EXPLORING THE KNOWLEDGE, ATTITUDES, AND PRACTICES ON MENSTRUAL HYGIENE, AND ACCESS TO MENSTRUAL PRODUCTS AND WASH FACILITIES

IN SELECTED COMMUNITIES IN THE NUWARA ELIYA DISTRICT, SRI LANKA

centre for poverty analysis

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Acronyms

CAAPP	Collective Action Against Period Poverty
CEPA	Centre for Poverty Analysis
DCS	Department of Census and Statistics
DSD	Divisional Secretariat Divisions
FGD	Focus Group Discussion
FPASL	The Family Planning Association of Sri Lanka
G.C.E A/L	General Certificate of Education Advanced Level
G.C.E O/L	General Certificate of Education Ordinary Level
GND	Grama Niladhari Division
GPS	Global Positioning System
GoSL	Government of Sri Lanka
HIES	Household Income and Expenditure Survey
HPB	Health Promotion Bureau
KAP	Knowledge, Attitudes, and Practices
KII	Key Informant Interview
LMIC	Low- and Middle-Income Countries
MOH	Medical Officer of Health
PHI	Public Health Inspectors
PHM	Public Health Midwives
RFSU	Swedish Association for Sexuality Education
RTI	Reproductive Tract Infections
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UTI	Urinary Tract Infections
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organisation

Executive Summary

The study, was conducted by the Centre for Poverty Analysis (CEPA) in partnership with the Family Planning Association of Sri Lanka (FPASL) and funded by the Innovation Fund of the Swedish Association for Sexuality Education (RFSU), investigates menstrual health knowledge, practices, stigma, discrimination, and access to menstrual hygiene products and WASH (Water, Sanitation, and Hygiene) facilities among menstruating individuals in estate communities within the Nuwara Eliya district. Following prior research in low-income urban areas of Colombo, CEPA was tasked with conducting a Knowledge, Attitudes, and Practices (KAP) study to produce essential data that would allow FPASL to provide evidence-based support services in the estate sector.

In Sri Lanka, although menstrual hygiene is sometimes addressed, broader systemic issues including stigma, discrimination, and the established patriarchy linked to menstruation are frequently neglected. This work tackles a significant deficiency in research about menstruation-related discrimination, providing empirical insights to guide policy and programming aimed at eliminating period poverty. The study specifically seeks to investigate knowledge and views of menstruation, explore cultural and religious beliefs and practices, comprehend the everyday effects of menstruation on individuals' lives, and provide recommendations for multi-sectoral participation.

The research employed a mixed-methods approach, integrating a quantitative survey of 417 menstruating individuals aged 15–49 years from two Divisional Secretariat Divisions (Norwood and Thalawakele) with qualitative data gathered through key informant interviews and focus group discussions. Data collection was conducted in eight purposively selected Grama Niladhari Divisions (GNDs). Consulted stakeholders comprised of menstruating girls and women, schoolboys, male community members, healthcare professionals, school principals, producers of menstrual hygiene products, and NGO representatives. The quantitative data was assessed using descriptive and non-parametric techniques, whereas the qualitative data was organized and interpreted using thematic analysis, taking into account economic, cultural, and social issues.

A significant discovery of the study was the limited awareness and understanding of menstruation before menarche. Nearly two-thirds of respondents indicated a lack of prior knowledge before their first menstruation, predominantly depending on their mothers or other female relatives for information. The deficiency in formal education is recognized to create an environment ripe for misunderstanding and fear regarding menstruation, as schoolteachers frequently hesitate to address the subject due to embarrassment or cultural sensitivity. Both girls and boys expressed discomfort regarding discussing menstruation within co-educational settings, presenting obstacles to comprehensive awareness.

Menstruation remains a stigmatized topic, frequently linked to beliefs of impurity. Numerous individuals engage in self-imposed isolation during menstruation and refrain from religious or social activities to avoid perceived embarrassment. Respondents described instances of avoiding specific foods, religious venues, and physical activities, demonstrating how cultural norms reinforce exclusion during menstruation. Although the majority of respondents (86%) indicated they did not experience direct discrimination, this was primarily attributed to the non-disclosure of menstruation to others.

Healthcare professionals, especially midwives, are crucial in promoting menstrual health awareness throughout estate communities. Nonetheless, obstacles persist when seeking advanced healthcare at the hospitals due to language limitations, discomfort in engaging with male doctors, and insufficient knowledge about reproductive health. These challenges discourage menstruators from pursuing professional assistance when necessary, resulting in dependence on informal networks or ineffective guidance.

The research additionally examined the use and access of menstrual hygiene products. Single-use sanitary napkins were the predominant menstrual hygiene product used in the study location followed by the use of cloth. Awareness of sustainable alternatives including the menstrual cup and reusable pads was noticeably deficient. The choice of products was significantly affected by age and income, with individuals of lower income more inclined to use cloth primarily out of necessity rather than preference. The economic crisis is recognized to have contributed to an increased dependence on less sanitary choices such as cloth among the targeted community.

Notably, most respondents lacked knowledge regarding the medically advised frequency for changing menstrual hygiene products. A considerable majority indicated using items beyond safe durations because of insufficient replacements or inadequate facilities. School students and women working on the estates frequently avoid changing products during the day due to the lack of disposal methods, heightening health concerns.

Cultural food restrictions during menstruation and menarche were also widely observed. Foods including meat, fish, brinjal, and papaya, which are rich in essential nutrients, were omitted, raising concerns for adolescent nutrition. These restrictions, based on practice rather than empirical evidence, may lead to long-term health consequences.

The study collectively demonstrates the broad social, economic, cultural, and infrastructural barriers experienced by menstruating individuals in the estate sector. It highlights the pressing necessity for multi-tiered interventions: enhanced school-based menstrual education, culturally responsive awareness initiatives, access to economical and sustainable menstrual hygiene products, improvements in WASH facilities, and policy advocacy. Reduced prices on necessary menstrual hygiene products and providing medical professionals with sufficient training are vital measures.

This study underscores the need to tackle period poverty from a comprehensive perspective. By addressing the interconnected challenges of stigma, accessibility, education, and infrastructure, stakeholders can achieve menstrual justice, dignity, and social assistance for all menstruating individuals in the estate communities in Sri Lanka.

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1. Introduction and background to the research

The Family Planning Association of Sri Lanka (FPASL), supported by the Innovation Fund of the Swedish Association for Sexuality Education (RFSU), is working towards making a significant positive impact for all menstruating individuals, by improving menstrual health and hygiene; ending menstrual stigma and discrimination; realizing the right to water and sanitation; addressing the lack of adequate amount of water, sanitation and hygiene (WASH) facilities in schools; and changing societal perceptions of menstruation and womanhood. Building on their previous experience conducting research on the topic in selected low-income areas in the Colombo district, the Centre for Poverty Analysis (CEPA) was approached to undertake a Knowledge, Attitudes, and Practices (KAP) research study to provide the foundational data necessary to assist FPASL to implement evidence-based support services pertaining to menstrual health and hygiene to communities residing within the estate sector in the Nuwara Eliya district.

1.1 Rationale for the study

According to Rossouw and Ross, "menstrual poverty or period poverty refers to the lack of access to the much-needed hygiene products during monthly periods as well as being able to access adequate places to use them which includes basic sanitation services and receiving information about menstruation" (as cited in Carneiro, 2021, p. 721). While period poverty is recognized as a condition of having insufficient access to menstrual hygiene products, education, and sanitation facilities (Jaafar et al., 2023) and is a global community health dilemma, it could also be identified as a neglected public health issue. As a result of period poverty, millions of menstruating individuals are subjected to injustice and inequality. Based on the global studies conducted on menstruation, period poverty and human rights, there has been an increase in period poverty-related issues since the COVID-19 pandemic. Menstruation and its correlation to poverty since the pandemic has increasingly become an important public issue around the world due to its impact on people's economic conditions (Khamai, 2021; United Nations Population Fund, 2022).

