methodological rigor. The review did not assess the quality of the included studies, which could affect the strength of the evidence presented. This scoping review provides a comprehensive and interdisciplinary mapping of social entrepreneurship initiatives addressing period poverty, with strengths in systematic methodology and breadth of coverage. However, limitations related to language bias, publication sources, timeframe, and methodological rigor should be considered when interpreting the findings. Future research should address these limitations to build on the



insights generated by this review.

### CONCLUSION

This scoping review has provided a comprehensive mapping of social entrepreneurship initiatives addressing period poverty, highlighting the innovative strategies employed, the outcomes achieved, and the challenges encountered. The review underscores the significant potential of social entrepreneurship to offer sustainable solutions to menstrual health challenges, particularly in low- and middle-income countries where traditional public and private-sector interventions often fall short. Key findings from the review indicate that social enterprises effectively leverage local resources and innovative business models to produce affordable menstrual hygiene products, conduct educational and awareness campaigns, and engage in advocacy and policy work. These initiatives improve menstrual health outcomes and contribute to broader social and economic empowerment, particularly for women and girls.

However, the review also identifies several gaps and challenges that need to be addressed to enhance the impact and sustainability of these initiatives. There is a critical need for longitudinal studies to assess the longterm outcomes of social entrepreneurship interventions in menstrual health. An intersectional approach that considers the multifaceted nature of period poverty, including its intersections with poverty, gender inequality, and education, is essential for developing holistic solutions. Geographic disparities in research and interventions highlight the need for expanded focus on underrepresented regions such as Latin America, the Middle East, and Eastern Europe. Moreover, culturally sensitive strategies are crucial for overcoming menstrual stigma and fostering supportive environments, and innovative financing mechanisms are needed to ensure the sustainability of menstrual health initiatives.

By addressing these gaps and challenges, future research, policy efforts, and practice can build on the insights generated by this review to develop more effective and scalable models for alleviating period poverty. A

coordinated and comprehensive approach involving collaboration between governments, NGOs, the private sector, and communities is essential for ensuring that all women and girls can manage their menstruation with dignity and without barriers. In conclusion, social entrepreneurship holds significant promise in addressing period poverty, but much work still needs to be done. By leveraging the strengths and addressing the limitations identified in this review, stakeholders can enhance the impact of menstrual health initiatives and contribute to the broader goals of public health, gender equality, and sustainable development.

### **Consent for Publication**

The author reviewed and approved the final version and has agreed to be accountable for all aspects of the work, including any accuracy or integrity issues.

### **DISCLOSURE**

The author declares that they do not have any financial involvement or affiliations with any organization, association, or entity directly or indirectly related to the subject matter or materials presented in this editorial. This includes honoraria, expert testimony, employment, ownership of stocks or options, patents, or grants received or pending royalties.

### **Data Availability**

Information is taken from freely available sources for this editorial.

### **Authorship Contribution**

All authors contributed significantly to the work, whether in the conception, design, utilization, collection, analysis, and interpretation of data or all these areas. They also participated in the paper's drafting, revision, or critical review, gave their final approval for the version that would be published, decided on the journal to which the article would be submitted, and made the responsible decision to be held accountable for all aspects of the work.



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