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Cultural Barriers and Periods Poverty: Addressing Menstrual Health Needs Around the World

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DECLARATION

I, ARYA SOMAN PILLAI declare that this dissertation has been composed by myself, that the work contained herein is entirely my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or qualification, in whole or in part, except as specified.

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Date: 14/05/2025

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Abstract

Background

Period poverty continues to be a worldwide public health concern, impacting women and girls disproportionately, particularly in low- and middle-income nations. Cultural taboos, stigma, and misinformation related to menstruation worsen obstacles to accessing menstrual hygiene products, education, and facilities. This dissertation examines the impact of cultural obstacles on period poverty and analyses approaches designed to tackle menstrual health requirements globally.

Methods

A systematic literature review was performed, analysing peer-reviewed research published from 2013 to 2023. Thematic analysis was employed to pinpoint crucial themes concerning cultural stigma, educational deficiencies, affordability and availability of menstrual products, and the efficacy of interventions. The inclusion criteria emphasized research related to menstruation in various cultural settings, encompassing adolescents, refugees, and people with disabilities.

Results

Research indicated that cultural norms frequently sustain silence and embarrassment regarding menstruation, preventing individuals from seeking assistance or maintaining proper menstrual hygiene. Financial limitations exacerbate these difficulties. The review also pointed out various promising strategies, such as school-based menstrual education, provision of free or subsidized products, community involvement initiatives, and policy changes. Approaches that are culturally aware and engage local stakeholders were identified as more effective in alleviating stigma and enhancing menstrual health results.

Conclusion

Cultural obstacles greatly influence the experience of menstruation and play a role in period poverty in various global settings. Confronting these obstacles necessitates diverse approaches that combine education, community involvement, policy formulation, and product availability. Future public health efforts must emphasize culturally sensitive strategies to advance menstrual equity and support the dignity and health of menstruators globally.

Keywords: period poverty, cultural barriers, menstrual health, stigma, public health, global health, menstrual equity

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ABBREVIATIONS

CASP – Critical Appraisal Skills Programme

JBI – Joanna Briggs Institute

LGBTQ+ – Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, and others

LMICs - Low and Middle-Income Countries

MHM – Menstrual Hygiene Management

NGO – Non-Governmental Organization

NGO – Non-Governmental Organization

PEO – Population, Exposure, Outcome

PRISMA – Preferred Reporting Items for Systematic Reviews and Meta-Analyses

SDGs – Sustainable Development Goals

SLR – Systematic Literature Review

UN – United Nations

UNESCO – United Nations Educational, Scientific and Cultural Organization

WHO – World Health Organization

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Introduction to the Topic

Puberty, beginning around ages 9 to 11, signifies the transition to adulthood, marked by menarche in girls. Women experience about 400 menstrual cycles, totalling roughly 67 months of bleeding. Menstruation, while biological, is influenced by sociocultural factors, with attitudes and understanding often shaped by superstitions and misconceptions regarding menstrual health (Mohammad Ali Morowatisharifabad et al., 2018).

Menstrual poverty, an international health concern, has been overlooked for an extended period. This scenario is marked by an absence of menstrual products, education, and hygiene services. Essentially, period poverty illustrates how many women face injustice and inequality because of their menstrual cycle (Jaafar, Ismail, and Azzeri, 2023).

About half of the world's menstrual population suffers from period poverty, a serious global issue linked to several Sustainable Development Goals (Critchley et al., 2020). Prejudices, cultural norms, discrimination, and institutional barriers exacerbate its effects on health on a physiological, emotional, and psychological level. Each month, many menstruating people struggle to get necessary personal hygiene items. Individuals, educators, healthcare providers, legislators, and researchers must all support menstruation equity and advocate for laws that increase access to sanitary goods and information. In addition to combating period poverty, international initiatives that prioritise capacity building may empower menstruators and advance equality, autonomy, and dignity (Mann and Byrne, 2023).

Millions of girls and women across the globe face period poverty, which is characterized by insufficient access to menstrual products, education about menstruation, or proper sanitation and hygiene facilities. Moreover, cultural norms, stigma, and taboos related to menstruation impose additional obstacles to attaining menstrual health (Babbar et al., 2021).



Figure 1: Statistics on Period Poverty from ActionAid UK

Barriers to menstrual health deny basic human rights for all who menstruate, impacting UN Sustainable Development Goals like poverty, education, health, water, sanitation, and gender equality, making menstrual health vital for achieving these goals by 2030 (Babbar et al., 2021).

Improving menstrual health for women and girls is crucial for dignity and gender equality. Menstrual health management (MHM) involves access to clean materials, private spaces, and education on menstrual issues. However, stigma and societal norms complicate support, impacting access based on socio-economic status and location, making MHM a challenging intersection of health, education, and WASH (Rossouw and Ross, 2021).

Individuals who menstruate frequently do not have access to the essential resources needed for safe and healthy menstruation, leading to missed educational and employment opportunities. Regardless, minimal global action has been undertaken to tackle these disparities. The Sustainable Development Goals (SDGs) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) offer opportunities for action. CEDAW does not reference menstruation, ignoring an important worldwide concern (United Nations 2009). Conversely, six SDGs focused on poverty, health, education, gender equality, and sanitation can be utilized to tackle period poverty. Immediate measures from UN organizations and governments, especially the Commission on the Status of Women, are crucial (Wilson 2022).

Globally, 63% of schools had a basic sanitation service in 2019

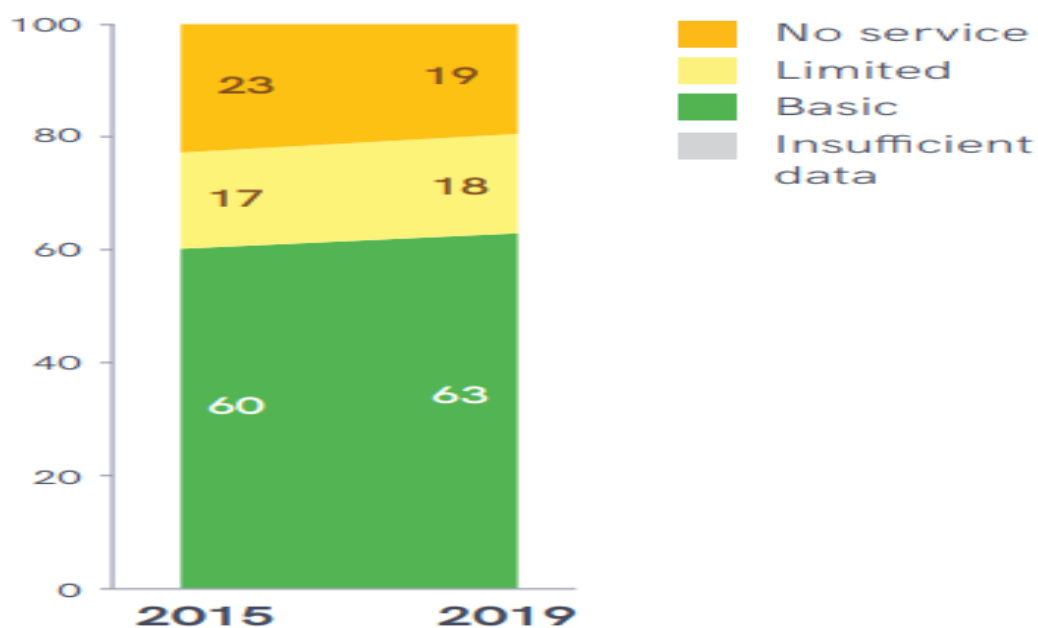


Figure 2: Global coverage of sanitation in schools,2019(%)

7 out of 8 SDG regions had estimates for basic sanitation services in 2019

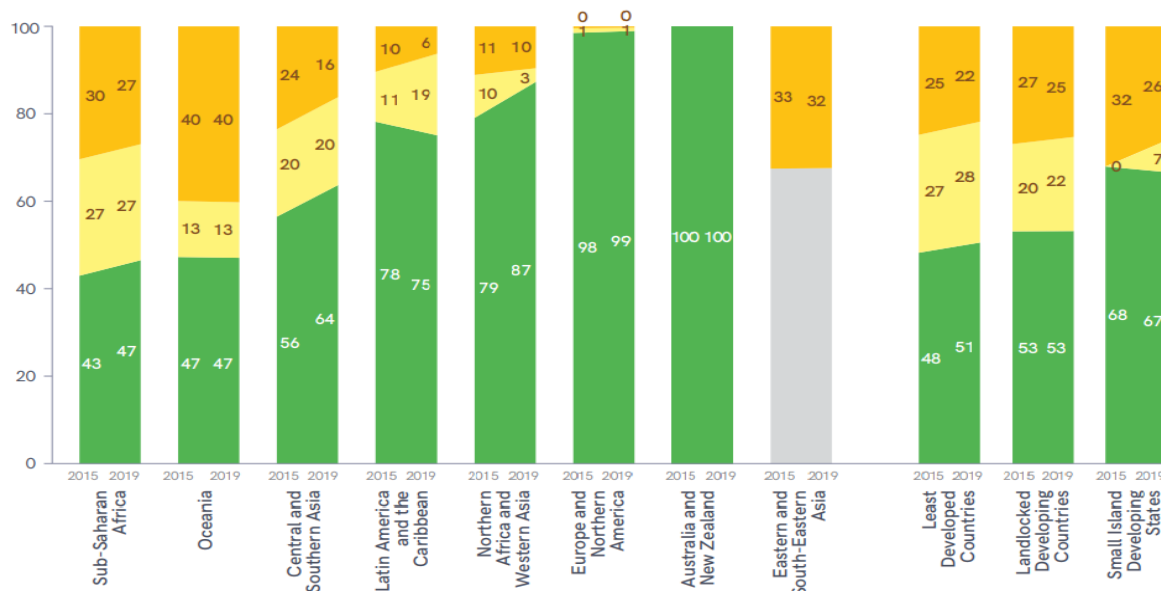


Figure 3: Regional Coverage of sanitation in schools,2019(%)

Image: WHO/UNICEF

(Masterson, 2022)

The given graphs depict worldwide and regional advancements in the availability of basic sanitation services in schools from 2015 to 2019. By 2019, 63% of schools across the globe offered basic sanitation services, showing a minor rise from 60% in 2015. While areas such as Europe, North America, and Australia/New Zealand achieved near-universal coverage, regions like Sub-Saharan Africa and Central/Southern Asia fell short, as numerous schools still lack sufficient facilities. For instance, Sub-Saharan Africa had merely 47% coverage, with 27% of schools lacking any sanitation facilities.

This dissertation examines the connection between cultural obstacles and period poverty, analysing how norms, taboos, and conventional beliefs influence menstrual health outcomes. Although there has been increasing awareness of material hardship in period poverty, cultural limitations remain insufficiently explored. By concentrating on the cultural aspects of menstrual health, this research offers an essential perspective on a global problem rooted in structural inequality and socio-cultural conventions.

1.2 Background and Current Context

1.2.1 Menstrual Health as a Public Health Issue

Menstrual health management (MHM) encompasses the availability of sanitary menstrual products, privacy, water and sanitation facilities, and information regarding menstruation (UNICEF, 2019).

Girls and women often confront discriminatory attitudes regarding menstruation, leading to feelings of shame and embarrassment. In schools, they face challenges like stress, teasing, and restrictions affecting attendance and food choices. It's essential for girls to engage in daily activities during their period without stigma. Involvement from boys, men, and community leaders is crucial for transforming perceptions and fostering supportive environments and policies (UNICEF,2019).

Period poverty emphasizes women's rights to safe menstrual products and hygiene services. Understanding menstruation helps reduce stigma and discrimination, improving access to essential supplies and menstrual health information (Jaafar, Ismail and Azzeri, 2023).

More than 500 million individuals globally do not have access to essential MHM resources. In sub-Saharan Africa, over 50% of girls of school age lack access to menstrual supplies or private restrooms in educational institutions (UNESCO, 2019).

1.2.2 Cultural Dimensions of Menstrual Health

Although there is growing focus on the material and infrastructural elements of period poverty, the cultural dimensions are still not sufficiently examined. Cultural taboos and strongly ingrained beliefs about menstruation can alienate and stigmatize those who menstruate. In many cultures, menstruation is regarded as unclean or shameful, resulting in restricted practices, social isolation, and mental anguish (Rossouw and Ross, 2021).

In South Asia, especially in certain areas of India and Nepal, menstruating people frequently face the custom of 'chhaupadi,' a cultural practice that segregates them during their menstrual cycles. They are barred from accessing kitchens, temples, or even resting in their own residences (Babbar et al., 2021). These traditions not only endanger menstruating individuals with physical injury and inadequate hygiene but also reinforce gender-based inequality.

Even in urban or advanced environments, the cultural unease about menstruation remains. Open discussions regarding periods are uncommon, and girls frequently lack proper preparation for menarche. Educators, guardians, and health experts often shy away from talking about menstruation because of shame or insufficient understanding, leading to confusion and stigma (Mojgan Mirghafourvand et al., 2024).

This quietness strengthens adverse stereotypes and inhibits girls and women from demanding their menstrual requirements. Myths portraying menstruation as a "curse" or menstrual blood as unclean persist in many cultures, shaping behaviours and limiting access to proper education (Rossouw and Ross, 2021).

1.2.3 Intersectionality and Disparities in Access

Access to menstrual health resources varies and is shaped by social determinants like income, location, disability, refugee status, and caste. Marginalised populations, including homeless individuals, individuals with impairments and those residing in crisis zones, encounter heightened difficulties in handling their menstrual health (UNICEF, 2019).

Even in prosperous nations such as the UK, almost 19% of menstruating individuals indicate that they miss work because of insufficient menstrual supplies or unsuitable workplace amenities. Emotional discomfort and shame are frequently noted, indicating that period poverty is not limited to developing areas but is a worldwide concern (The State of Period Equity in the UK Breaking Cycles of Exclusion, 2024).

Discrimination interacts with period poverty in various complex manners. For example, menstruating people in refugee camps frequently do not have access to hygiene supplies and

safe disposal options, which significantly undermines their physical well-being and dignity (Kaur, Kaur and Kaur, 2018; Jaafar, Ismail and Azzeri, 2023).