Period poverty is not only a matter of one's economic and physical well-being, but also one's mental and social well-being (Michel et al., 2022); it is characterized by a lack of access to menstrual hygiene products, hygiene facilities, proper waste management (or disposal of

menstrual products), and education and awareness on menstruation. To this end, period poverty is understood to operate at three layers; the first: the lack of awareness and education, the second: the lack of infrastructure which supports those who menstruate when they are at work, in school, or in public, and the third: the lack of access to menstrual products, often due to their high costs (Navodya, 2023).

In Sri Lanka, it is estimated that of the 11.2 million of the female population of the country, 5.2 million are menstruating women and girls (i.e., the mid-year population age group) (Hettiarachchi et al., 2023); and according to the Advocata Institute (2022), it is reported that approximately 50% of Sri Lanka's menstruating households are period poor.[1] Factors such as inadequate financial resources coupled with rising costs of sanitary products, cultural stigma, lack of knowledge on menstruation and products, lack of a supportive social environment, and limited menstrual hygiene resources (Hettiarachchi et al., 2023) are recognized to contribute to this situation.

Infrastructure which supports menstruating individuals in public places is important in maintaining their hygiene, comfort and overall health. The absence of supportive infrastructure, especially for WASH, can have a direct impact on a menstruating individual's productivity and daily life and could result in girls not attending schools, women and trans-men not attending work and other social functions when menstruating which means a loss of productivity to the country and the individual.

Knowledge about menstruation, WASH, and access to menstrual hygiene products is essential for securing one's physical, mental, and emotional well-being. Unhygienic practices related to menstruation, i.e., using old cloth that has not been properly washed, dried, stored and/or worn for far too long or using menstrual hygiene products for longer than the recommended duration, could lead to conditions such as Urinary Tract Infections (UTIs) and Reproductive Tract Infections

[1] This was arrived at by "subtracting the number of households that had access to sanitary napkins (the households in the survey that have a component of expenditure allocated to sanitary napkins) from the total number of households that had at least one menstruating woman (females between 15-47 years of age)". Adovacata Institute. (n.d.). *Taxing Menstrual Hygiene Products in Sri Lanka: A Policy Analysis*. https://adrasrilanka.org/tmhpsl/

(RTIs) (Dissanayake and Sri-Bandara, 2022). Therefore, addressing concerns regarding accessibility and affordability of menstrual hygiene products and knowledge is crucial.

The lack of awareness and education on the topic of menstruation can be attributed to how it is labelled as taboo to be discussed openly. The literature suggests that many children either have no prior knowledge of menstruation at the stage of menarche, or whatever information or knowledge they acquire is what is passed down from their mothers, aunts, siblings, cousins, or friends, which often times could be skewed by a sense of mysticism (UNICEF, 2015). However, the literature also suggests that many school-teachers skip over lessons on sexual and reproductive health due to embarrassment or cultural beliefs (Hettiarachchi et al., 2023), leaving children to learn about menstruation on their own or from someone else, which often can be an unreliable source. Although there is a lack of recent research conducted on beliefs surrounding menstruation and misinformation in Sri Lanka, the literature from the rest of the region reveals the extent to which menstruation is discussed factually; for instance, it was reported that 48% of Indian school girls surveyed by UNICEF believed that menstruation was some sort of a disease (Hettiarachchi et al., 2023).

Drawing from the existing contextual information already available, this research study attempts to answer the following research questions:

- What is the level of awareness and perceptions of menstrual practices among people? How do they gain information? (These characteristics may include socio-economic factors such as ethnicity, class, gender and caste)
- What is the level of awareness of people on menstrual hygiene products used and available?
- What are the barriers to accessing menstrual hygiene products? Knowledge on alternative menstrual hygiene products available, used and consequences?
- How does menstruation affect school attendance or engagement in community/social activities? (perceptions of menstruating individuals (school aged girls, women), school representatives with responses characterised by ethnicity, class, and gender)?

- What is the availability of WASH facilities at home, school or the work environment and how does this impact decisions of menstruating individuals?
- What changes should be made to contribute to dignified menstruating experiences of menstruating individuals?

1.2 Objective of the research

In Sri Lanka, while aspects of menstrual hygiene are occasionally discussed, broader issues such as discrimination and deep-rooted patriarchy associated with menstruation and related practices often go unaddressed. Recognising a gap in comprehensive research and data on menstruation-related discrimination in Sri Lanka, this research offers foundational data to guide project implementation and policy recommendations to address period poverty. Therefore, the objective of the research is to collect in-depth information on menstruation-related knowledge, attitudes, practices (KAP), understand existing policies, stigma, discrimination, access to menstrual hygiene products, and assessing the availability and quality of water, sanitation and hygiene facilities (WASH) facilities among communities residing in the estate sector in selected locations within the Nuwara Eliya District. To this end, the specific objectives of this study are:

- To explore community members' knowledge, awareness, and perceptions of menstruation and menstrual practices.
- To explore cultural and religious beliefs surrounding menstruation and practices during menstruation.
- To examine the ways in which menstruation, menstrual practices, and menstrual pain affects menstruators' day-to-day life.
- To provide recommendations for the government, the development sector, and the private sector for better investment in local communities to effectively reduce period poverty.

The findings from the research will provide FPASL with foundational information necessary to address issues and to promote improved knowledge and practices pertaining to menstrual health and hygiene among the estate sector community in the Nuwara Eliya district of Sri Lanka. It is

expected that this report will contribute to identifying potential factors that can influence changes in societal perceptions and practices on menstruation.

1.3 Structure of the report

The outline of the report includes an executive summary, followed by a brief insight into the current context in which the research is situated informed by extracts from the detailed desk review undertaken as part of this research. The next section provides details of the methodology adopted in implementing this research study and is followed by the findings section, which documents and reflects the key findings related to knowledge, attitudes, and practices associated with menstrual health and hygiene, with a particular emphasis on perceptions related to menstrual stigma and discrimination, access to water and sanitation facilities in homes, schools and public spaces, as well as access to menstrual hygiene products in the research locations within the Colombo district. The report concludes with recommendations which may be adopted in an effort towards identifying potential factors that can contribute towards changes in societal perceptions and practices on menstruation.

2 Methodology

This research adopted an in-depth, mixed methods approach to study the selected respondents' menstrual-related knowledge, attitudes and practices (KAP). Through using this approach, it aimed to provide comprehensive data on menstrual practices, and the impact of stigma and discrimination experienced by research respondents located in the selected research locations on their menstruation related practices. It is expected that the findings from the research will guide FPASL to make evidence-based recommendations and develop strategies for future interventions to overcome stigma and discrimination faced by menstruating individuals in the estate sector of Sri Lanka.

To this end, CEPA adopted a three-pronged approach to data collection which included a desk review of existing literature and policies (which builds on the literature review undertaken for

the CAAPP project[2]), and a KAP survey which was complemented by qualitative data collection methods. The methodology and tools used in this study are informed by the previously concluded research study, with the data collection tools only modified for any shortfalls identified. Therefore, it is expected that this will allow for a comparison of menstrual experiences between urban and estate communities at a later date.

Recognising that there was a dearth of publicly available, recent research on menstruation and related discrimination in Sri Lanka, the desk review of literature undertaken as part of this research considered data available in Sri Lanka, followed by experiences from the south Asian region. The findings presented in this report builds on a recent research study undertaken by CEPA on behalf of Shanthi Maargam, which documented responses from individuals residing in low-income settlements in the Colombo district.

2.1 Quantitative component

The initial questionnaire for the KAP survey was designed by CEPA. This was subsequently reviewed by the FPASL team. Once approved, the questionnaire was translated to Tamil and digitised on Kobo Toolbox which was used for data collection of the survey. Tablet computers were used for collecting data using the Kobo Toolbox software. The survey tool is available as an Annex at the end of this report.