1.2.4 Policy Gaps and Global Action

While there have been some advancements in menstrual health like Scotland being the first nation to offer free menstrual products to all residents, global progress continues to be unequal. Significantly, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) fails to specifically reference menstruation, even though it plays a crucial role in women's lives (United Nations, 2009).

Period products should be free for everyone. Eliminating the "tampon tax," which still exists in 30 U.S. states, is a feasible step for governments. Many countries, including Canada and Kenya, have already abolished this biased tax. To address menstruation and period poverty, it's crucial to evolve our understanding, recognizing that menstruation is not solely a women's rights issue. Inclusive language, like "people who menstruate," helps acknowledge the experiences of women, non-binary individuals, trans men, and others (Wilson, 2022).

1.2.5 Addressing the Research Gap

Although awareness of period poverty is increasing, much of the research emphasizes concrete elements like product access and sanitation facilities, frequently overlooking the less apparent yet deeply embedded cultural obstacles. These encompass menstrual shame, silence, and detrimental cultural beliefs that influence attitudes and actions (Rossouw and Ross, 2021).

This research tackles this gap by methodically examining literature to understand how cultural norms and taboos influence menstrual health outcomes worldwide. By emphasizing socio-cultural aspects instead of solely economic or policy-based explanations, the research enhances a more comprehensive grasp of period poverty and seeks to guide culturally aware health initiatives (Babbar et al., 2021; Wilson, 2022).

1.3 Rationale for Research

Millions of people in the UK struggle to get the products, knowledge, and support they need for menstruation health, despite the vision of a society where menstrual cycles do not define individuals (Weiss-Wolf, 2017). Due to physical and mental health problems, which are made worse by a lack of supplies at work, over 19% of people who have periods frequently leave work. This results in an extra day off from work or school every month. Menstruation's

persistent stigma increases anxiety and shame, underscoring the need for more access and education (The State of Period Equity in the UK, 2024).

According to Kaur, Kaur, and Kaur (2018), menstruating people's access to sanitary and safe washing facilities, menstrual products, and accurate information on menstruation is associated with menstrual health. Menstrual health must also be seen as a tool for enhancing health and is linked to the experiences of the menstrual cycle. Embracing the stigma, discrimination, and taboos around menstruation is another facet of menstrual wellness. There are four It is essential to promote menstrual health to attain gender parity and enhance the health of those who experience periods. According to Medina-Perucha et al. (2020), menstruation health has recently been suggested as a crucial indicator.

This study aims to explore how cultural obstacles influence menstrual health results and contribute to period poverty. It will analyse peer-reviewed research from various areas to emphasize shared trends and challenges unique to each region. The scope of the research is determined by its emphasis on cultural elements, instead of solely economic or policy-related aspects. This systematic literature review seeks to guide culturally informed menstrual health policies and initiatives worldwide.

1.4 Research Question

"How are menstrual health outcomes and period poverty around the world affected by cultural barriers?"

1.5 Research Aim

To investigate the impact of cultural obstacles on menstrual health results and their role in global period poverty via a systematic literature review.

1.6 Research Objectives

- Examine societal perceptions and taboos related to menstruation.
- Evaluate how cultural norms and economic disparity affect the availability of menstrual health products.
- Determine ways to get around these obstacles.

1.7 Chapter Summary

This chapter presents the subject of period poverty as a complex international health and human rights concern, with an emphasis on its cultural aspects. It starts by characterizing menstruation as a biological and socio-cultural phenomenon, influenced by stigma, taboos, and superstitions. Though increasing focus has been placed on the material facets of

menstrual health like access to supplies and hygiene cultural obstacles are still not thoroughly examined.

The chapter discusses the detrimental effects of period poverty on education, health, and gender equality, linking these issues to various UN Sustainable Development Goals. It emphasizes that effective Menstrual Health Management (MHM) necessitates both infrastructure and public education to challenge discriminatory cultural norms. The chapter highlights the intersectional challenges faced by marginalized groups, including refugees and the homeless, noting that even in affluent countries like the UK, 19% miss work due to menstrual issues. Though there's some progress in policies, global action is inconsistent, and menstruation is often excluded from treaties. It identifies a research gap in cultural studies of menstrual health and outlines the study's objectives for a systematic literature review.

CHAPTER 2: Literature Review

2.1 Introduction to the Literature Review Chapter

This chapter offers an extensive overview of academic literature concerning the effects of cultural barriers on menstrual health results and period poverty. The review rigorously analyses worldwide research outcomes, concentrating on how cultural beliefs, taboos, and stigma influence access to menstrual products, education, and hygiene practices. This chapter assesses the level and characteristics of current research through thematic categorization, emphasizes significant trends, and pinpoints gaps in knowledge. This examination guides the methodological decisions of the present study and supports its emphasis on cultural factors in menstrual health discussions, paving the way for the systematic literature review.

2.2 Review of Existing Literature

2.2.2 The Concept of Period Poverty

Menstrual poverty, a neglected international health issue, involves inadequate access to menstrual products, education, and sanitation, leading to injustice and inequality for many women during their reproductive years, highlighting significant community impacts (Jaafar, Ismail and Azzeri, 2023).

Barriers to menstrual products, education, and sanitation include social, cultural, economic, and political factors. Period poverty leads to health issues like depression and urinary tract infections. There are various types of period poverty, such as access and affordability issues, embarrassment, cultural isolation, inadequate facilities, and loneliness (Michel et al., 2022).

People in low-income nations, particularly in the Global South, experience considerable period poverty. Insufficient workplace amenities hinder menstrual hygiene, leading to countless missed workdays in Southeast Asia. Numerous African countries lack private areas for menstrual hygiene, and the availability of sanitary pads is limited, resulting in various inadequate options for menstruators (Geng and Yockey, 2021).

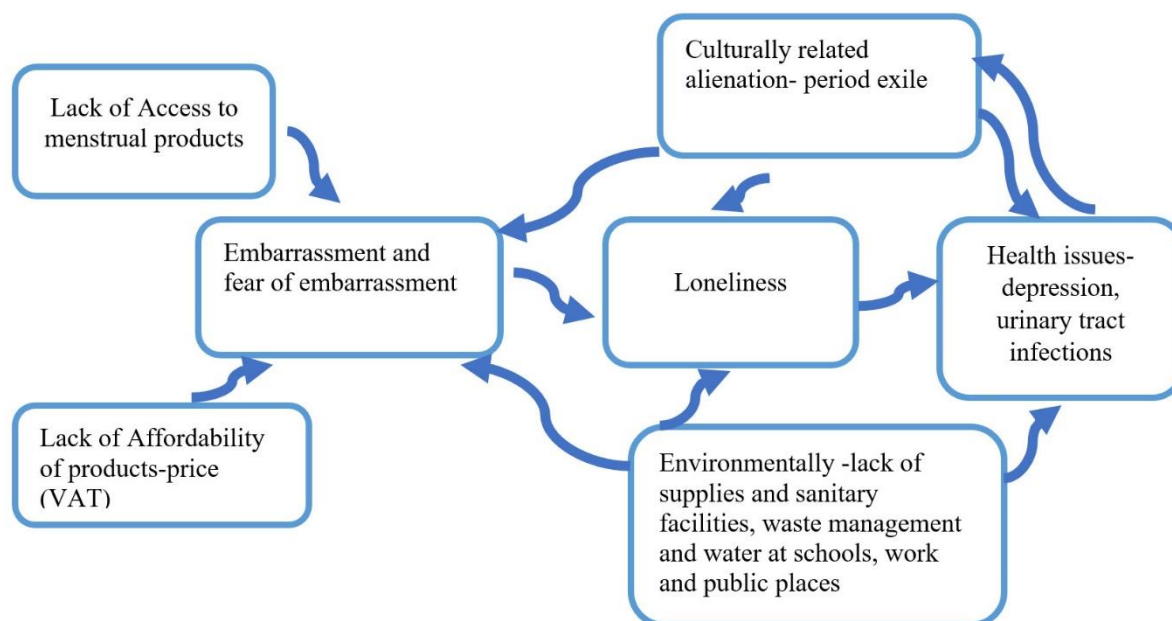


Figure 4: Faces of period poverty Source: Michel et al. (2022)

The diagram highlights the intricate and interrelated aspects of period poverty, underscoring how different social, economic, cultural, and environmental elements lead to subpar menstrual health outcomes. At the heart of this issue lies the feeling of embarrassment and the fear of feeling humiliated, which is often caused by the unavailability or high cost of menstrual products. When individuals cannot afford or access these essential items -often due to elevated prices and additional expenses like VAT-they face an increased risk of shame from noticeable leaks or odours, which subsequently deters them from engaging in daily activities like attending school or work.

This stigma results in social isolation and feelings of loneliness, worsened by cultural practices like period exile, which alienate menstruators during their monthly cycles. Moreover, the absence of clean, private, and adequately functioning sanitation facilities in schools, workplaces, and public spaces exacerbates feelings of embarrassment and isolation, making it more challenging to handle menstruation with respect.

Major health issues like melancholy and urinary tract infections are brought on by these growing challenges over time. Caused by inadequate menstrual hygiene and social isolation. The diagram emphasizes that period poverty is not just about accessing products but is fundamentally a major social injustice influenced by interconnected structural obstacles.

Many women resort to using makeshift materials, resulting in discomfort, distractions, and school absenteeism, which can hinder job market access and lead to economic poverty. Furthermore, shame and guilt surrounding menstruation inhibit discussions on access,

product taxation, and health implications, highlighting the complexity of this issue (Michel et al., 2022).

2.2.3 Cultural Barriers to Menstrual Health

Menstruation is surrounded by myths and cultural practices, such as young girls and women refraining from entering puja rooms, kitchens, looking in mirrors, and engaging with guests while menstruating (Kumar and Srivastava, 2011). The primary limitation for urban girls is not being allowed in the puja room, while for rural girls, the main restriction is not being allowed in the kitchen during menstruation (Puri and Kapoor, 2006).

In rural India, menstruation is surrounded by myths and taboos, obstructing menstrual hygiene management (MHM) and endangering women's reproductive health. Inadequate menstrual hygiene may result in urinary tract infections, school absenteeism, and pregnancy-related complications (Logeswari, Parmar and Suryawanshi, 2021).

In countryside regions, young girls perceive menstruation as a punishment or curse from God (Dasgupta and Sarkar, 2008; Sharma et al., 2006).

Myths encompass ideas regarding the importance of the day a girl experiences her first menstruation, affecting views on her purity and destiny. Limitations during menstruation restrict activities like bathing and accessing sacred spaces, resulting in stigma and inadequate self-care habits (Logeswari, Parmar and Suryawanshi, 2021).

Women often experience shame surrounding menstruation due to stigma associated with uncleanness. In some cultures, this leads to isolation during their periods, perpetuating the taboo. Such practices persist in modern societies, including places like Nepal (Jaafar, Ismail and Azzeri, 2023).

2.2.4 Intersections with Gender, Education, and Development

Stigma and cultural taboos surrounding menstruation, strengthen gender inequalities, restricting the involvement of females and young females in community engagements. In various cultures, menstruating females and young girls are frequently regarded as contaminated or dirty, which may result in behaviours that exclude them (Amatya et al., 2018). Fighting against period poverty entails not only supplying menstrual products but also confronting and transforming the cultural attitudes that sustain these stereotypes. Educational programs that raise awareness about menstrual health and challenge stigmas can greatly enhance gender equality by enabling women to engage fully in societal, educational, and financial endeavours without the limitations of time-associated prejudice (Johnston-Robledo and Chrisler, 2020; Shah et al., 2019; Regional Health–Americas, 2022).

The World Bank (2018) has acknowledged menstrual health as vital for promoting gender equality, emphasizing that without inclusive approaches, the SDGs concerning education, health, and gender will stay unattainable. However, numerous national policies continue to regard menstruation as a private issue instead of a priority for development.

2.2.5 Current Global Efforts and Gaps

Policymakers ought to lower or eliminate taxes on menstrual supplies. Each nation must abolish the period tax to support women and offer them fair prices for menstrual supplies. Multiple countries, including the United States, Kenya, Canada, Australia, India, Colombia, Malaysia, Nicaragua, Jamaica, Nigeria, Uganda, Lebanon, and Trinidad and Tobago, have lowered or removed taxes on menstrual products (Diamond, 2022).

The government, along with an NGO, should ensure free menstrual products are available in public spaces like lavatories, schools, and workplaces for better accessibility. The Bunga Pads initiative, launched by My Corps Alumni in July 2019, addresses this need by supplying sanitary pads to low-income female students, inspired by founder Fitriyati Bakri's experiences in Bangladesh (Babbar et al., 2021).

Since the law was enacted in 2021, free menstrual products have been made available in Scotland to anyone who requests them (American Medical Association, 2021).

This study aims to address that gap by integrating worldwide literature on cultural obstacles and their influence on disparities in menstrual health. An approach that is aware of cultural differences is crucial for successful and inclusive policy development.

2.3 Chapter summary

This chapter has thoroughly examined current scholarly research regarding the effects of cultural obstacles on menstrual health results and period poverty. It starts by defining the idea of period poverty, which includes the unavailability of menstrual products, education, and sanitation, particularly in low-income and marginalized populations. The literature highlights how this deprivation contributes to physical health problems such as infections, mental health issues like depression, and broader social and economic exclusion.

The chapter subsequently examines the significant influence of cultural beliefs, stigma, and taboos on menstrual experiences. Beliefs about menstruation especially in South Asia and the Global South typically limit the activities of women and girls and uphold damaging gender norms. Practices like menstrual exile, restrictions on movement, and the stigma associated with menstruation significantly hinder menstrual hygiene management and continue to foster feelings of shame and isolation.

Moreover, the review highlights the intersection of cultural barriers with gender, education, and development. These issues frequently prevent menstruating individuals from participating in school, work, and community activities, reinforcing gender disparities. Educational initiatives and policy changes are recognized as crucial for transforming cultural narratives and fostering dignity, health, and equality.

The chapter wraps up by assessing ongoing worldwide actions against menstrual inequity, such as the removal of taxes on menstrual products and the establishment of free product distribution programs in nations like Scotland, India, and Kenya. Although advancements have been made, significant gaps persist, especially concerning culturally aware policymaking and the necessity for systemic transformation that tackles the fundamental cultural origins of menstrual stigma.