2.1.1 Survey sample

The target sample population comprised of menstruating individuals in the age range of 15-49 years. The age category of 15 - 49 was selected as it aligns with the World Heath Organisation's (WHOs) defined reproductive age range, encompassing the majority of menstruating individuals, ensuring relevance for menstrual research and compatibility with the global studies (World Health Organization, 2022). The sample respondents resided in two selected Divisional Secretariat Divisions (DSD) of Norwood and Thalawakele within the Nuwara Eliya district. These

[2] The CAAPP project: Collective Action Against Period Poverty (CAAPP) aims to improve menstrual health and hygiene by increasing knowledge; end menstrual stigma and discrimination; realize human rights to water and sanitation; address the lack of adequate Water, Sanitation, and Hygiene (WASH) facilities schools and communities; and shift societal perceptions on menstruation. CEPA was contracted by one of the project partners to undertake similar research in selected locations in the Colombo district.

two DSDs were purposively selected in consultation with FPASL based on FPASL's ongoing engagement in the community and recognized availability of potential survey respondents.[3] The purposive selection of survey locations ensures that findings from the research can be utilized in communities where FPASL intends to undertake future interventions.

According to the 2012 Census and Population Survey (the latest available) the total female population between the age of 15-19 in the research locations is reported as 95,328 (Department of Census and Statistics [DCS], 2012). Based on this population size, the survey sample size was calculated using a simple random sampling formula (indicated below) with a confidence level of 95% and a margin of error of 5%.

$$n' = \frac{n}{1 + \frac{z * \hat{p}(1-\hat{p})}{\varepsilon^2 N}}$$

n'	Sample size
N	Population size
z	Z score (at 95% confidence interval)
$\hat{p}$	Population proportion (0.5)
ε	Margin of error (0.05)
n	sample size for an infinite population

Based on the formula, the minimum sample size required for the sample to be representative was calculated as 384 respondents. However, for better representation of the population and accounting for potential survey errors, the final sample size for this research was increased to 400 respondents. The survey reached a total of 417 respondents among the selected geographical locations. In order to reflect diversity of experiences among the sample population, the respondents were categorised by the following four age groups of: 15-19, 20-29, 30-39, and 40-49 years.

[3] During preliminary scoping activities it was indicated that there has been a significant migration from the estate sector since the economic crisis in 2022, which also contributed to the purposive selection of the data collection locations.

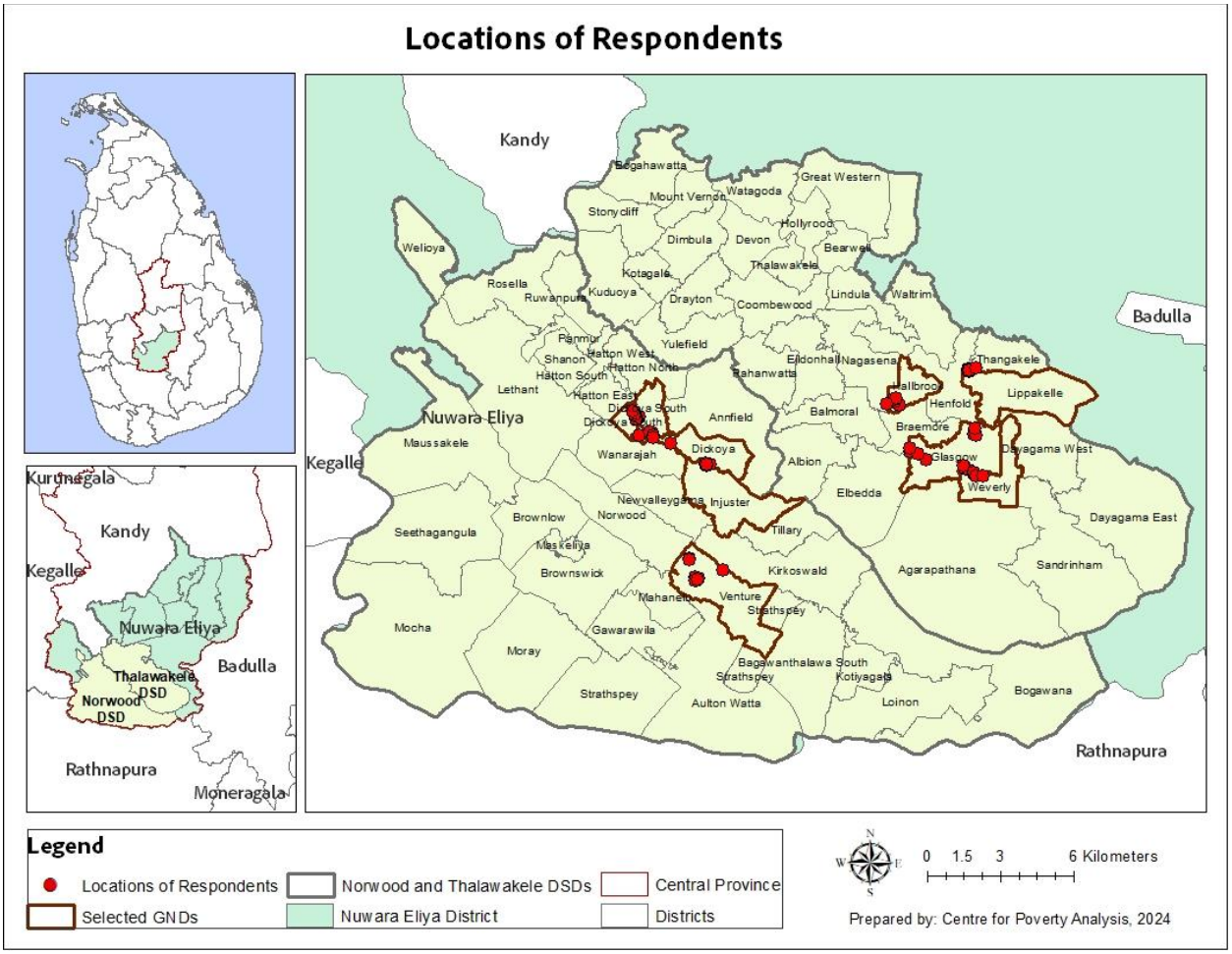
The 400 survey respondents were proportionally distributed among 8 Grama Niladhari Divisions (GNDs) within the selected DSDs, based on the population of menstruating individuals between the ages of 15-49 in each GND. The sample breakdown disaggregated by DSD and GND is given below:

Table 1: Detailed breakdown on the sample research locations

Selected Divisional Secretariat Divisions (DSDs)	**Selected Grama Niladhari Divisions (GNDs)**	**Sample size**
Norwood (n=230; 55%)	Dickoya	47
	Dickoya South	47
	Injustry	64
	Venture	72
Thalawakele (n=187; 45 %)	Glassgow	56
	Hallbrook	53
	Lippakele	39
	Weverly	39
	Total	**417**

Using the GPS coordinates recorded during the survey component of the research, Figure 1 below elaborates the geographic distribution of the survey respondents from this study.

Figure 1: GPS coordinates of survey respondents



2.1.2 Implementation of the survey

Eight (8) enumerators were selected to administer the survey in-person and were provided with a detailed training on the purpose and expectation of the study, the data collection methodology, the survey tool, as well as medical awareness of menstruation by a CEPA research team member. Given the nature of the research and the potential sensitivity of the subject matter, all enumerators selected to be a part of the data collection team were female to ensure that respondents felt comfortable to participate in the survey and provide responses. The enumerators recruited to administer the survey were residents of the Nuwara Eliya district and were conversant in local languages and familiar with the local dialect.

The respondents chosen to be surveyed were selected on the basis of a stratified random sampling methodology to ensure a diverse spread in terms of gender, age, ethnicity, and language. Informed consent was obtained from all survey respondents, and any respondents under the age of 18 required informed and written consent from a parent or guardian.

Recognising the long hours of work for individuals employed on the estate, and these individuals representing a significant proportion (57%) of the survey sample, efforts were made to ensure responses from them were captured. To this end, the research team would administer the survey with them either during their lunch break (for those who returned home for lunch) or would schedule a convenient time to speak with them after they returned home at the end of the day after 5pm.

2.1.3 Selection of households/respondents for the survey

At the beginning of the data collection process, the research team followed the rule of every third household, with the starting point in each GND decided by the community mobiliser. The research team were provided with a guidance document to ensure that an adequate representation of the different age-categories of respondents was captured in each GND.