Based on the themes and gaps identified in this literature review, Chapter 3 will describe the methodology used in this research. It describes the systematic literature review (SLR) methodology, detailing the search strategy, criteria for inclusion and exclusion, and ethical aspects. This thorough and clear process underpins the synthesis of recent studies on how cultural obstacles affect period poverty and menstrual health globally.

CHAPTER 3: METHODOLOGY

3.1 Introduction to Chapter

This chapter outlines the methodological framework of the study, emphasizing the organized and clear strategy used to explore the influence of cultural obstacles on menstrual health results and period poverty. Due to the global and complex aspects of menstrual health as a public health and human rights concern, a Systematic Literature Review (SLR) was chosen as the most suitable and thorough research design. The SLR enables a comprehensive investigation and integration of peer-reviewed scholarly works while reducing researcher bias and promoting methodological clarity and reproducibility (Moher et al., 2009; Tranfield, Denyer and Smart, 2003).

This chapter starts by presenting the reasoning for employing a systematic literature review (SLR) and its significance to the research question. It subsequently outlines every stage of the review process, highlighting the creation and use of the PEO (Population, Exposure, Outcome) framework to direct the research emphasis. Search tactics, keyword selection, and the justification for selecting databases are described to guarantee thorough coverage of the body of current research in pertinent fields like gender studies, sociology, and public health.

The chapter also describes the inclusion and exclusion criteria that were applied to identify papers that were relevant for analysis. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) structure was then explained to ensure clarity in the selection of research. Ethical issues are also covered to increase the review's legitimacy and dependability, including using research that has received ethical approval and adhering to academic integrity norms.

In summary, this methodology chapter establishes the foundation for the research outcomes by outlining the systematic and evidence-driven approach employed to collect, analyse, and integrate data related to cultural obstacles and menstrual health requirements worldwide.

3.2 Systematic Literature Review (SLR)

A Systematic Literature Review (SLR) is a methodologically sound and clear procedure utilized to locate, assess, and combine current studies pertaining to a particular subject or research inquiry. In contrast to conventional narrative literature reviews, which can be swayed by author bias and selective citations, the systematic literature review (SLR) adheres to a set protocol that can be replicated, with the goal of minimizing bias, increasing transparency, and offering a comprehensive understanding of the topic (Moher et al., 2009).

This method is especially useful in areas where intricate socio-cultural, structural, and public health elements converge, as seen with menstrual health and period poverty. The SLR approach enables an extensive mapping of current evidence across various geographical, economic, and cultural settings. According to Tranfield, Denyer, and Smart (2003), the systematic review process consists of several clearly defined steps: developing research questions, creating a search strategy, choosing pertinent academic databases, implementing inclusion and exclusion criteria, evaluating and reviewing the quality of studies, gathering relevant data, and ultimately synthesizing the results into significant thematic insights.

In this dissertation, the SLR was utilized to analyse worldwide studies concerning cultural obstacles to menstrual health and their contribution to maintaining period poverty. This methodological strategy was selected to maintain a strong level of academic rigor and to collect diverse viewpoints that might otherwise be less represented in solitary or isolated research.

Menstrual health is more and more acknowledged as a public health concern, a matter of human rights, and an issue of gender equality (Hennegan et al., 2019). As global initiatives advocate for menstrual equity, an increasing amount of qualitative and mixed-methods research is being conducted, illuminating how menstruation is understood, handled, and governed by cultural standards, stigma, and policy shortcomings. Nonetheless, despite increasing scholarly attention, cultural elements continue to be insufficiently examined in numerous extensive international assessments.

The systematic literature review in this research seeks to fill that void by methodically gathering and examining peer-reviewed studies published from 2014 to 2025. It highlights culturally ingrained beliefs, taboos, and practices, and their impact on menstrual health outcomes, resource access, and the experiences of menstruators. Through the synthesis of this body of work, the SLR offers evidence-driven insights that guide policy suggestions and forthcoming research plans.

3.3 Search Strategy

A search strategy is a structured approach to identifying relevant academic literature systematically (Booth, 2016). In this research, a comprehensive search was conducted using the PEO (Population, Exposure, Outcome) framework, which is suitable for qualitative research.

PEO Framework:

- **Population/Problem (P):** Individuals affected by period poverty

- **Exposure (E):** Cultural barriers to menstrual health
- **Outcome (O):** Impact on menstrual health needs

The search was conducted within peer-reviewed databases, limiting the timeframe to studies published from 2014 to 2025 to capture the most recent insights on the topic.

3.4 Search Terms

Search terms are key concepts used to retrieve relevant literature (Gough et al., 2017). Using synonyms is crucial for broadening search results and minimizing bias.

PEO-Based Search Strategy:

- **P:** "period poverty" OR "menstrual poverty" OR "lack of menstrual products"
- **E:** "cultural stigma" OR "cultural taboos" OR "menstrual shame" OR "gender norms"
- **O:** "menstrual health" OR "menstrual hygiene" OR "health outcomes"

Boolean Operators Used:

- "OR" was used to combine synonyms for each PEO component.
- "AND" was used to combine P, E, and O components to refine search results.

PEO Framework

Population/Problem	Exposure/Issue	Outcome
Period Poverty	Cultural Barriers	Menstrual Health Needs

Table 1: PEO Framework- (Self-created)

3.5 Keywords

Keywords are essential in retrieving relevant articles (Fink, 2020). The main keywords used were: "period poverty," "menstrual health," "cultural stigma," "gender norms," "menstrual hygiene management," "taboos," and "menstrual inequity."

3.6 Databases

Academic databases ensure access to credible peer-reviewed literature (Gough et al., 2017). Multiple databases were used to maximize coverage, including:

- PubMed
- ProQuest

These databases were chosen for their comprehensive coverage of scholarly literature and their relevance to health, social sciences, and interdisciplinary research.

PubMed offers extensive biomedical literature, ensuring access to high-quality clinical and scientific research (PubMed, 2023).

ProQuest empowers researchers and librarians globally by providing innovative information content and technologies that enhance productivity. Through partnerships, it preserves diverse information, combining historical archives and contemporary advancements with digital tools for effective discovery, sharing, and management in various library settings (ProQuest, 2024).

Using multiple databases ensures diverse perspectives, reducing bias and enhancing the credibility of findings (Booth et al., 2016).

3.7 Inclusion/Exclusion Criteria

Inclusion and exclusion criteria ensure relevancy and quality in selected studies (Petticrew & Roberts, 2006).

3.7.1 Inclusion Criteria

- Published in peer-reviewed journals (2014–2025)
- Focus on cultural barriers and menstrual health
- Studies conducted in diverse cultural contexts

3.7.2 Exclusion Criteria

- Non-English language publications
- Studies focused solely on medical interventions without cultural aspects
- Opinion pieces, editorials, or non-peer-reviewed sources

3.8 Search Results

The PRISMA flow diagram illustrates the systematic process undertaken to identify and select studies for inclusion in the review. Initially, a total of 1,099 records were identified from two databases and registers. After removing 338 duplicate records before screening, 761 records remained for the screening stage. During the screening process, 711 records were excluded based on relevance and eligibility criteria. The remaining 50 reports were sought for retrieval;

however, 36 of these could not be retrieved, possibly due to access limitations or unavailable full texts. Consequently, 14 reports were assessed for eligibility. Of these, two reports were excluded as they were systematic literature reviews (SLRs) and did not meet the inclusion criteria. Finally, 12 studies, along with their corresponding 12 reports, were included in the systematic review. This diagram demonstrates a rigorous and transparent selection process, ensuring the inclusion of only relevant and high-quality studies.

PRISMA Flowchart

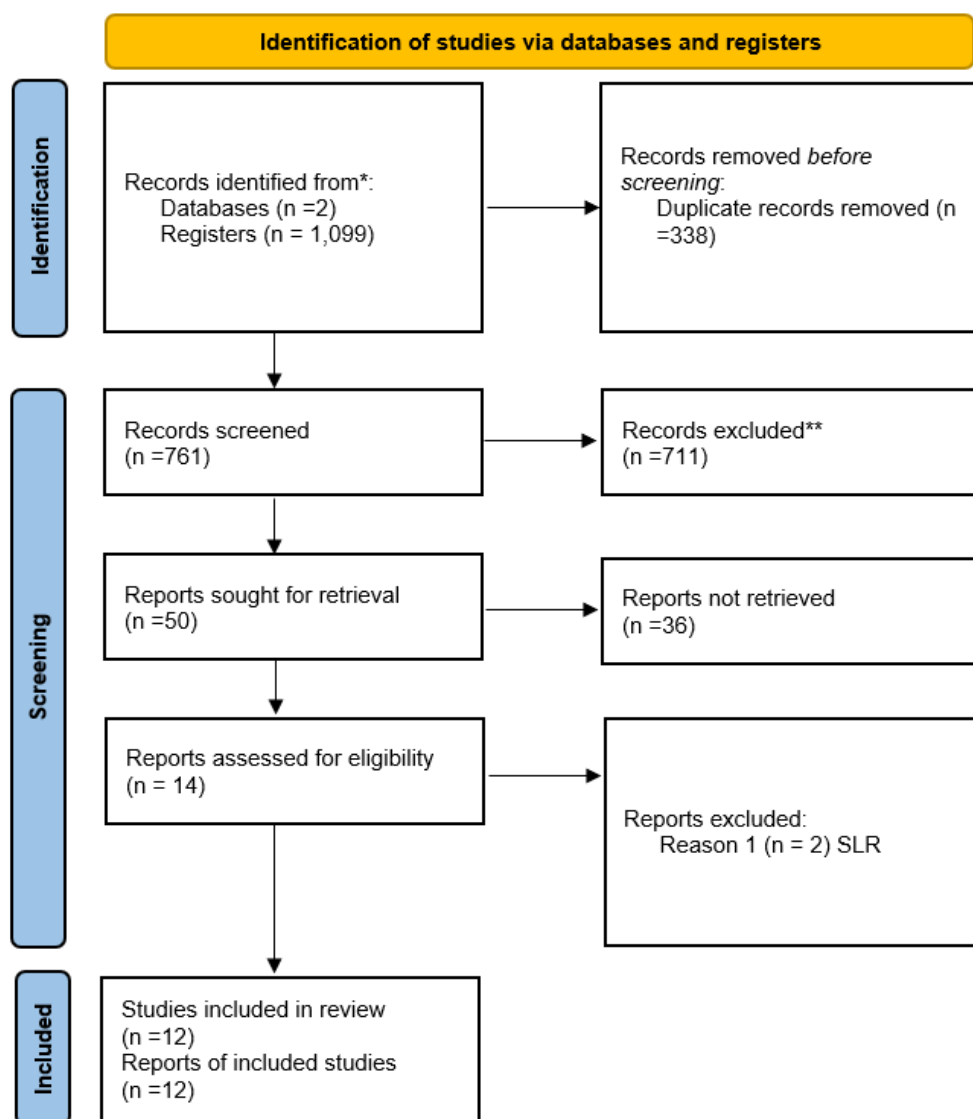


Figure 5 - PRISMA Flowchart – (Self-created)

3.9 Ethical Considerations

Ethical considerations in research ensure credibility and responsibility (Resnik, 2020). Only ethically approved peer-reviewed studies were included, ensuring that data was collected with participant consent and confidentiality. The research adhered to academic integrity guidelines and avoided biased or misleading data.

3.10 Chapter Summary

This chapter presented a thorough summary of the methodology used in this research, which was based on a Systematic Literature Review (SLR) approach. The choice to utilize the SLR method stemmed from its capacity to systematically and transparently recognize, assess, and combine a wide array of pertinent peer-reviewed research, guaranteeing the production of trustworthy and thorough understandings of the cultural obstacles impacting menstrual health and period poverty worldwide.

The chapter commenced by explaining the rationale for the methodological framework and outlining the review process step by step. The PEO (Population, Exposure, Outcome) framework was utilized to distinctly outline the research emphasis, facilitating the development of accurate search terms and methods. The search was conducted through various academic databases to guarantee the incorporation of different viewpoints. The use of inclusion and exclusion criteria guaranteed the relevance and quality of the chosen studies.

Additionally, the implementation of the PRISMA flowchart promoted a clear and reproducible selection process, allowing for the documentation of how records were identified, screened, and ultimately chosen for inclusion. Ethical considerations were also addressed to guarantee that only studies adhering to strong ethical standards were incorporated.

In conclusion, this methodology chapter lays the groundwork for the results and analysis that will follow. The results of the systematic review and an examination of the major topics that emerged from the literature are presented in the following chapter. These revelations will advance our knowledge of how cultural variables affect menstrual health outcomes and the persistence of period poverty.

CHAPTER 4: DATA EXTRACTION AND EVALUATION

4.1 Introduction to Chapter

This chapter describes the data extraction and evaluation stage of the study, which is crucial to the Systematic Literature Review (SLR) method employed in this research. The goal of this chapter is to describe the organized method employed to gather and evaluate information from pertinent studies dealing with cultural obstacles and period poverty, especially regarding their impact on menstrual health outcomes. An exacting and open process is essential to guarantee the accuracy and dependability of the research results (Moher et al., 2009).

The chapter starts by outlining how relevant data were gathered from chosen studies utilizing a standardized framework. The information gathered comprised publication specifics, objectives of the study, demographics of participants, geographical locations, methodological design, and significant findings concerning menstruation, stigma, and availability of menstrual health services. Ensuring uniformity in data extraction among various study types is crucial for minimizing bias and facilitating significant comparisons (Munn, Tufanaru and Aromataris, 2014).

Furthermore, this chapter presents the instruments utilized for evaluating the methodological quality of the studies included. Quality assessment is an essential part of systematic reviews because it aids in recognizing the advantages, disadvantages, and possible biases of every study (Crowe and Sheppard, 2011). The review encompassed study designs from qualitative, quantitative, and mixed methods approaches; therefore, various appraisal tools were employed to ensure relevance and methodological appropriateness. For example, the Critical Appraisal Skills Programme (CASP) tool was used for qualitative studies, while Joanna Briggs Institute (JBI) checklists were applied to assess the quality of quantitative and mixed-method research (Haile, 2021).

This chapter enhances the overall reliability of the systematic review by merging structured data extraction with thorough critical appraisal. The assessment of each study's reliability also guides the thematic analysis that occurs in Chapter 5, ensuring that the synthesis is based on methodologically robust evidence.

4.2 Data Extraction

Data extraction is a crucial phase in systematic reviews, as it guarantees that information is reliably and precisely collected from the studies considered. Pedder et al. (2016) state that poor coordination or communication in data extraction may result in inconsistencies and,

eventually, incorrect conclusions. In this study, a systematic and standardized data extraction template was used to reduce such risks. This template comprised essential variables including study title, authors, publication year, country of study, research objectives, sample traits, methodology, cultural emphasis, and significant outcomes concerning menstrual health and cultural obstacles.

To improve reliability, data extraction was carried out in a two-phase method. At first, all pertinent articles were individually examined, then a second reviewer cross-checked them to address any inconsistencies. This method guaranteed consistency among raters and improved the overall validity of the obtained data (Munn, Tufanaru and Aromataris, 2014). Every retrieved data point was verified twice to confirm that no significant information was missed, and that solely the most trustworthy and pertinent results were incorporated into the final dataset.

Additionally, the procedure highlighted the significance of qualitative results. According to Munn, Tufanaru, and Aromataris (2014), qualitative systematic reviews are especially useful for comprehending intricate and context-dependent health issues, such as cultural taboos, stigma, and social exclusion related to menstruation. By concentrating on research with extensive narrative data, the extraction procedure gathered personal experiences and culturally contextualized insights that quantitative measures might miss.

Mixed-methods research was also incorporated to facilitate triangulation and enhance the credibility of the results. This enabled the integration of statistical insights and contextual comprehension into the review. The collected data acted as the key basis for the thematic analysis outlined in the next chapter, where patterns, themes, and connections among the variables are integrated to address the main research question.

4.3 Brief Introduction to Critical Appraisal and Paper Quality Assessment

Critical appraisal is an essential part of every systematic literature review, functioning as the method by which researchers assess the quality, reliability, and significance of current studies. It entails a systematic and organized evaluation of the methodological, ethical, and theoretical robustness of each study to determine if its findings are reliable and should be included in the synthesis (Tod, Booth and Smith, 2021). The aim is not just to pinpoint high-quality research but also to identify possible biases, limitations in methodology, and concerns regarding generalizability.

A thorough critical evaluation transcends superficial assessments of publication status or the author's standing. As highlighted by the Critical Appraisal Skills Programme (CASP, 2024), trustworthiness must rely on internal validity, clarity of results, and consistency in the

application of research frameworks not just on journal impact factors or affiliations. This principle holds significant importance when evaluating research from various cultural backgrounds, as valuable insights can arise from publications that are lesser-known or specific to certain regions.

The appraisal process is shaped by the reviewers' theoretical perspectives, academic background, and even gender-based viewpoints. This interpretive aspect, although enhancing depth, also brings in subjectivity that may influence evaluation results (Tod, Booth and Smith, 2021). Consequently, reviewers need to be reflective—conscious of how their experiences might influence their evaluation of evidence. In spite of these difficulties, evaluation is vital for upholding the integrity and clarity of the assessment process.

Verified checklists are typically used in critical assessment to ensure uniformity and objectivity. The clarity of study questions, sampling strategies, data analysis approaches, and ethical considerations are just a few of the aspects of methodological integrity that these checklists help researchers assess. Protogerou and Hagger (2020), for instance, point out that quantitative approaches usually include standards such as statistical validity, sample size justification, and confounding variable control. Similarly, qualitative checklists highlight the reliability, validity, and applicability of findings.

Tools for critical appraisal are often divided into two categories: generic tools and instruments specialised to research design. The first are made for particular approaches (such qualitative interviews and randomised controlled trials), while the second aims to make it easier to compare different kinds of research. While tools designed for a particular design provide a detailed analysis of a particular method, they may limit cross-study integration. Generic tools, on the other hand, offer a broader evaluative viewpoint but may miss methodological nuances unique to a certain setting (Crowe and Sheppard, 2011). In particular, when reviews include mixed-method research, Katrak et al. (2004) argue that the absence of a universally accepted gold standard instrument leaves a gap in evidence synthesis.

4.4 Critical Appraisal Tools

Carrying out research of superior quality and evidence-informed practice relies on utilizing organized and reliable instruments to evaluate the quality and reliability of current studies. These evaluation tools offer researchers structures to assess the methodological rigor, relevance, and ethical integrity of published studies (Haile, 2021). They hold particular significance in intricate evaluations like this, where diverse qualitative, quantitative, and mixed-method studies are examined to comprehend the culturally ingrained aspects of period poverty and menstrual health.

In recent decades, many important evaluation tools have been developed. Every tool is tailored to meet particular types of research methods, study frameworks, or fields of study. For instance, instruments such as CASP, JBI (Joanna Briggs Institute checklists), and those from the Centre for Evidence-Based Medicine (CEBM) are now commonly recognized for their clarity and ease of use. Nonetheless, no specific evaluation tool has achieved widespread acclaim, and the selection of an instrument frequently relies on the context, research framework, and the experience of the reviewer (Buccheri and Sharifi, 2017).

Certain tools, including CASP, are commonly employed to evaluate qualitative research and systematic reviews. CASP offers a checklist-driven method that highlights ethical transparency, consistency in research design, and analytical openness. The JBI Critical Appraisal Checklists and CEBM Appraisal Tools are frequently used in clinical and quantitative research because they offer structured questions about validity, reliability, and generalisability (Crowe and Sheppard, 2011).

The GRADE (Grading of Recommendations Assessment, Development and Evaluation) framework, on the other hand, is a tool designed to evaluate the overall quality of evidence from different research, particularly in meta-analyses and the creation of clinical guidelines. Similarly, AGREE II (Appraisal of Guidelines for Research and Evaluation) is intended to evaluate the quality of guidelines, whereas AMSTAR 2 evaluates systematic reviews.

Katrak et al. (2004) classify appraisal tools into two main categories: design-specific tools (e.g., suited for RCTs, cohort studies, or ethnographies) and generic tools (e.g., relevant across various study designs). Although tools tailored for design provide accuracy, they might limit the capacity to integrate insights from various methodologies. In contrast, generic tools enable wider comparisons but might reduce intricate study features to a basic level.

Hence, it is crucial for researchers to choose appraisal instruments thoughtfully considering elements like research design, quality metrics, contextual relevance, and ease of use. Reviewer training and reflexivity should enhance tools to reduce biases and misinterpretations. Crowe and Sheppard (2011) highlight that examining supporting documents, pilot-testing the instrument, and making necessary adjustments are crucial for achieving precise and significant evaluations.

This research employed a blend of CASP, JBI, and CEBM instruments to rigorously evaluate the methodological standards of chosen articles. The following section will provide a comparative analysis of these studies and discuss how the evaluation outcomes affected the ultimate integration of themes.

Tool	Authors/Organization	Applicability/Study design	Example of application in lactation research
Critical Appraisal Skills Programme (CASP)	CASP	Systematic Reviews, Randomized Controlled Trials, Cohort Studies, Case Control Studies, Economic Evaluations, Diagnostic Studies, Qualitative Studies, and Clinical Prediction Rule	(Channell Doig et al., 2020)
Appraisal of Guidelines for Research & Evaluation II (AGREE II)	AGREE Collaboration	Guideline Quality	(Boss et al., 2021)
Johns Hopkins Research Evidence Appraisal Tool	The Johns Hopkins Hospital/Johns Hopkins University	Quantitative, Qualitative and Mixed Methods Studies	(Robinson et al., 2018)
Johns Hopkins Non-Research Evidence Appraisal Tool	The Johns Hopkins Hospital/Johns Hopkins University	Clinical Practice Guidelines, Consensus, or Position Statements; Organizational Experience; Case Report, Integrative Review, Literature Review, Expert Opinion, Community Standard, Clinician Experience, Consumer Preference	(Cvach, 2012) ¹
Grading of Recommendations Assessment, Development and Evaluation (GRADE)	GRADE Working Group	Certainty in Evidence and Strength of Recommendations	(McFadden et al., 2019)

Cochrane Risk of Bias Tool (RoB 2)	(Higgins et al., 2011)	Risk of Bias in Randomized Trials and other Systematic Reviews	(Huda et al., 2021)
Joanna Briggs Institute Critical Appraisal Tools (JBI)	Joanna Briggs Institute	Analytical Cross-sectional Studies, Case-Control Studies, Case Reports, Case Series, Cohort Studies, Diagnostic Test Accuracy Studies, Economic Evaluations, Prevalence Studies, Qualitative Research, Quasi-Experimental Studies, Randomized Controlled Trials, Systematic Reviews and Text and Opinion	(Dall'Oglio et al., 2020)
Rapid Critical Appraisal Checklists	(Melnyk & Fineout-Overholt, 2015)	Descriptive Studies, Evidence-Based Practice Implementation or Quality Improvement Projects, Cohort Studies, Randomized Controlled Trials, Systematic Reviews of Clinical Interventions/Treatments, Qualitative Evidence, And Evidence-Based Guidelines	(Hubschman-Shahar, 2021)
Centre for Evidence-Based Medicine Critical Appraisal Tools (CEBM)	The Oxford Centre for Evidence-Based Medicine (CEBM)	Systematic Reviews, Diagnostics, Prognosis, Randomized Controlled Trials, Qualitative	(Johnson et al., 2020)

		Reviews, IPD Reviews in multiple languages	
A Measurement Tool to Assess Systematic Reviews 2 (AMSTAR 2)	(Shea et al., 2017)	Systematic Reviews of Randomized or Non-randomized Studies	(Fair et al., 2021)
Quality Assessment of Diagnostic Accuracy Studies 2 (QUADAS 2)	(Whiting et al., 2011)	Diagnostic Accuracy Studies	(Raskovalova et al., 2015)

Table 2. Examples of Widely Used Critical Appraisal Tools.

(Source: Haile, 2021).

4.5 Evaluation of Qualitative, Quantitative, Mixed Methods Studies using an Appropriate Tools

Qualitative, quantitative, and mixed-methods research require appropriate evaluation instruments for methodological integrity. The CASP Qualitative Checklist and JBI Critical Appraisal Tools effectively evaluate research design, data collection, ethics, and credibility in qualitative research (Critical Appraisal Skills Programme, 2018).

Quantitative research employs JBI Critical Appraisal Tools and CEBM Appraisal Tools for improved assessment and analysis (The Centre for Evidence-Based Medicine (n.d.)).

Mixed-methods research requires comprehensive assessment using instruments such as the Johns Hopkins Research Evidence Appraisal Tool, guaranteeing excellence in both qualitative and quantitative dimensions for cohesive methodology and reliable results (Johns Hopkins Medicine, 2022).

Summarizing the key aspects of the studies provided: -

The examined studies collectively illuminate the complex aspects of period poverty and menstrual health in various global contexts. Soeiro et al. (2021) carried out a qualitative study focusing on Venezuelan migrant women in Brazil, uncovering major obstacles in obtaining menstrual hygiene products and access to facilities because of their migrant status. In a similar vein, Rossouw and Ross (2021) employed quantitative techniques to emphasize how socio-economic disparities like income, education, and infrastructure impact menstrual hygiene management (MHM) in eight low- and middle-income nations. In Barcelona, Medina-Perucha et al. (2020) used a mixed-methods strategy to demonstrate that social disparities, stigma,

and economic limitations are significant obstacles to proper menstrual health. Meanwhile, Holst et al. (2022) examined menstrual inequity because of poverty, stigma, and a lack of policy support via qualitative interviews.

Sobudula and Naidoo (2024) carried out a qualitative pilot study in South Africa that demonstrated how menstrual education is hindered by cultural taboos and a lack of maternal assistance. Through quantitative surveys conducted in Bangladesh, Khan et al. (2024) highlighted the stigma and accessibility issues that women with disabilities experience when it comes to managing their periods. Using quantitative data from schools in The Gambia, Nabwera et al. (2021) discovered that poor menstrual hygiene raises the risk of infection and has a negative impact on school attendance. Large-scale quantitative data from ten countries was presented by Smith et al. (2020), who found a high correlation between socioeconomic differences and the usage of menstruation products.

In a cross-sectional quantitative study, Muhaidat et al. (2024) looked into period poverty in Jordanian refugee camps and discovered a correlation between it and depressive symptoms as well as product reuse. In Ethiopia, Wall et al. (2018) used an ethnographic method to investigate how ingrained cultural taboos significantly restrict access to resources and menstruation education. Period poverty in Barcelona has been quantitatively shown to be linked to higher levels of stress, anxiety, and depression (Marí-Klose et al., 2023). Finally, a cross-sectional study carried out in Spain by Medina-Perucha et al. (2023) demonstrated that socioeconomic level is a significant factor in predicting menstrual health outcomes and product accessibility. Collectively, this research highlight how important structural, cultural, and economic issues are to menstrual health and wellbeing.