In instances when the menstruating individual belonging to the household was not in the house at the time of visiting (as they were engaged in plucking tea leaves), an appointment was made, and the house was revisited at a time convenient to the respondent.

Reasons for skipping households included:

- Respondents' refusal to participate in the survey.
- Over-age or under-age respondents.

2.2 Qualitative component

In addition to the KAP survey, an in-depth qualitative inquiry was carried out to contextualise the study by exploring people's perceptions on menstruation related stigma and discrimination. The qualitative component of the study brought out gendered, ethno-religious dynamics as well as assisted in better understanding pre-existing misconceptions related to menstruation. Data

obtained through qualitative tools supported the research team to triangulate key findings from the quantitative survey. This component employed two qualitative research methods, namely Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) using semi-structured, open-ended questionnaires. A full list of the KIIs and FGDs conducted as part of this study and their corresponding in-text citations is available as Annex A, and the qualitative interview guides are shared as Annex B at the end of the report.

Key Informant Interviews: The Key Informant Interviews (KIIs) captured diverse viewpoints of a range of stakeholders including (but not limited to): area midwives and health professionals including Public Health Inspectors (PHIs), school principal, representatives of commercial single-use and reusable menstrual hygiene product producers, as well as representatives from organisations working to improve awareness of safe menstrual hygiene and practices. Two (2) interviews were also conducted with representatives from FPASL given their experience in the sector. These interviews provided insights into developing policy recommendations which will enhance FPASLs expected outcome related to this project.

Focus Group Discussions: A total of four (4) Focus Group Discussions (FGDs) were conducted as part of this research study. The FGDs were monolingual, in local languages and sex-disaggregated to be able to capture gender-specific characteristics and experiences related to menstruation.

The FGDs groups included school-going menstruating individuals, women from the community, men from the community, and school-aged boys. The FGDs allowed the research team to triangulate information obtained through the surveys and KIIs, as well as to gather diverse experiences related to practices during menstruation from the study participants.

2.3 Data analysis

The **quantitative survey responses** were analysed using both descriptive and non-parametric methods. Descriptive statistics were generated to summarize the overall responses and provide a general understanding of the data distribution. To examine the associations between demographic factors (age, ethnicity, religion) and respondent's practices and perceptions, non-parametric chi square independence tests were employed. The Kruskal-Wallis test was used to assess the differences among multiple groups, with the Wilcoxon Rank Sum test used for pairwise

comparisons. The significance level for all statistical tests was set at α=0.05, indicating that results with p-value less than or equal to 0.05 were considered statistically significant. All statistical analysis were performed using STATA (licenced STATA version 12).

For the qualitative interviews, the interview notes were checked for accuracy, translated to English and subsequently inputted into the NVivo software for analysis. A simple coding system was developed on the basis of the key research questions, with economic, social and environmental factors also taken into consideration. The qualitative data analysis also took into account concerns raised by respondents pertaining to sustainability concerns, gaps in data, challenges, and recommendations for the way forward.

2.4 Ethical considerations

Prior to commencing any data collection pertaining to this research study, CEPA submitted and obtained ethical approval to conduct the study from the Ethics Review Committee for Social Sciences and Humanities of the Faculty of Arts of the University of Colombo on 25th of September 2024. CEPA had already received ethical clearance for the survey which was enumerated in Colombo earlier in 2024 and as the objective of this research study was largely similar, this contributed to obtaining the approval in a shorter duration. While the same tools and procedures were adopted as the previous study, necessary revisions to reflect cultural and regional differences present amongst the Upcountry Tamil/ Malaiyaha Tamil community in the Nuwara Eliya district were incorporated as needed.

In keeping with the guidelines issued by the Ethics Review Committee and CEPA's own guidelines, informed and written consent was obtained from all research study participants. For any respondents surveyed under the age of 18 years, informed and written consent was obtained from a parent or guardian to facilitate participation in the survey and FGDs. All respondents were assured that their identity and personal information would be protected if they chose to participate in the study. In keeping with this, all data collected as part of this study is anonymised and stored securely within CEPAs cloud storage.

To ensure the principles of the 'Do No Harm'[4] approach was adhered to, prior to engaging in data collection for the study, the research team was capacitated to understand the sensitivity associated with speaking about menstruation with the respondents as well as to ensure they were respectful towards the respondents with regard to their varying practices and beliefs. The research team was also provided with guidance from a medical professional associated with FPASL to ensure that any questions pertaining to menstrual health and hygiene practices were accurately communicated to the respondent. Furthermore, a list of service providers was prepared and shared with any respondents who had concerns related to menstruation and requested direction on the same.[5]

2.5 Limitations

As the survey sampling focused on specific, purposively selected GNDs within the two selected DSDs of Norwood and Thalawakele, the findings cannot be determined to be representative of the Nuwara Eliya district or the entire estate sector population. However, the findings can be determined to be indicative of a general trend within the community residing within the estate sector with regard to existing menstrual hygiene practices which can be utilised to develop support services to menstruating individuals. It is further noted that the findings from this research are not nationally representative either as cultural, ethnic, and religious characteristics of a population significantly impact their practices and attitudes related to menstruation in addition to geographic characteristics such as population density, and urban/rural characteristics. To this end, there exists the opportunity to undertake future research to determine the existence of similarities or differences in the knowledge, attitudes and practices of both menstruating individuals and those they engage with.

The lack of updated national level statistics such as the Household Income and Expenditure Survey (HIES), and the National Census presented challenges when conducting analysis of the

[4] The Do No Harm approach ensures that the context in which any intervention is being implemented is understood, due consideration is given to the possibility of unintended consequences, and mitigatory measures are available.

[5] If respondent had any medical concerns, they were provided the necessary contact details and directed towards the public health midwives in their locality or the FPASL office or to the digital chatbot Fio developed and popularised by the Her Foundation (Hemas).

research findings as it was not possible to draw adequate comparisons. The national level data available does not reflect the implications of the economic crisis such as the decrease in household income levels, resultant migration outside the sector and overseas.

3 Findings

The findings presented in this report are contextualised by secondary literature and supplemented by observations in the field, and qualitative data collected as part of this research. The findings from the research study are categorised broadly by three sub-categories of knowledge, attitudes, and practices.

The following section provides an overview of the demographic and socio-economic characteristics of the 417 survey respondents who participated in the KAP survey as part of this research, in the selected study locations.

3.1 Characteristics of survey respondents

The survey respondents selected to participate in the survey were between the ages of 15-49 years and were distributed among the following age groups as indicated in Table 2 below:

Table 2: Age distribution of survey respondents

Age group	Frequency	Percentage
15-19	62	15%
20-29	124	30%
30-39	128	31%
40-49	103	24%

The **ethnic composition** of the survey respondents is indicated in Table 3. When disaggregated by ethnicity, respondents who identified as Sri Lankan Tamil had the highest representation at 89% (373/417), followed by individuals who identified as Malaiyaha Tamils[6] at 7% (31/417).

[6] For the purpose of this research, the survey used the terminology Malaiyaha Tamils; the Department of Census and Statistics – which is the national statistical office of the country - refers to the same category of individuals as Indian Tamils in its datasets

Table 3: Ethnic distribution of the survey respondents

Ethnicity	Frequency	Percentage
Sri Lankan Tamil	373	90%
Malaiyaha Tamils	31	8%
Sri Lankan Moor	7	1%
Sinhalese	5	1%
Mixed	1	0%
Total	417	100%

The distribution of survey respondents disaggregated by **religious identity** is elaborated in Table 4. As can be observed, followers of Hinduism had the highest representation among the survey sample at 83% (347/417) followed by the followers of Christianity as 7% (28/417).

Table 4: Distribution of religion of the survey respondents

Religion	Frequency	Percentage
Hinduism	347	83%
Christianity	28	7%
Catholic	18	4%
Buddhism	8	2%
Islam	7	2%
Mixed	8	2%

Other	1	0%

As part of the analysis of the survey responses, **formal education levels of the respondents** was taken into consideration in determining the impact – if any – of education on knowledge or practices related to menstrual health and hygiene. When assessing the educational attainment of the respondents, it is possible to observe a variation based on age groups and level of education, with younger respondents recording higher levels of completing formal education compared to their older counterparts.