#	Name of the Study	Appropriate Research Design	Clear Statement of Aim	Qualitative Method Appropriate	Quantitative Method Appropriate	Sample Strategy	Ethical Consideration	Findings
1	Soeiro et al. (2021) – Period poverty among Venezuelan migrant women in Brazil	Qualitative study	Yes	Yes (interviews, experiences)	NA	Purposive sampling	Ethical approval, informed consent	Migrant women struggle with access to menstrual hygiene products and facilities.
2	Rossouw & Ross (2021) – Socio-economic inequalities in MHM in eight LMICs	Quantitative study	Yes	NA	Yes (survey-based statistical analysis)	Large-scale survey data	Ethical review, anonymity ensured	Menstrual hygiene access is influenced by income, education, and infrastructure disparities.
3	Medina-Perucha et al. (2020) – Menstrual health and period poverty in Barcelona	Mixed-methods study	Yes	Yes	Yes	Online survey + interviews	Ethical approval, participant consent	Social inequities impact menstrual health; stigma and financial

								constraints are key barriers.
4	Holst et al. (2022) – Menstrual inequity in Barcelona	Qualitative study	Yes	Yes (interviews, narratives)	NA	Purposive sampling	Ethical approval obtained	Menstrual inequity is linked to financial hardship, stigma, and lack of policy support.
5	Sobudula & Naidoo (2024) – Barriers to menstrual education in South Africa	Qualitative pilot study	Yes	Yes	NA	Small-scale purposive sampling	Informed consent, confidentiality maintained	Cultural taboos and lack of knowledge hinder menstrual education from maternal figures.
6	Khan et al. (2024) – Menstrual hygiene management among	Quantitative study	Yes	NA	Yes (surveys, health assessments)	Survey-based sampling	Ethical review board approval	Women with disabilities face accessibility issues and stigma related to

	women with disabilities in Bangladesh							menstrual hygiene.
7	Nabwera et al. (2021) – Menstrual hygiene management in rural Gambia	Quantitative study	Yes	NA	Yes	School-based sampling	Ethical approval, parental consent	Poor menstrual hygiene affects school attendance and increases risk of infections.
8	Smith et al. (2020) – National monitoring of menstrual health across 10 countries	Quantitative study	Yes	NA	Yes (survey-based statistical analysis)	Nationally representative survey	Ethical board approval	Type of menstrual product used is linked to socio-economic disparities in menstrual health.
9	Muhaidat et al. (2024) – Period poverty and depressive symptoms in Jordanian refugee camps	Quantitative study	Yes	NA	Yes (survey-based cross-sectional study)	Refugee camp-based sampling	Ethical review, participant confidentiality	Period poverty and reuse of menstrual products are associated with increased

								depressive symptoms.
10	Wall et al. (2018) – Menstrual beliefs in Tigray, Ethiopia	Qualitative study	Yes	Yes (ethnographic study)	NA	Purposive sampling	Ethical approval, cultural sensitivity	Strong cultural taboos impact menstrual health education and access to resources.
11	Marí-Klose et al. (2023) – Period poverty and mental health in Barcelona	Quantitative study	Yes	NA	Yes (survey-based analysis)	Representative sample	Ethical review, participant consent	Period poverty is linked to higher levels of stress, anxiety, and depression.
12	Medina-Perucha et al. (2023) – Menstruation and social inequities in Spain	Cross-sectional study	Yes	NA	Yes	Online survey sampling	Ethical approval, informed consent	Socioeconomic factors significantly impact menstrual health and access to products.

Table 3. Provides a clear comparison of each study based on research design, methodology, and key findings. - (Self-Created)

4.6 Chapter Summary

This chapter outlines the methods used for extracting and evaluating data related to cultural barriers and period poverty in menstrual health, emphasizing systematic data collection for reliable research outcomes. The data extraction process is crucial in systematic reviews, advocating the use of validated formats and dual-reviewer verification to obtain unbiased information. Key extracted data includes study specifics, participant attributes, interventions, and outcomes for enhanced comparability. Evaluating the methodological rigor of selected studies through structured appraisal tools like CASP, AGREE II, GRADE, and JBI is essential, although no single "gold standard" exists, necessitating careful tool selection. A comparative analysis of significant studies on menstrual health, summarized in Table 2, addresses menstrual inequity, accessibility issues, cultural stigmas, and the effects of period poverty, revealing that economic disparities and inadequate policy significantly impact menstrual health management. This chapter's insights offer a foundation for understanding menstrual health challenges and intervention strategies.

CHAPTER 5: DATA ANALYSIS AND SYNTHESIS

5.1 Introduction to Chapter

This chapter presents the data analysis and synthesis of the selected studies on cultural barriers and period poverty, addressing menstrual health needs worldwide. The chapter employs thematic analysis to categorize and interpret findings from various studies. It begins with an overview of the thematic analysis approach and the chosen analytical framework. The characteristics of the identified studies are summarized, highlighting their geographical distribution. The main section of the chapter synthesizes the emerging themes and sub-themes identified from the studies, providing insights into the socio-cultural, economic, and health-related challenges related to period poverty. Finally, the chapter concludes with a summary of the key findings.

5.2 Thematic Analysis

One popular technique for assessing qualitative data is thematic analysis, which entails finding, examining, and summarising patterns or themes in a dataset (Braun & Clarke, 2006). It offers an adaptable and user-friendly method for evaluating qualitative data, enabling researchers to produce intricate, rich, and thorough explanations of the data.

This approach is beneficial when understanding experiences, viewpoints, and social realities is the aim; hence, it is well suited for subjects like menstrual health and period poverty. A form of thematic synthesis, which integrates and interprets findings from various research studies using thematic analysis principles, is frequently employed in systematic literature reviews (SLRs) (Thomas & Harden, 2008). Researchers can start theorising and detecting gaps in the literature through this synthesis process, which goes beyond simply summarising the evidence that already exists.

The relatively straightforward nature of thematic analysis makes it particularly advantageous for novice researchers. It does not require a deep technical or theoretical comprehension of more advanced qualitative methods such as ethnography, phenomenology, or grounded theory. Thematic analysis, as described by Braun and Clarke (2006), is essential to qualitative research due to its straightforward nature, as it fosters the growth of important analytical skills that extend to other qualitative methods, including theme development and coding. Furthermore, due to its flexibility, researchers are able to apply it within numerous theoretical and epistemological frameworks, such as constructionist and realist paradigms.

According to Nowell et al. (2017), thematic analysis provides a clear and methodical approach to data interpretation, which makes it perfect for research projects that want to draw attention to important characteristics, meanings, and trends within the data set. It works especially well when discussing delicate topics like menstruation, cultural taboos, and social injustices and providing people a voice in understudied areas. Thematic analysis is essential to this study's synthesis of results from several investigations carried out across various populations and nations. This method enables the researcher to investigate the ways in

which different social, cultural, and economic elements interact to influence people's experiences with menstrual health and period poverty.

Thematic analysis does, however, have several drawbacks. One critique is that if researchers do not rigorously follow a predetermined analytical framework, its flexibility could lead to inconsistent implementation. Some scholars argue that it lacks the interpretive depth offered by more theory-driven methodologies like ethnography, which immerses researchers in cultural contexts, or grounded theory, which aims to develop new ideas. Additionally, as shown in discourse analysis, theme analysis is not the best method for linguistic analysis, which focuses on how language generates meaning (Braun and Clarke, 2006). Due to the method's great degree of flexibility and the dearth of thorough procedural literature, novice researchers may be unsure of how to do thematic analysis transparently and rigorously.

Despite these limitations, thematic analysis remains highly pertinent for qualitative and mixed-methods research. It serves as a useful tool for understanding patterns, relationships, and contextual elements that are hard to capture through quantitative data alone. This thesis employs thematic analysis to examine a diverse range of studies centring on period poverty and cultural barriers to menstrual health across various international contexts. By systematically coding and categorizing results into shared themes, the study uncovers widespread issues such as stigma, limited availability of menstrual products, socioeconomic disparities, and the effects of gaps in education and policy. This thematic synthesis enhances our understanding of how these challenges operate in different cultural settings, while also assisting in the recognition of potential approaches for promoting menstrual equity and health globally.

Thematic analysis is a qualitative method for analysing data that aims to identify, examine, and present patterns (themes) found within the data (Braun & Clarke, 2006). It is especially advantageous in systematic literature reviews (SLR), where it is known as thematic synthesis (Thomas & Harden, 2008). Thematic analysis, frequently underappreciated in qualitative research, serves as a fundamental approach that provides researchers with vital competencies for different qualitative assessments (Braun & Clarke, 2006). Thematic analysis provides a versatile and straightforward method for qualitative research, enabling deep data insights and clarity, particularly for beginner researchers, while also highlighting essential data characteristics (Nowell et al., 2017). Thematic analysis faces disadvantages compared to other qualitative methods like grounded theory, ethnography, and phenomenology, primarily due to limited literature, leaving novice researchers unsure about conducting rigorous analyses. Its simplicity makes it less effective in analysing language use (Braun & Clarke, 2006). This method is applicable to both qualitative and quantitative research as it allows for an in-depth understanding of trends, patterns, and relationships among various factors influencing menstrual health. By employing thematic analysis, this study synthesizes findings across multiple research studies to develop a comprehensive understanding of cultural barriers and period poverty.

5.3 Data Analysis Tool

This research utilizes Braun and Clarke's (2006) thematic analysis framework, offering a systematic method for recognizing, analysing, and presenting themes in the data. This framework consists of a six-phase process: getting acquainted with the data, creating initial codes, identifying themes, assessing themes, defining and labelling themes, and compiling the final report.

The six phases of Braun and Clarke's thematic analysis framework are as follows:

1. **Familiarization with the data** – This first stage entails deeply engaging with the data through reading and re-reading the content, taking initial notes and observations that start to form an analytical viewpoint.
2. **Generating initial codes** – Researchers systematically identify and label pertinent features of the data throughout the entire data set. These codes act as foundational elements for recognizing larger themes.
3. **Searching for themes** –At this stage, codes are gathered into possible themes, enabling researchers to investigate how codes merge to create significant patterns.
4. **Reviewing themes** – Themes are polished and verified with the coded data and the overall dataset to confirm consistency and significance. Certain themes might be combined, separated, or eliminated.
5. **Defining and naming themes** – Themes are distinctly identified and labelled, encapsulating the core of what each theme signifies and its role in addressing the research question.
6. **Producing the report** – The concluding stage requires compiling the thematic results into a clear narrative, reinforced by data excerpts and consistent with the goals of the study (Braun & Clarke, 2006).

The importance of this framework lies in its flexibility and systematic approach, enabling a clear and replicable analysis of complex themes within menstrual health research.

5.4 Characteristics of the Identified Studies

The chosen research was carried out in a number of nations, representing a wide range of international viewpoints on menstrual health and period poverty. The studies' geographic distribution is as follows:

- **Brazil:** Soeiro et al. (2021)
- **Spain:** Medina-Perucha et al. (2020), Holst et al. (2022), Marí-Klose et al. (2023), Medina-Perucha et al. (2023)
- **South Africa:** Sobudula and Naidoo (2024)

- **Bangladesh:** Khan et al. (2024)
- **Gambia:** Nabwera et al. (2021)
- **Jordan:** Muhaidat et al. (2024)
- **Ethiopia:** Wall et al. (2018)
- **Multiple LMICs:** Rossouw and Ross (2021), Smith et al. (2020)

5.5 Emerging Themes from Included Studies

Cultural barriers and period poverty were highlighted as several overarching themes and sub-themes in the analysis of the included research. These themes illustrate the various socio-cultural, economic, and health-related challenges experienced by menstruators globally.

Themes and Sub-Themes

Themes	Sub-Themes	Articles
Cultural Taboos and Stigmas	Silence around menstruation, Restrictions on daily activities	#10 Wall et al. (2018), #5 Sobudula and Naidoo (2024), #4 Holst et al. (2022), #12 Medina-Perucha et al. (2023)
Access to Menstrual Products	Economic barriers, Availability and affordability, Government and NGO interventions	#2 Rossouw and Ross (2021), #9 Muhaidat et al. (2024), #8 Smith et al. (2020), #11 Marí-Klose et al. (2023)

Menstrual Health Education	Role of schools, Lack of parental guidance, Community awareness programs	#7 Nabwera et al. (2021), #3 Medina-Perucha et al. (2020)
Period Poverty and Health Impacts	Infections and reproductive health issues, psychological distress,	#1 Soeiro et al. (2021), #6 Khan et al. (2024)

Table 4: Themes and Sub-Themes- (Self-created)

Theme 1: Cultural Taboos and Stigmas

Menstruation remains deeply stigmatized across various cultural contexts, often regarded as impure or shameful. These views contribute to a culture of silence, emotional distress, and limited social participation, particularly for adolescents and young women. The internalization of these taboos has significant implications for menstrual health education, emotional well-being, and access to care (#10, p.4; #4, p.2). Research conducted in both high and low-income regions underscores how such cultural perceptions restrict not only knowledge but also everyday freedoms (Wall et al., 2018; Holst et al., 2022; Sobudula & Naidoo, 2024). This theme is developed through two closely connected sub-themes: silence around menstruation and restrictions on daily activities.

Sub-themes:

Silence Around Menstruation

In many settings, menstruation is treated as a private or even shameful issue, leading to widespread silence. This silence obstructs open dialogue, leaving girls and women misinformed or unaware of essential menstrual hygiene practices (#10, p.4; #5, p.3). Wall et al. (2018) note that in Tigray, Ethiopia, menstruation is considered a highly sensitive and often forbidden subject, fostering a culture in which adolescent girls lack accurate knowledge due to the absence of open conversations. This silence sustains harmful beliefs and deepens psychological distress.

Sobudula and Naidoo (2024) similarly observe that in South African communities, mothers and older women frequently refrain from educating young girls about menstruation. Social expectations discourage such discussions, perpetuating misinformation and reinforcing menstrual shame. Holst et al. (2022) report that even in urban Barcelona, menstruation is regarded as a taboo subject, making women uncomfortable discussing it with peers or healthcare providers. This discomfort limits opportunities for learning and normalizing menstrual health conversations.

Medina-Perucha et al. (2023) further explain that when menstruation is not discussed within families or communities, ignorance is preserved, and the likelihood of poor menstrual management increases. The

silence around menstruation is thus not merely a lack of dialogue it is a cultural mechanism that entrenches stigma and undermines physical and emotional well-being.

This systemic silence directly contributes to behavioural norms that isolate menstruators. These norms not only affect how menstruation is perceived but also shape tangible restrictions on behaviour and movement, as discussed in the next sub-theme.

Restrictions on Daily Activities

Cultural beliefs that frame menstruation as unclean frequently translate into concrete restrictions on the lives of menstruating individuals. These include exclusion from school, sports, religious practices, and household activities, all of which reinforce stigma and limit personal agency (#10, p.5; #5, p.4; #4, p.4).

Wall et al. (2018) detail that in Tigray, menstruating women are often prohibited from participating in daily and religious activities such as cooking, entering shared spaces, or attending services. These restrictions arise from longstanding beliefs around ritual impurity. Sobudula and Naidoo (2024) echo this in the South African context, where adolescent girls are frequently confined to their homes during menstruation and discouraged from engaging in education or sports, due to cultural taboos and parental enforcement.