Based on the responses to the survey recorded in Table 5 below, a majority of the respondents (35%; 147/417) reported completing schooling up to grade 11, followed by those who passed the General Certificate of Education Ordinary Level (G.C.E O/L) examination (24%; 99/417). Notably, only a small proportion of respondents had completed tertiary education, with 2% (8 respondents) reporting completing a degree and 1% (6 /417) possessing technical or vocational qualifications.

Among respondents who had attained education only up to Grade 5, the highest proportion (68%; 26/38) is represented by individuals between the ages of 40-49. In addition, of the seven respondents who never attended school, five belonged to this same age group. This is indicative that the older respondents had lower access to or completion rates of formal school education. In contrast, a majority of the respondents in the 20-29 age group (29%; 36/124) had completed G.C.E A/L examination highlighting a positive shift toward higher educational attainment in younger cohorts.

Table 5: Education attainment of survey respondents

Age Category	**Educational Attainment**

	No Schooling	Grade 1-5	Grade 6-11	Passed GCE O/L	Up to GCE A/L	Passed GCE A/L	Technical and Vocational qualifications	Graduate	Total
15-19	1	0	31	12	17	0	0	1	62
20-29	0	1	32	30	18	36	3	4	124
30-39	1	11	48	36	10	17	3	2	128
40-49	5	260	36	21	3	11	0	1	103
Total	7	38	147	99	48	64	6	8	417
	2%	9%	35%	24%	12%	15%	1%	2%	

Of the total survey respondents, 33% (139/417) are **engaged in income generating activities**. A majority of these respondents (58%; 80/139) reported working on the estate, with 96% (77/80) employed as tea leaf pickers and 3 engaged as factory workers. The second most common source of employment among the survey respondents was the private sector, representing 27% (38/139) of the sample.

While the latest data available from the Department of Census and Statistics (2019) indicates that the average monthly income in the estate sector is LKR 46,865, the survey respondents indicated that their average monthly income was LKR 34,772 and the median income was LKR 30,000. This disparity can be attributed to the research sample representing a more economically disadvantaged demographic population or it could exhibit regional and demographic disparities within the estate sector. It is also possible, that the result of the economic crisis and resultant impact on households may not be reflected in the national datasets. This research recognises the importance of understanding the average household income as it can and does influence decisions pertaining to purchase and use of menstrual hygiene products; a factor that is discussed in more detail later in the report.

In terms of the respondents' **civil status**, 70% (291/417) of the survey respondents reported that they were married, while 27% (114/417) identified as single. A majority of the married respondents were between the ages of 30-39 years (42%; 121/291), followed by individuals

between the ages of 40-49 at 32% (92/291), and lastly 26% (76/291) of those who reported being married were between the ages of 20-29.

The **average household size** recorded from the survey sample was 4.7. Among the surveyed households, a majority of the respondents surveyed (30%; 125/417) reported having 5 household members, while 25% (105/417) had 4 household members. Furthermore, the survey revealed that cumulatively, 34% (140/417) of the respondents had between 6 to 12 household members residing in their home. The average male to female ratio of household composition among the surveyed households was 1.07; indicative that there are a higher number of males than females in an average household surveyed.

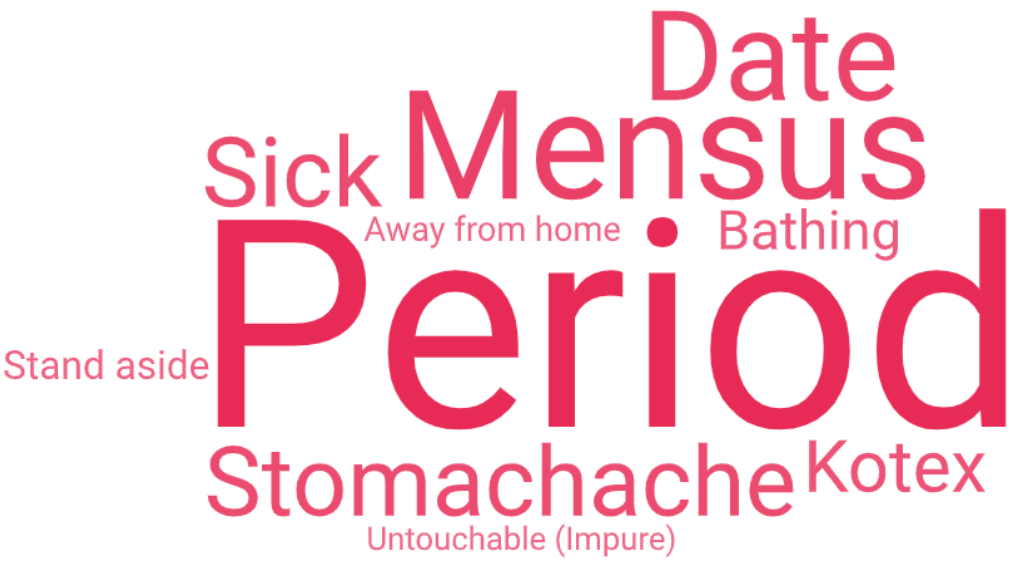
Given the design and selection of the survey respondents, each household surveyed had at least one menstruating individual between the ages of 15-49 years in a household. Majority (38%, 157/417) of the surveyed households reported having two menstruating members in the household, followed by 34% (143/417) of the respondents who stated that they were the only menstruating member in their household. Notably, 10% (42/417) of the sample had more than three menstruating members in a single household.

In an effort to determine if the available space within a respondent's house accounted for adequate privacy when compared with the number of household members, the survey asked the respondents how many **rooms or bedrooms they had within their residence**. Majority of the respondents (47%; 195/417) indicated having two bedrooms, followed by 23% of the respondents (96/417) who indicated only having one bedroom in their residence. Among the responses recorded, 5 respondents indicated having no separate bedroom in their residence; these five respondents shared this space with 5 to 8 household members at any given time. While these 5 respondents only represent 1% of the survey sample, it is a matter of concern that should not be discounted when designing interventions related to menstrual health and hygiene, particularly in a context where a lack of privacy exists among individuals who are not comfortable speaking openly about menstruation.

3.2 Terms used to refer to menstruation

The research team introduced the study and the purpose of the study by referring to menstruation using the biological phrase or terminology. Subsequently, based on the respondent's familiarity with the term, the team either continued to use the same phrase or switched to using the phrase most commonly used by the respondents to refer to menstruation. As part of the survey, respondents were asked to list the different terms or phrases they used to refer to menstruation. Figure 2 below illustrates the most commonly used phrases used by respondents. As can be observed, the most commonly used phrases included period, menses, not feeling well, and stomach-ache. Phrases such as *Theettu* (loosely translates to untouchable or unclean)*, Kotex*, and *Kullithal* (which translates to bathing or variations of not bathing it), were also mentioned by respondents, although not used as frequently.

Figure 2: Phrases and terms used by the respondents to refer to menstruation



3.3 Knowledge

Menstruation is defined as the "periodic vaginal discharge of bloody fluid from the non-pregnant uterus that occurs from the age of puberty to menopause" (Bobak & Jensan, 1993; do Amaral et al., 2011). Although it is a normal physiological function, the existence of either positive or negative perceptions varies across different cultures (Kalman, 2003). Positive attitudes exist

when menstruation is interpreted as a symbol of femininity, fertility, youth, or bodily purity; while negative attitudes such as susceptibility to illnesses might contribute to sentiments of revulsion and humiliation (Kalman, 2003). Poor knowledge of female anatomy is attributed to the adverse social perceptions toward menarche and menstruation, specifically in low- and middle-income families (Chandra-Mouli & Patel, 2017).

This section attempts to understand the level of knowledge or understanding respondents possess that influence their beliefs, fears, and/or feelings of embarrassment throughout menarche and menstruation. Based on the responses recorded and resulting analysis, information can be shared with menstruating individuals and community members to ensure that they are well-informed, can adopt hygiene practices that are comfortable for them, and seek help from caregivers or health practitioners in a way that allows them to navigate their experience confidently, in a secure and supportive setting.