Even in less conservative contexts, such as Spain, menstrual stigma continues to affect participation. Holst et al. (2022) report that women in Barcelona sometimes miss work or avoid social settings due to the discomfort or embarrassment associated with menstruation. Medina-Perucha et al. (2023) add that, while restrictions in Spain are subtler, the prevailing taboos still negatively impact daily engagement by fostering a fear of judgment or exclusion. These constraints often lead to reduced productivity, emotional withdrawal, and in some cases, educational and economic disadvantages.

Thus, the silence surrounding menstruation and the resulting behavioural restrictions are mutually reinforcing. The inability to speak openly about menstruation contributes to restrictive norms, while those restrictions deepen shame and prevent dialogue. This cyclical relationship sustains stigma across generations and geographies, underscoring the need for culturally sensitive awareness programs and policy interventions to challenge these deep-rooted beliefs.

Theme 2: Access to Menstrual Products

Access to menstrual products encompasses more than physical availability; it includes affordability, cultural suitability, and consistent supply. When these conditions are unmet, particularly among marginalized populations, menstruators face health complications, stigma, and educational disruptions (#2, p.3). The literature reveals that economic disadvantage, uneven distribution, and inadequate institutional support collectively restrict access, underscoring the need for multifaceted interventions. This theme is examined through three interconnected sub-themes: economic barriers, availability and affordability, and government and NGO interventions.

Sub-themes:

Economic Barriers

Economic hardship is one of the most significant factors influencing menstrual product access. Rossouw and Ross (2021) observe that wealth disparities, limited education, and underdeveloped infrastructure contribute directly to inequality in menstrual hygiene management (#9, p.4). Financial constraints are particularly severe among refugees and residents of low-income regions. Muhaidat et al. (2024) report that 42% of menstruators in Jordanian refugee camps struggled monthly to purchase necessary supplies, a clear indication that poverty is a primary obstacle (#8, p.7). Even when products like pads are available, Smith et al. (2020) found that over a quarter of women (26.4%) still reported unmet material needs, suggesting that affordability alone does not equate to adequate provision (#2, p.5).

Furthermore, economic inequality contributes to poor coping mechanisms such as product reuse or substitution with unsafe alternatives, practices that increase health risks and psychological stress. Marí-Klose et al. (2023) highlight that period poverty is more prevalent among women from lower socio-economic backgrounds, for whom purchasing menstrual supplies is a recurring financial burden (#9, p.6). These findings make clear that financial barriers must be addressed to ensure equitable access to menstrual care.

However, financial limitations do not act in isolation. They often intersect with issues of inconsistent product supply and inadequate infrastructure, which are explored in the next sub-theme.

Availability and Affordability

Closely linked to economic barriers is the issue of product availability and affordability. Even when menstruators can afford supplies, access may be restricted by irregular distribution or geographic isolation. In refugee contexts, for example, Muhaidat et al. (2024) found that 71.5% of participants reported reusing menstrual products due to inconsistent access to clean, disposable alternatives (#8, p.5). Rossouw and Ross (2021) reinforce that socio-economic status shapes not just affordability but also access to adequate hygiene facilities and materials, particularly in disadvantaged communities (#9, p.4).

Affordability issues persist even in high-income settings. Marí-Klose et al. (2023) note that the financial burden of menstrual products remains a challenge for many in urban areas like Barcelona, demonstrating that market availability does not automatically translate to accessibility (#9, p.6). Smith et al. (2020) further caution that the use of specific products such as pads should not be interpreted as a sign of fulfilled menstrual needs, as availability may not align with suitability or quantity required (#2, p.5).

Thus, while economic capacity influences access, the irregular supply and high cost of menstrual products compound the issue, revealing a systemic problem that transcends individual financial limitations. Addressing these structural issues requires organized support, which leads into the third sub-theme: Government and NGO Interventions

Government and NGO Interventions

To address the systemic inequalities that limit menstrual product access, the role of government and NGO interventions is vital. These actors can provide not only material support but also policy frameworks that promote long-term change. Rossouw and Ross (2021) call for a comprehensive policy approach that goes beyond wealth redistribution to include environmental and socio-cultural factors that impact menstrual health (#9, p.6). Similarly, Muhaidat et al. (2024) advocate for targeted programs that address both the material needs and the mental and physical well-being of refugees experiencing period poverty (#8, pp.6–7).

Smith et al. (2020) argue that effective interventions must be multi-dimensional, incorporating education, infrastructure, and economic empowerment—not just product distribution (#2, p.6). Yet, many institutional responses remain fragmented. Marí-Klose et al. (2023) emphasize the need for integrated public policies, noting that existing governmental and NGO efforts are often disjointed and insufficient in reaching the most vulnerable populations (#9, p.6). The authors support initiatives such as the free provision of menstrual products in schools and community centres as part of broader reproductive health strategies.

These findings collectively suggest that without coordinated intervention at the structural level; economic and logistical barriers will persist. Government and NGO support is essential to bridging gaps in availability and affordability while also addressing the underlying economic inequities highlighted earlier.

Theme3: Menstrual Health Education

Menstrual health education involves not only the biological and physiological understanding of menstruation but also emotional readiness, hygiene practices, and stigma reduction. The literature consistently affirms the need for timely, accurate, and culturally sensitive education to enable girls to manage menstruation confidently and safely (UNESCO, 2014). This theme is explored through three interrelated sub-themes: the role of schools, the lack of parental guidance, and community awareness programs. These components, while distinct, form a cohesive framework that either enables or hinders effective menstrual health education.

Sub-themes:

Role of Schools

Schools function as foundational spaces where adolescent girls can access both formal instruction and informal support related to menstruation. Nabwera et al. (2021) highlight the centrality of schools in rural Gambia, where teachers are instrumental in delivering menstrual education and fostering environments that reduce shame and psychological discomfort (#7, pp. 11, 13, 16). Medina-Perucha et al. (2020) further stress that embedding menstrual health into school curricula equips students with both the biological knowledge and practical skills needed for effective menstrual management (#3, p.8).

Beyond education, schools also provide critical resources, such as free sanitary pads and private washroom facilities. Nabwera et al. (2021) note that 63% of the surveyed schools offered free disposable pads, significantly supporting girls' menstrual hygiene needs (#7, p.3). This infrastructure positions schools not only as educational hubs but also as protective spaces where girls can manage menstruation with dignity and reduced health risks (#7, p.14; #3, pp. 3, 5).

"Teachers and schools are vital in providing menstrual health education, empowering students to handle menstruation more effectively and reduce any feelings of shame" (#7, p.16)

However, the effectiveness of school-based education can be limited without reinforcement at home, which brings attention to the next sub-theme: the lack of parental guidance.

Lack of Parental Guidance

Despite the critical role of schools, the absence of open dialogue at home often hinders the full integration of menstrual health education. Cultural norms in many communities discourage conversations about menstruation, particularly between mothers and daughters. Nabwera et al. (2021) found that in rural Gambia, silence around menstruation within families leads to misinformation, embarrassment, and harmful hygiene practices (#7, pp. 11, 15). Similarly, Medina-Perucha et al. (2020) report that many parents, especially those facing economic hardships, feel ill-equipped to support their children's menstrual needs due to a lack of knowledge and persistent taboos (#3, pp. 4, 7).

This lack of parental engagement creates a disconnect between what is taught in schools and the support students receive at home. As a result, even the best school-based programs may not reach their full potential unless they are reinforced by informed and supportive caregivers. To bridge this gap and foster consistent messaging across settings, broader community engagement becomes essential.

Community Awareness Programs

Community-based awareness programs serve as a vital link between schools and households. These initiatives work to dismantle stigma and promote open discussion by engaging both men and women, as well as local leaders. Nabwera et al. (2021) underscore the effectiveness of community-driven efforts in challenging entrenched taboos and promoting hygienic practices, particularly in low-resource environments (#7, pp. 13, 16). Medina-Perucha et al. (2020) also highlight the role of grassroots organizations and community leaders in filling educational and resource gaps that neither schools nor families can fully address alone (#3, pp. 6, 8).

When communities are actively involved, they help normalize menstruation as a public health issue, reinforcing what is taught in schools and compensating for gaps in parental guidance. Such holistic, multi-level engagement across educational institutions, family units, and community structures creates a supportive

ecosystem where adolescents can access the knowledge, resources, and emotional support necessary for healthy menstrual management.

Theme 4: Period Poverty and Health Impacts

Period poverty is defined as the lack of access to essential menstrual products, education, hygiene facilities, and safe sanitation. It has far-reaching consequences on physical health, emotional well-being, and social inclusion, disproportionately affecting marginalized groups such as refugee women and women living with disabilities (#1, p.4; #6, p.3). Soeiro et al. (2021) identify period poverty as a major issue among Venezuelan migrant women, noting that the unaffordability of menstrual products leads many to resort to unhygienic alternatives.

The study emphasizes that “the cost of menstrual products worsens period poverty for Venezuelan migrant women, compelling them to use unsanitary alternatives.”

Similarly, Khan et al. (2024) highlight the acute vulnerabilities faced by women with disabilities in Bangladesh, where both financial limitations and mobility constraints inhibit access to essential menstrual supplies.

As they state: “Period poverty is a widespread concern for women with disabilities, as financial and physical obstacles hinder their access to necessary menstrual hygiene items.”

These challenges manifest in tangible health outcomes, particularly in the form of **infections and reproductive health issues**, as well as profound **psychological distress**. Each sub-theme illustrates how period poverty affects the individual not just materially, but socially and emotionally.

Sub-themes:

Infections and Reproductive Health Issues

A consistent theme across the literature is the health risk posed by inadequate menstrual hygiene management. Without access to sanitary products, clean water, or private washing spaces, menstruators are more likely to use unsafe methods, leading to infections and longer-term reproductive health issues (#6, p.4; #1, p.5).

Khan et al. (2024) report that disabled women in Bangladesh often rely on others for mobility, which hinders their ability to maintain adequate hygiene. This dependency, combined with poor access to sanitary facilities, increases the likelihood of infection. The study found that women with disabilities were significantly less likely to use clean, suitable menstrual products, and many were unable to access safe toilets or water sources. Similarly, Soeiro et al. (2021) document that many Venezuelan migrants reported using cloths repeatedly or going without any menstrual products, often without access to soap or private bathrooms. Such conditions significantly elevate the risk of bacterial infections and long-term reproductive health problems, especially for already vulnerable populations.

Thus, period poverty is not only a matter of inconvenience or discomfort it is a public health concern. The direct link between inadequate menstrual care and serious health risks reinforces the urgency of inclusive menstrual health policies and interventions.

Psychological Distress

Beyond its physical impacts, period poverty exerts a deep psychological toll. Shame, stress, and social exclusion were common experiences among participants across studies, particularly where menstruation had to be managed in public, unsanitary, or unsupported settings (#1, p.6; #6, p.5).

Khan et al. (2024) highlight that many women with significant disabilities experienced heightened psychological stress due to their inability to manage menstruation discreetly. The stigma attached to menstrual accidents or dependence on caregivers compounded feelings of embarrassment and led to social withdrawal. Soeiro et al. (2021) similarly found that Venezuelan migrant women frequently described their menstrual experiences as “awful,” “unpleasant,” and “dreadful.” The lack of products and secure facilities not only increased anxiety but also generated feelings of powerlessness and loss of dignity. For many, menstruation became a source of dread rather than a normal biological process.

Psychological distress, therefore, is both a symptom and a consequence of broader systemic failures economic, infrastructural, and cultural that reinforce menstrual inequity. When compounded with physical health risks, the emotional burden of period poverty underscores the multidimensional nature of the issue and the importance of holistic, inclusive solutions.

5.6 Chapter Summary

This chapter presents the results found from examining the articles selected for this systematic review. It discusses the major obstacles encountered worldwide in maintaining dignity throughout menstruation. Employing thematic analysis as outlined by Braun and Clarke (2006), it utilizes stories from Brazil, Spain, South Africa, Bangladesh, and Ethiopia, emphasizing the ways cultural beliefs, financial challenges, and educational deficits influence menstrual health experiences for numerous women. An essential point is the significance of menstrual education. Educational institutions can offer encouraging environments for girls to receive positive information about menstruation; nevertheless, societal customs frequently obstruct candid conversations at home, causing numerous girls to feel perplexed and ill-equipped.

There is optimism, as initiatives driven by the community are encouraging inclusive dialogues to eliminate stigma. The chapter highlights the limited availability of menstrual products, especially for individuals living in poverty or displacement, leading some to turn to unsafe options. Economic obstacles continue to exist even in city regions. The passage emphasizes that sustainable change demands more than mere charity; it necessitates concrete government measures, such as offering free resources and support systems to address period poverty.

Furthermore, the cultural stigma associated with menstruation persists in isolating individuals, obstructing their engagement in different areas of life. This exclusion has a detrimental impact on mental health yet increasing awareness and brave community initiatives are opening pathways for essential changes.

CHAPTER 6: DISCUSSION

6.1 Introduction to Chapter

This chapter examines the study's key findings in relation to the main research question: "How are menstrual health outcomes and period poverty around the world affected by cultural barriers?". Each research objective is approached through the four primary themes identified in the thematic analysis: (1) Education on Menstrual Health, (2) Availability of Menstrual Products, (3) Cultural Stigmas and Taboos, and (4) Health Impacts and Period Poverty. The findings are compared with existing literature and thoroughly analysed to recognize patterns, impacts, and potential strategies for intervention. The chapter wraps up by assessing the research method, highlighting both strengths and weaknesses, and providing suggestions for implementation and further research.

6.2 Discussion of Key Findings

6.2.1 Societal perceptions and taboos related to menstruation

The First research objective is to examine societal perceptions and taboos related to menstruation. The result reveals that cultural taboos continue to be a major obstacle to menstrual health worldwide. In various settings from Ethiopia to Spain menstruation is enveloped in stigma, secrecy, and embarrassment (Wall et al., 2018; Holst et al., 2022). These taboos appear in detrimental forms, comprising restricted communication, false information, and behavioural limitations, like being barred from religious or home activities while menstruating (Sobudula & Naidoo, 2024). The cultural reinforcement of silence regarding menstruation is particularly evident within families, as mothers frequently avoid discussing the subject with their daughters (Medina-Perucha et al., 2023).