3.3.1 Menarche

Menarche is the first menstruation that adolescent female experiences (Tang et al., 2003). It represents a physical sign in the transition from young girlhood to womanhood. In an interview with a healthcare professional, the average age of menarche in Sri Lanka was indicated to be between 12-14 years of age. The survey responses from this research revealed that 75% (314/417) of the respondents were between the ages of 12-14 years **when they had their first period (menarche),** while 16% (68/417) of the respondents were 15 years or older.

In many low- and middle-income countries (LMIC), girls enter puberty with significant knowledge deficiencies and misunderstandings around menstruation, leaving them ill-equipped to manage it and uncertain about when and where to seek assistance. This is attributed to the fact that the adults in their environment, such as parents and teachers, are often misinformed themselves, and/or uncomfortable about addressing topics related to sexuality, reproduction, and menstruation, which are often associated with negativity and shame (Chandra-Mouli & Patel, 2017). The lack of knowledge about the changes in their body during menstruation is reflected in the survey findings with 66% (276/417) of the survey respondents indicating that they had **no knowledge about menstruation before menarche**.

In order to determine if there was a significant association between the age of the respondents and level of knowledge prior to menarche, a Chi-Square test was conducted. The results indicate that only 25% (26/103) of respondents belonging to the 40–49 age group reported having knowledge about menstruation before menarche, whereas 42% (26/62) of respondents in the 15–19 age group reported prior awareness. Despite this variation across age groups, the difference is not statistically significant (p=0.135), suggesting that there is no strong association between age and prior knowledge of menstruation before menarche as elaborated in Table 6 below. However, a KAP study conducted among urban community representatives in the Colombo district, with a sample of 602 respondents, revealed that there is a statistically significant association (p=0.043) between the age group and the respondents' knowledge. This finding implies that, over time, the level of knowledge has not significantly improved within the sample of the estate communities, indicating that the respondents belonging to the younger age groups are not substantially more informed about menstruation before menarche compared to older respondents. This finding emphasises the need for more effective educational interventions across generations.

Table 6 Association Between Age Group and Having Knowledge About Menstruation Before Menarche – Chi-Square Results

Age Group	Yes (n)	Yes (%)	No (n)	No (%)	Total (n)	Chi-square (X^2)	p-value
15-19 years	26	42%	36	58%	62	5.5663	0.135
20-29 years	45	44%	79	56%	124	df=4	
30-39 years	44	49%	84	51%	128		
40-49 years	26	25%	77	74%	103		

3.3.2 Sources of information

Among the respondents, the **primary source of information regarding menarche or menstruation** was reported to be the respondent's mother at 67% (280/417); this is followed by 'other female relatives' accounting for 9% (37/417), while teachers were the third highest source of information at 7% (31/417).

The FGDs conducted with women from the community and school-aged girls too reiterated that their primary source of information on menstruation was the mother. If their mother was not

present, it was either a sister, a female cousin, or an aunt who had provided information on menstruation. Interestingly, the primary source of information had not changed across two to three generations, possibly indicating a lapse in the education system and the secretive nature with which the topic and process of menstruation is treated. Therefore, if awareness programmes are conducted on the topic of good practices to be adhered to related to menstrual health and hygiene, it is recommended that individuals with young children be identified, allowing them to learn and share the relevant knowledge.

A significant majority of the respondents, 96% (401/417) were of the opinion that girls should be **taught about menstruation at school before menarche.** This highlights the need for more information being made available through formal channels. Among the respondents who disagreed with this suggestion (4%; 16/417), the reason for disagreement was attributed to the perception that "the girls are too young" to learn these prior to menarche, and that mothers should be responsible to teach them.

At present, the **government curricula** for Health and Physical Education covers the reproductive system aimed at students of grade 7 onwards. Key informants consulted were of the opinion that while the relevant topics were covered adequately within the textbooks, there is concern as to whether the teachers themselves were adequately informed or comfortable teaching the content.

In response to this recognised vacuum of reliable information for school-aged individuals regarding menstruation, the Health Promotion Bureau (HPB) have developed a series of handbooks on the topic of menstruation which is available on the E-Thaksalawa portal[7] (CEPA, 2025). These handbooks provide information that is designed in a manner that allows students to self-learn. However, at the time of writing this report, it is noted that a majority of the handbooks were only available in the Sinhala language, which would not be accessible to the targeted community who are predominantly Tamil language speakers. Furthermore, as the

[7] E-Thaksalawa is an initiative by the Ministry of Education which is a digital space for students and educators to access curricula-related information, textbooks, extra readings, and virtual lessons.

content is only available as online resources, accessibility is limited for individuals without digital devices or internet connectivity (CEPA, 2025).

The absence of adequate information provision or guidance from the school or other reliable sources prior to menarche is of concern, as even within the household, sometimes, individuals have trouble accessing accurate information regarding menstruation. This could lead to trying to learn these crucial topics from non-professional outsiders such as friends (Biswas, 2020).

3.3.3 Health professionals' knowledge on menstruation

Qualitative interviews conducted with midwives from the study locations indicated that they were well aware of local practices associated with menarche and menstruation and how to approach women and girls as health care providers. They reported having a record of all residents in the locality who were of reproductive age. It was further stated that knowledge dissemination programmes were conducted regularly among the female population over the age of 15, focusing on individuals who were either married or expecting to get married.

As part of a programme designed by the MoH, the midwives interviewed reported that they were expected to conduct annual awareness sessions at the schools, targeting students who had already reached menarche; however, this is stated to not take place regularly due to competing commitments and school principals not prioritising this activity, thus contributing to a vacuum in knowledge among young menstruators.

The mid-wives went on to state that if menstruators approached them with concerns about their menstrual cycle, they would provide them with the necessary assistance based on their expertise. It was noted however, in instances when further screening or testing was required and individuals were directed to the hospital, they were reluctant to follow through due to feelings of embarrassment since the doctors were predominantly male and considered to lack the necessary awareness related to reproductive issues, as well as due to the existing **language barrier** – as the doctors were not able to communicate in the local language of Tamil.

While recognising the ongoing challenges faced within the public medical facilities due to shortage of medical staff [8](Abeysooriya et al., 2023), it is necessary for the existing service providers to be adequately sensitised to the needs of menstruating individuals in an effort to ensure the minimum standard of care is met. These factors can be attributed to reasons why menstruators may be hampered from seeking advice or information from qualified medical professionals. This must be addressed in an effort to minimise any misconceptions pertaining to menstruation and to ensure a dignified menstrual experience.