These views are intimately connected to gender norms and purity beliefs, reinforcing power disparities and marginalizing women from public life during their menstrual periods. Based on Goffman's stigma theory (1963), these social labels diminish individuals to discredited positions, resulting in psychological distress and insufficient care for menstruators. The persistence of these taboos hinders open dialogue, education, and assistance, ultimately diminishing menstrual health results.

Consequently, the results back the idea that cultural taboos play a key role in sustaining menstrual stigma and negative menstrual health results, consistent with earlier studies (UNESCO, 2014; Hennegan and Montgomery, 2021).

6.2.2 Cultural norms and economic disparity affect the availability of menstrual health products

The Second research objective is to evaluate the Cultural norms and economic disparity greatly affect the access to menstrual products. The cultural stigma linked to menstruation prevents girls from buying or

requesting menstrual products (Medina-Perucha et al., 2023). In certain communities, menstruation carries such stigma that those who menstruate feel compelled to conceal their periods and shy away from discussing their needs publicly (Holst et al., 2022).

Economically, period poverty is worsened by elevated costs, unreliable availability, and inadequate government assistance frameworks. For example, Muhaidat et al. (2024) discovered that 71.5% of women in Jordanian refugee camps repurposed items because of restricted access and costs. Even in affluent urban locations such as Barcelona, economic obstacles remain for marginalized communities (Marí-Klose et al., 2023).

The absence of infrastructure and inadequate distribution exacerbate the problem, especially in rural or conflict-ridden regions. Interventions by governments and NGOs, as pointed out by Smith et al. (2020), tend to be disjointed and poorly focused, missing the most at-risk populations.

As a result, cultural stigmas along with economic and structural obstacles restrict access to menstrual products, putting menstruators at risk of negative health consequences.

6.2.3 Methods to Navigate these Challenges

The Third research objective is to Tackle cultural obstacles starts with learning. This analysis reveals that educational institutions are essential in offering information and resources for managing menstrual health (Nabwera et al., 2021; Medina-Perucha et al., 2020). Nevertheless, the success of school initiatives is frequently weakened by insufficient backing from families and local communities.

The cultural taboo surrounding menstruation diminishes the effectiveness of education provided in schools. Numerous girls lack support from caregivers because of societal taboos, resulting in a lack of knowledge and feelings of shame (Sobudula & Naidoo, 2024). Programs aimed at community awareness that involve men, and religious leaders have proven effective in combating stigma and promoting behaviour change (Nabwera et al., 2021).

Addressing these problems requires comprehensive participation. Schools should incorporate menstrual education into their curricula, governments need to offer free products and enhance sanitation services, and communities must address ongoing stigmas.

As a result, successful solutions necessitate collaborative initiatives in education, policy, and cultural involvement to break down obstacles and enhance menstrual health results.

6.2.4 Understand the consequences of cultural barriers and period poverty

The effects of cultural and structural obstacles are not just social they have a direct effect on health. Soeiro et al. (2021) and Khan et al. (2024) reported infections, discomfort, and reproductive problems arising from poor hygiene practices and the unsafe reuse of products.

Many menstruators face feelings of shame, anxiety, and social isolation psychologically. The sensation of lacking preparation or support during menstruation causes emotional distress and lowers self-esteem, particularly in teenagers (Mari-Klose et al., 2023). Women with disabilities face double marginalization—restricted from obtaining products and left out of support networks (Khan et al., 2024).

These results confirm that period poverty represents a health emergency and a human rights concern, necessitating a transition from viewing menstruation as a personal responsibility to recognizing it as a systemic shortcoming.

6.2.5 Critique of Research Approach

The implementation of a systematic literature review (SLR) facilitated a comprehensive and well-structured examination of various studies investigating the link between cultural obstacles and period poverty. This method facilitated a comprehensive inquiry by integrating studies from diverse international settings and methodological perspectives. By incorporating qualitative, quantitative, and mixed-methods studies, the review effectively illustrated a complex overview of menstrual health issues in various socio-cultural contexts (Tranfield, Denyer & Smart, 2003).

Although it had strengths, the review encountered significant difficulties. A major constraint was the omission of studies in languages other than English, which might have led to language bias by leaving out culturally relevant research from non-English-speaking nations (Petticrew & Roberts, 2006). Moreover, excluding grey literature might have led to missing practical or community-oriented insights typically present in reports from NGOs or government organizations. These exclusions might have limited the breadth of the results.

Furthermore, combining results from studies with different designs and research paradigms was challenging. Although qualitative studies provided detailed contextual accounts, quantitative studies typically focused on statistical relationships, complicating uniform comparisons (Crowe & Sheppard, 2011). However, Braun and Clarke's (2006) thematic analysis framework offered a systematic but adaptable approach to recognize shared themes throughout this variation. This method enabled a unified synthesis and aided in the creation of broad insights, even with varied methodologies.

6.3 Strengths and Limitations

This study's use of a systematic literature review technique offers a clear and comprehensive framework for combining evidence from many contexts, which is a major advantage (Moher et al., 2009; Tranfield, Denyer & Smart, 2003). By providing clarity in the selection of research and the execution of analysis, the SLR

technique helped to improve reproducibility and minimise bias. This method was especially helpful in determining general and context-specific barriers to menstrual health based on structural and cultural factors.

Utilizing thematic analysis as described by Braun and Clarke (2006) enhanced the study by providing a systematic yet flexible method to recognize and analyse recurring themes in the data. This approach proved especially beneficial for integrating qualitative and mixed methods results and helped identify intricate, culturally embedded themes. Its clarity and replicability improved the overall trustworthiness of the synthesis.

Nonetheless, numerous limitations existed. The omission of non-English publications might have limited the inclusion of culturally important studies from areas where menstrual health is shaped by distinct local customs (Petticrew & Roberts, 2006). Moreover, because this review was exclusively based on secondary data, its conclusions were fundamentally influenced by the range, interpretations, and methods of the initial studies (Gough, Oliver & Thomas, 2017).

Differences in study quality and design created additional difficulties for the consistency of the synthesis. Even with the application of quality assessment tools like CASP and JBI to evaluate methodological rigor (Haile, 2021), there is still no universally accepted method for directly contrasting qualitative and quantitative studies within a systematic literature review framework (Katrak et al., 2004). This complicated the ability to assess evidence consistently and could have affected the importance placed on specific results.

This research utilized a Systematic Literature Review (SLR) strategy, commonly seen as a thorough and clear technique for integrating evidence from various settings (Moher et al., 2009; Tranfield, Denyer and Smart, 2003).

Utilizing Braun and Clarke's (2006) thematic analysis framework improved the clarity and replicability of the data synthesis process, especially in recognizing complex patterns within qualitative and mixed-methods research.

Nonetheless, various constraints need to be recognized. The omission of literature in languages other than English may have created language bias, possibly leaving out culturally significant studies from non-English-speaking areas (Petticrew and Roberts, 2006).

Additionally, the review relied on secondary data, thus the results are influenced by the interpretations and constraints of the original authors (Gough, Oliver and Thomas, 2017).

Variations in research design and quality among the studies included also hindered direct comparison and synthesis (Crowe and Sheppard, 2011). Although appraisal instruments like CASP and JBI are employed (Haile, 2021), there is no universally acknowledged standard for comparing qualitative and quantitative studies in systematic literature reviews (Katrak et al., 2004).

6.4 Chapter Summary

This chapter examined how cultural obstacles like stigma, silence, and inequality considerably influence menstrual health results and accessibility to care. The research question and objectives were explored through four themes, demonstrating how stigma restricts education, product access, and emotional health. The results align with current literature, emphasizing that menstrual inequity is a worldwide concern grounded in cultural and structural frameworks. Although the SLR methodology provided methodological rigor, certain limitations were recognized. In the end, the research advocates for comprehensive approaches in education, policymaking, and community involvement to establish fair and respectful menstrual health settings.

Recommendations for Practice

1. Free Distribution of Menstrual Products:

To tackle period poverty successfully, authorities must emphasize the free and universal provision of menstrual products across all public institutions such as schools, colleges, universities, healthcare centres, community hubs, and shelters. Data from Scotland's national program demonstrates that these initiatives lower stigma, absenteeism, and anxiety among those who menstruate (Smith, Patel and Adewale, 2020; Rossouw and Ross, 2021). These items should be diverse (pads, tampons, reusable cups) to represent individual, cultural, and health-related choices.

2. Menstrual Health in Education Curricula:

Schools play a crucial role in transforming perspectives and enhancing menstrual knowledge. Menstrual health must be part of comprehensive sexuality education starting from primary school. Curricula must be suitable for the age group, scientifically correct, and culturally aware, allowing both girls and boys to understand menstruation as a regular biological process (Nabwera, Hassan and Adegbite, 2021; Medina-Perucha et al., 2020). Early education encourages improved hygiene habits and cultivates nurturing peer relationships.

3. Community-Led Awareness Campaigns:

Awareness campaigns that are community-based effectively challenge taboos when they involve men, religious figures, and parents (Medina-Perucha et al., 2020; Nabwera, Hassan, and Adegbite, 2021).

4. Disability-Inclusive Menstrual Health Programs:

Interventions for menstrual health must be available to individuals with disabilities. This involves offering items tailored to physical or sensory disabilities, guaranteeing accessible restrooms, and educating caregivers. Menstruators with disabilities encounter specific difficulties that frequently go overlooked (Khan, Sultana and Hossain, 2024).

5. Public Sanitation and Infrastructure Development:

Enhancements in public sanitation and the introduction of gender-sensitive amenities directly tackle hygiene-related obstacles to menstrual health (Hennegan and Montgomery, 2021).

Recommendations for Future Research

1. Non-English and Regional Literature Inclusion:

Numerous culturally vital perspectives have yet to be published in English, resulting in a distorted comprehension of menstrual health issues globally. Upcoming research should incorporate non-English literature to promote inclusivity and reflect various cultural contexts, especially in Asia, Africa, and Latin America (Petticrew and Roberts, 2006).

2. Longitudinal Impact Studies:

Most existing research is cross-sectional and cannot evaluate long-term impacts. Future studies ought to utilize longitudinal designs to assess the ongoing effectiveness and real-world effects of menstrual health initiatives such as school attendance, self-esteem, mental well-being, and economic involvement over time (Rossouw and Ross, 2021).

3. Menstrual Stigma Among Boys and Men:

There is a significant lack of knowledge regarding how boys and men view menstruation. Their participation in discussions about menstrual health is crucial for reducing stigma. Upcoming studies should investigate the dynamics between genders and how inclusive education can change male perspectives and promote allyship (Medina-Perucha et al., 2023).

4. Intersectional Research:

Marginalized communities, including people with disabilities, refugees, trans men, and non-binary individuals, frequently encounter intersecting types of exclusion. Intersectional studies can reveal distinct obstacles and guide focused solutions that are socially fair and equitable (Khan, Sultana and Hossain, 2024; Muhaidat, Jarrar and Al-Zoubi, 2024).

5. Impact Evaluation of Government Programs:

Assessment studies are essential to grasp the efficacy, scalability, and fairness of menstrual health policies like free product distribution or tax exemption initiatives. These evaluations ought to guide policymaking based on evidence and aid in continuous enhancements (Smith, Patel, and Adewale, 2020).

CHAPTER 7: CONCLUSION

7.1 Introduction to Chapter

This final chapter provides a thorough conclusion to the research on cultural obstacles and period poverty, particularly highlighting their effects on menstrual health worldwide. The chapter starts by examining the consequences of the results concerning public health, gender equity, and social justice. It subsequently compiles the main findings, connecting them to the research question and goals. Although this version does not include specific recommendations for practice and future research, their significance is recognized. The chapter wraps up by highlighting the main contributions of the study and emphasizing the importance of treating menstruation as a significant human rights and public health concern.

7.2 Implications of Findings

The research revealed that cultural beliefs and norms significantly influence the perception, handling, and conversation surrounding menstruation. Taboos and stigma continue to be deeply rooted, obstructing open dialogue, restricting education, and reducing access to menstrual resources. These results suggest that menstrual health transcends being merely a personal or sanitary concern; it represents a wider public health and gender equity challenge (Wall et al., 2018; Medina-Perucha et al., 2023).

Health systems, educational bodies, and governments need to acknowledge menstruation as a topic rooted in cultural stories and systemic inequalities. This entails progressing past awareness initiatives and product dissemination to address more profound cultural stigmas. The results notably emphasize the importance of considering the distinct experiences of marginalized populations like individuals with disabilities, indigenous peoples, and refugees who encounter overlapping obstacles (Khan et al., 2024; Muhaidat et al., 2024). The persistent existence of menstrual stigma in both low-income and high-income nations highlights the worldwide character of this problem and the urgent requirement for inclusive, culturally aware, and sustainable approaches.

7.3 Conclusion

This research was motivated by the primary question: In what ways do cultural barriers influence menstrual health outcomes and period poverty globally? Through a thorough literature review and thematic analysis, the research sought to reveal the impact of deep-seated cultural beliefs on menstrual health practices and resource availability across various global contexts.

The analysis produced four main themes: Menstrual Health Education, Availability of Menstrual Products, Cultural Taboos and Stigmas, and Period Poverty and Health Effects. Collectively, these themes uncovered the diverse ways cultural perceptions of menstruation obstruct efforts to attain menstrual equity and health.

To begin with, the research showed that cultural discomfort and silence frequently impede menstrual education. In numerous communities, menstruation is a sensitive topic, seldom talked about in homes or

schools. This lack of communication fosters myths and misinformation, hindering young menstruators from acquiring a proper understanding of their bodies and how to manage menstruation in a hygienic and self-assured manner. Where education is available, it frequently tends to be gender-separated, narrow in scope, or provided without cultural awareness, further marginalizing menstruators.

Secondly, the availability of menstrual products continues to be a notable obstacle in both advanced and emerging nations. Cultural constraints, stigma, and financial hardship converge to restrict product access and options. In numerous regions, menstruators turn to using unclean materials or keep to themselves during menstruation due to embarrassment and a shortage of resources. Although financial limitations are a significant factor in period poverty, this research confirms that cultural stigma frequently has a similarly restrictive impact.

Thirdly, the research examined how taboos and stigma related to menstruation are maintained by religious, familial, and institutional standards. These stigmas influence not only personal conduct but also policy choices and societal perceptions. For example, menstruators might be barred from joining religious or social gatherings, experience exclusion from educational or professional environments, or develop shame that contributes to low self-worth and mental health issues. This cultural governance of menstruation perpetuates gender disparity and limits bodily freedom.