3.3.4 Menstrual hygiene products

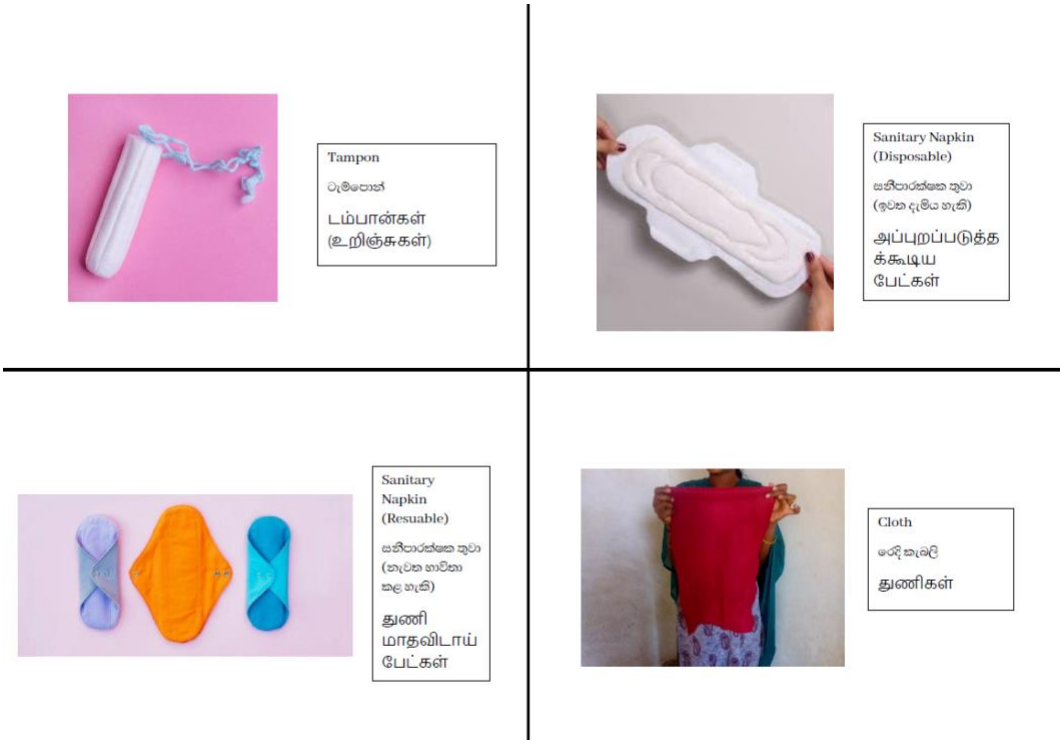
The survey respondents were shown images of eight different menstrual hygiene products and were asked if they have seen or were familiar with each product (See Figure 3). The survey results revealed that all respondents (100%; 417/417) were familiar with the single use sanitary napkin, while only 59% (247/602) of the survey respondents were aware of the use of cloth as a menstrual hygiene product. The level of awareness of the other menstrual hygiene products among the survey respondents were significantly low and was recorded as follows: 6% (24/417) knew of the menstrual cup and reusable cloth sanitary napkin, 5% (21/417) knew of the menstrual underwear, and only 3% (12/417) were aware of tampons. Comparatively, among respondents in Colombo, 38% of respondents indicated knowledge/awareness of the menstrual cup, and 25% were aware of tampons (CEPA, forthcoming).

In an interview with a representative from FPASL, it was indicated that a programme had been undertaken prior to the commencement of the research study in a neighbouring GN Division to

[8] A substantial brain drain is currently occurring in Sri Lanka, impacting nearly all sectors, including education and healthcare. However, it has significantly contributed to the collapse of the health sector in Sri Lanka. The Annual Health Bulletin for 2020 indicates that Sri Lanka employs 150,273 healthcare professionals, including lab technicians, radiographers, therapists, and medical attendants. The total comprises of 2,730 medical specialists, 21,450 doctors, 1,564 dentists, 46,385 nurses, and 8,525 midwives (Abeysooriya et al., 2023). Data from the Ministry of Health (MOH) indicate that in 2018, 240 medical professionals educated in the preceding two years returned to Sri Lanka, whereas 267 prospective specialists departed the nation for educational opportunities overseas. In 2019, 290 prospective medical professionals left Sri Lanka for abroad training, whereas 262 returned after completing their training one or two years prior. Consequently, 191 future medical specialists have left the nation. Data from the Government Medical Officers Association (GMOA) indicates that from August 30, 2022, to August 30, 2023, there were 526 medical officers on long-term foreign leave, 200 doctors who departed without notifying the appropriate authorities, 197 medical officers who resigned, and 71 medical officers who retired (Madhavi, 2023).

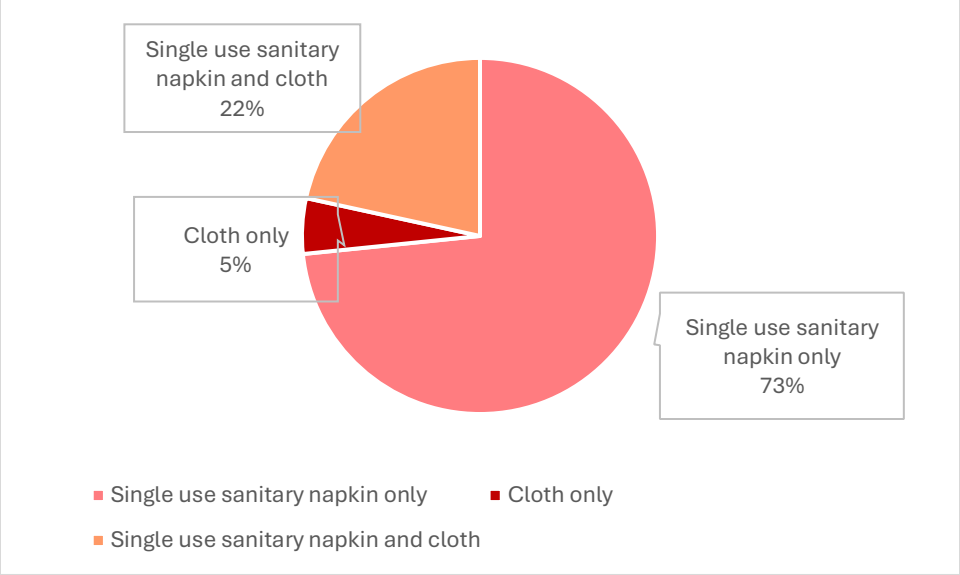
introduce the menstrual cup to the participants. While it was stated that approximately 265 individuals had been provided with a menstrual cup during these programmes, knowledge or awareness of this product does not appear to have transferred to the neighbouring community members; this could be attributed to individuals not feeling comfortable enough to speak openly about menstruation and menstrual hygiene products even among other women. This could be considered an indication that there is a need to conduct more comprehensive awareness programmes among the targeted respondents to increase their knowledge regarding the alternative menstrual hygiene products and by extension the choices available to them during menstruation.

Figure 3: Menstrual hygiene products sheet used as part of the research study



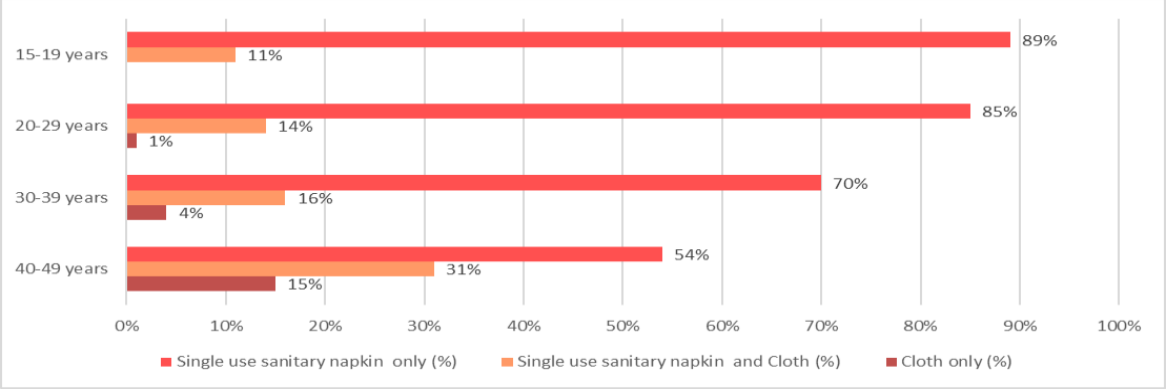
As part of the survey, respondents were asked of their usage practices with regard to menstrual hygiene products, and three main usage patterns were identified; respondents who only use single use sanitary napkins, respondents who only use cloth, and respondents who use both single use sanitary napkins and cloth interchangeably. As elaborated in Figure 4, majority (73%; 306/417) of the respondents reported that they used only single use sanitary napkins, followed by 22% (90/417) who reported that they use both cloth and single use sanitary napkins, while only 5% (21/417) of the respondents reported using only cloth during menstruation. Among respondents who used both single use sanitary napkins and cloth, 78% (70/90) indicated that they preferred the use of sanitary napkins compared to cloth.