Ultimately, the issue of period poverty and its health effects emphasized the significant repercussions of these cultural and structural obstacles. When individuals who menstruate cannot handle their periods with dignity, it may result in infections, dropping out of school, and absenteeism from work, perpetuating the larger cycle of poverty and gender inequality. The physical and mental well-being of menstruators suffers when menstruation is regarded as a source of embarrassment instead of a typical biological occurrence.

This study highlights the significance of examining menstruation from an intersectional perspective that includes cultural, economic, and social factors. It emphasizes that although economic obstacles are important, cultural stigma is a related and frequently ignored problem that needs to be addressed at the same time. A major discovery of this research is that menstrual stigma exists beyond just developing nations. Even in wealthy countries, marginalized groups including homeless women, transgender people, and immigrant populations still endure period poverty and stigma, indicating that cultural transformation is needed universally.

Reiterating the research subject and goals, this study aimed to examine the connection between culture and menstrual health. It has effectively highlighted that period poverty encompasses more than just a shortage of products it signifies profound cultural inequalities. Through the integration of worldwide data, this study enhances the increasing acknowledgment of menstruation as an issue of dignity, health, and human rights.

The importance of these results rests in their ability to guide policy, education, and advocacy. Policies that focus solely on the physical aspects of menstruation like providing free products might be inadequate if they

do not simultaneously aim to break down cultural stigmas and provide thorough menstrual education. Likewise, community-focused initiatives need to be inclusive and aware of cultural contexts, guaranteeing that they uplift menstruators instead of reinforcing stigma.

In summary, the study highlights that cultural obstacles significantly contribute to menstrual inequality and period poverty, often overlooked worldwide. Effective menstrual health initiatives must challenge harmful beliefs, promote education, and support inclusive policies. Menstruation should be recognized as a public health priority and a human rights issue. The success of global menstrual health efforts depends on addressing cultural aspects. This research calls for a collective commitment to end silence, uphold dignity, and improve equity for all menstruators.

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Appendix

Appendix 1: Summary of Included Studies

No.	Author(s) and Year	Country	Study Design	Key Findings
1	Soeiro et al. (2021)	Brazil	Qualitative	Migrant women struggle with access to menstrual hygiene products and services.
2	Rossouw & Ross (2021)	Multiple LMICs	Quantitative	Socioeconomic inequalities influence menstrual hygiene access.
3	Medina-Perucha et al. (2020)	Spain	Mixed-Methods	Stigma and economic inequities are key barriers to menstrual health.
4	Holst et al. (2022)	Spain	Qualitative	Menstrual inequity linked to stigma, poverty, and lack of policy support.
5	Sobudula & Naidoo (2024)	South Africa	Qualitative	Cultural taboos and lack of maternal support hinder menstrual education.
6	Khan et al. (2024)	Bangladesh	Quantitative	Women with disabilities face stigma and poor access to menstrual hygiene.

7	Nabwera et al. (2021)	Gambia	Quantitative	Poor hygiene affects school attendance and increases infection risk.
8	Smith et al. (2020)	10 Countries	Quantitative	Product usage is tied to socioeconomic disparities.
9	Muhaidat et al. (2024)	Jordan	Quantitative	Period poverty linked to depressive symptoms and reuse of products.
10	Wall et al. (2018)	Ethiopia	Ethnographic	Cultural taboos significantly restrict education and resource access.
11	Marí-Klose et al. (2023)	Spain	Quantitative	Period poverty correlates with high stress and anxiety.
12	Medina-Perucha et al. (2023)	Spain	Cross-Sectional	Socioeconomic status predicts menstrual health outcomes.

Table 5: Summary of Included Studies – (Self-created)

Appendix 2: PRISMA Flowchart Description

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flowchart outlines the process of identifying, screening, and including studies in the systematic review. The flowchart visually represents the following steps:

Records identified through database searching: 1099

Records after duplicates removed: 761

Records screened: 761

Records excluded: 711

Full-text articles assessed for eligibility: 50

Full-text articles excluded (with reasons): 36

Studies included in qualitative synthesis: 12

This flowchart ensures transparency in study selection and is self-created based on PRISMA guidelines.

Appendix 3: Search Strategy

The search strategy was designed using the PEO framework:

Population: Individuals affected by period poverty

Exposure: Cultural stigma, taboos, and gender norms

Outcome: Menstrual health and hygiene outcomes

Search terms combined with Boolean operators (AND/OR) included:

- 'period poverty' OR 'menstrual poverty' OR 'lack of menstrual products'
- AND 'cultural stigma' OR 'menstrual shame' OR 'gender norms'
- AND 'menstrual health' OR 'menstrual hygiene' OR 'health outcomes'

Databases used: PubMed and ProQuest

Date Range: Studies published between 2014 and 2025

Language: English only

Inclusion/Exclusion criteria applied to ensure relevance and quality of sources.

Appendix 4: Quality Appraisal Summary (CASP/JBI)

The following table summarizes the quality assessment of the included studies using CASP for qualitative studies and JBI for quantitative and mixed-method studies.

No.	Study	Design	Appraisal Tool	Criteria Met	Quality Rating
1	Soeiro et al. (2021)	Qualitative	CASP	9/10	High
2	Rossouw & Ross (2021)	Quantitative	JBI	8/10	High
3	Medina-Perucha et al. (2020)	Mixed-Methods	JBI	8/10	High
4	Holst et al. (2022)	Qualitative	CASP	8/10	Moderate
5	Sobudula & Naidoo (2024)	Qualitative	CASP	7/10	Moderate
6	Khan et al. (2024)	Quantitative	JBI	7/10	Moderate
7	Nabwera et al. (2021)	Quantitative	JBI	9/10	High
8	Smith et al. (2020)	Quantitative	JBI	8/10	High
9	Muhaidat et al. (2024)	Quantitative	JBI	7/10	Moderate
10	Wall et al. (2018)	Qualitative	CASP	8/10	Moderate
11	Mari-Klose et al. (2023)	Quantitative	JBI	8/10	High
12	Medina-Perucha et al. (2023)	Quantitative	JBI	9/10	High

Table 6: Quality Appraisal Summary (CASP/JBI) – (Self-Created)

Appendix 5: How period poverty can play out in the lives of girls

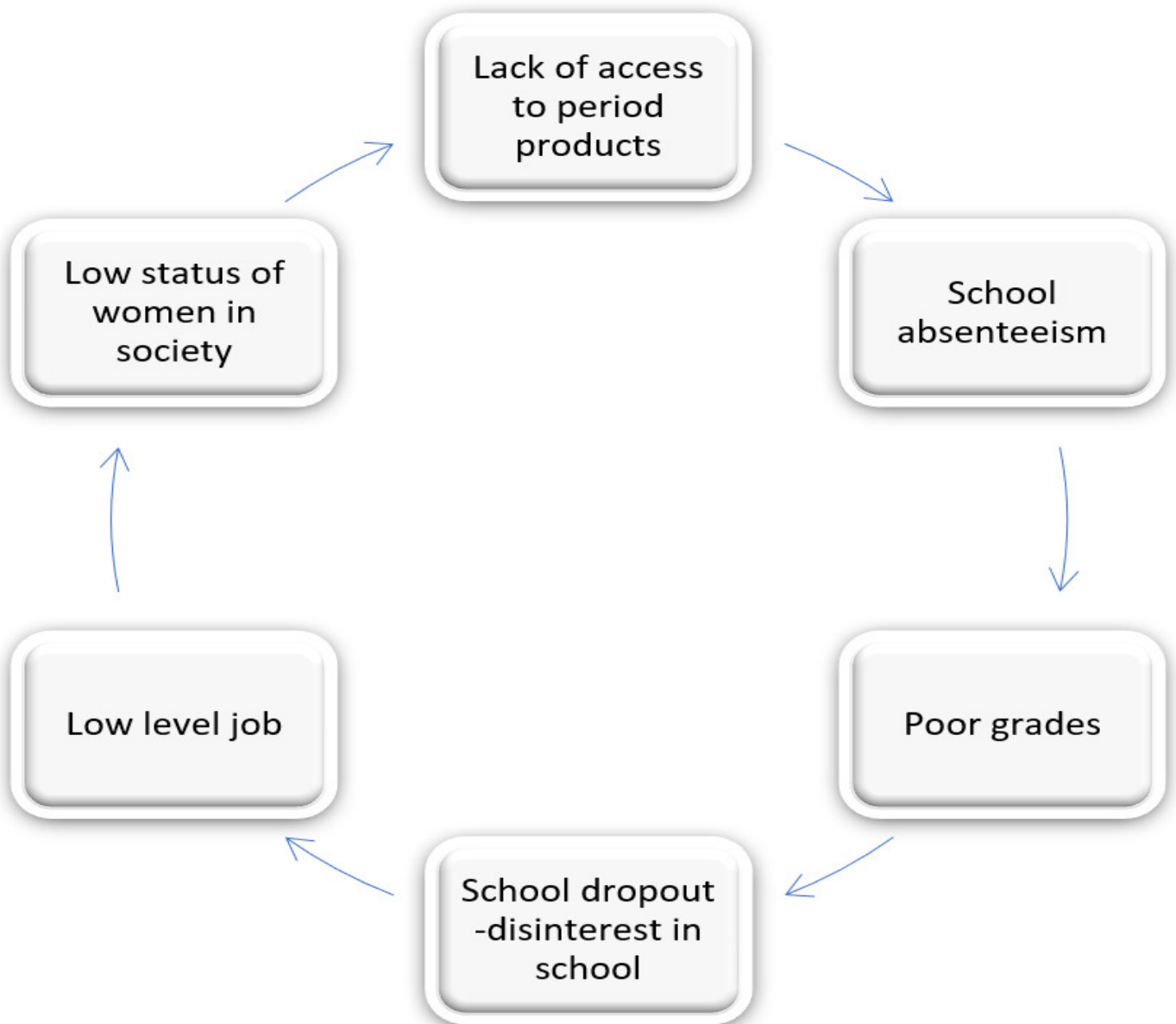


Figure 6: illustrates the complex effects of period poverty on girls' lives (Sommer et al., 2015).

Appendix 6: How access to menstrual products can change the lives of schoolgirls.

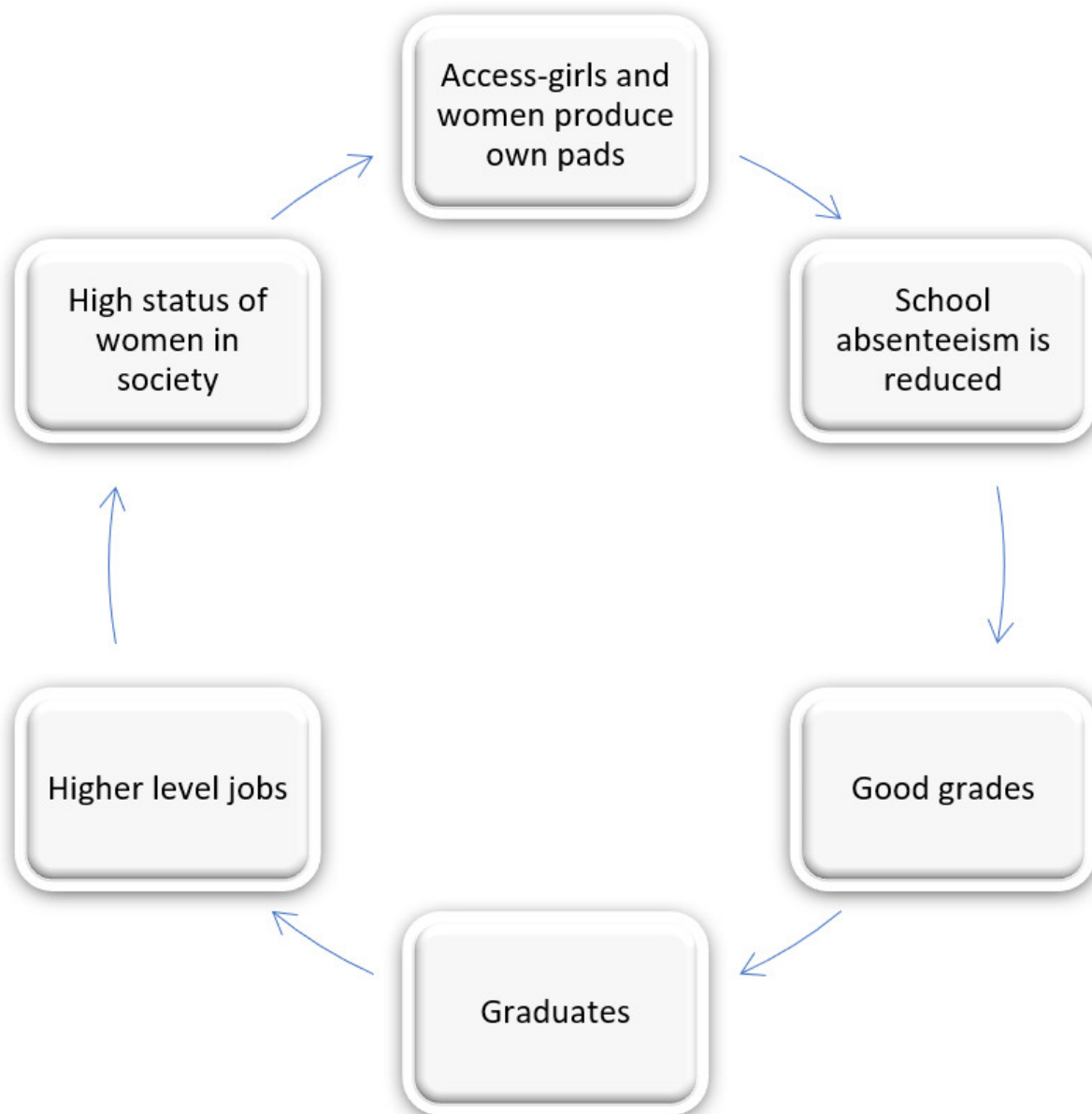


Figure 7: Highlights the transformative impact of menstrual product access on schoolgirls' lives
(Sommer et al., 2015).