Figure 4: Usage of menstrual hygiene products



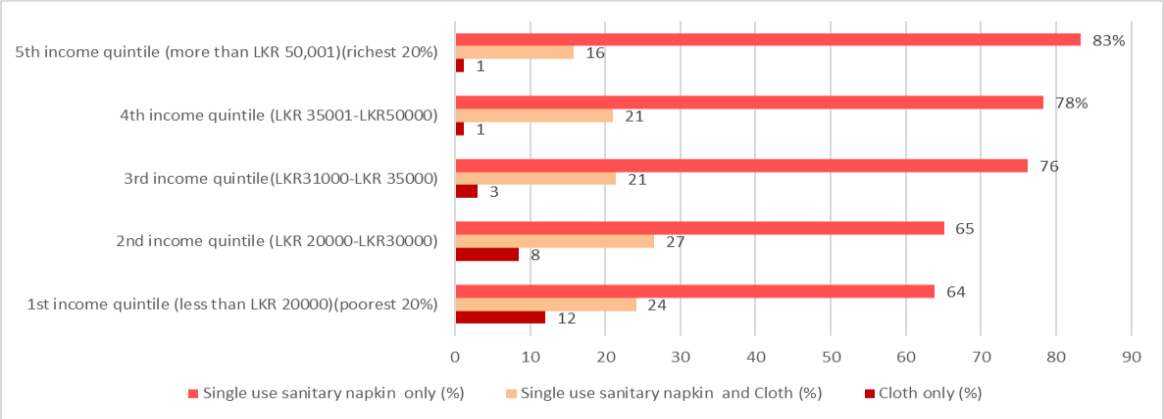
When menstrual hygiene product usage was disaggregated by age groups, it was possible to observe a significant variation. As illustrated in Figure 5, a majority (89%; 55/62) of respondents in the youngest age group (15-19) exclusively use single-use sanitary napkins, with no respondents in this age category reporting the sole use of cloth as a menstrual hygiene product. Conversely, in the oldest age cohort, only 54% (56/103) of the respondents reported using single-use sanitary napkins exclusively, which is observed to be the lowest across all age groups, while 15% (32/103) of the respondents in this age group indicated using cloth as their sole menstrual hygiene product, which is the highest representation across all age groups. As discussed during the FGDs, in households with multiple menstruating individuals and limited incomes, the younger menstruating individual was prioritised in an effort to contribute to their comfort during this period.

Figure 5: Usage of menstrual hygiene products disaggregated by age



As part of the analysis, the responses recorded were disaggregated by household income level to determine if this influenced an individual's choice of menstrual hygiene product. It is noted that 83% (70/84) of the richest income quintile (richest 20% of the sample)[9] of the respondents used single-use sanitary napkins exclusively during menstruation, while 64% (53/83) of respondents belonging to the poorest income quintile used it exclusively. Moreover, as illustrated in Figure 6, 12% (10/83) of the poorest income quintile, used cloth exclusively during menstruation, representing the highest proportion of all the other quintiles.

Figure 6: Use of menstrual hygiene product disaggregated by income quintile



[9] **Income quintile** is a statistical measure that divides a sample into five equal groups (or quintiles) based on household or individual income levels. Each quintile represents 20% of the sample, ranked from the lowest to the highest income. This categorization allows for the analysis of income distribution and economic inequality within a sample.

The chi square independence tests were conducted to examine the association between the income quintile and age groups with the use of single use sanitary napkin as the sole menstrual hygiene product. The results revealed a statistically significant association ($X^2(4)=12.4301$, $p=0.014$) indicating that respondents from higher income quintiles and the respondents from younger age groups ($X^2(3)=35.2360$, $p<0.001$) were more likely to use single use pads exclusively during menstruation. This implies that the economic status of the households and age of the respondent plays a significant role in determining choice of menstrual hygiene product.

In contrast, the use of cloth either as the sole menstrual hygiene product (21 respondents) or in combination with single use sanitary napkins (90 respondents) was statistically significantly associated with income level of the respondents, indicating that respondents from lower economic strata are more likely to use cloth as a menstrual hygiene product. Thirty six percent of the poorest 20% of the sample reported using cloth, while in the richest 20% it was only 16% (14/84). Moreover, the age of the respondent also acts as a key factor in determining the use of cloth as menstrual hygiene product within the surveyed sample, resulting a statistically significant association with the age group ($X2=35.2360$ $p<0.001$). Only 11% (7/62) of the respondents from the youngest age group (15-19 years) reported using cloth compared to 45% (47/103) of those in the oldest age group. The survey recorded that a majority of the respondents (86%; 96/111) who use cloth (as their sole menstrual hygiene product or in combination with single-use sanitary napkins) have been using cloth since the menarche, while only 10% (12/111) attributed switching from single use sanitary napkins since the economic crisis.

In addition to the menstrual hygiene product used at the time of the survey, the respondents were asked about the products that had been used before, but no longer used. Accordingly, 16% (67/417) mentioned that they have used cloth prior but no longer use it. However, none of the respondents stated that they have stopped using single-use sanitary napkins. The follow up question inquiring about the reason for stopping the use of cloth revealed that (72% 48/67) the majority cited discomfort as the primary reason and 15% (10/67) stated that it caused them an allergy, itching and injuries/wounds.

3.3.5 Duration of the use of menstrual hygiene products

As per the medical recommendations of the professionals in the health sector, it is advised to change the menstrual hygiene product every 4-6 hours when using single use sanitary napkins or tampons, as using a single-use menstrual hygiene product for a longer period increases the risk of bacterial infections or irritations. Among the survey respondents, 34% (142/417) indicated that they were not aware of a **medically recommended duration for wearing a sanitary napkin.**

According to the findings of the survey conducted, a majority of the respondents (39%; 161/417) stated that they change their menstrual hygiene product on average every 8-12 hours which means 2-3 pads per day. The second highest frequency was every 6-8 hours, reported by 31% (131/417) of the respondents, which can be considered as 4 pads per day. Further, only 27% (111/417) of the total respondents emphasized that they change their product every 4-6 hours which is the medically recommended duration to use a single sanitary napkin.

When the frequency of changing menstrual pads or cloths is considered based on the age groups, it is noted that a considerable proportion of respondents in each age group use sanitary napkins or cloth for longer than the recommended duration (54%; 20/37 (15-19), 56%; 42/75 (20-29), 59%; 53/90 (30-39) and 61%; 44/72 (40-49)) which is more than half of the respondents in each age group.

Moreover, out of 274 respondents who stated that they are aware of the recommended frequency to change the sanitary napkin or cloth, 33% (91/274) reported **using the products for longer than the medically recommended duration**. The most common reason attributed by 57% (52/91) of the respondents for this decision was not having a replacement on hand. The second highest reason attributed was that changing the product depended on their menstrual flow which meant that 36% (33/91) of the respondents who used the products for longer than the medically recommended duration changed their product only if there is a heavy flow; while a further, 19% (17/91) of the respondents stated that they do not change their products as per the recommended frequency due to not being able to find appropriate facilities to change or dispose of the product.

During the interview with the schoolteacher, it was stated that the school did not have a disposal mechanism for used sanitary napkins. As such, students would have to take the used menstrual hygiene product home with them if they changed in school. Therefore, she indicated that students were more likely to wait to go home before changing, resulting in wearing the menstrual hygiene product for longer than the recommended duration.

3.4 Attitudes and perceptions

Despite increased recent public debate on women's health and more open discussions (Bobel, 2020; Gaybor, 2020), menstruation continues to be associated with stigmas and taboos (Brantelid et al., 2014; Grandey et al., 2019). Menstruation is sometimes portrayed in popular culture and advertising as something unpleasant, impractical, dirty, and shameful (Johnston-Robledo & Stubbs, 2012; McMillan & Jenkins, 2016). Bound with all the misconceptions, myths and taboos related to menstruation, girls' and women's understanding on menarche, menstruation and reproductive health are at a very low level especially in the South Asian countries such as India and Sri Lanka. There is no validity to any of these cultural stigmas and none of these myths and misconceptions are supported by any scientific empirical data taken overall (Mangla, 2023).

In South Asia, obstacles to period equity are based on poverty, gender, religion and other intersecting identities. Taboos and beliefs regarding menstruation perpetuated by a lack of sufficient understanding are widespread in south Asia, leading women to feel that they are "impure", contributing to a negative impact on young girls' mental health (Mangla, 2023). In Sri Lanka, a collaborative study conducted by the UNFPA and WaterAid found that 60% of parents did not allow their daughters to attend school during their periods, while 80% of teachers believed that bathing should be avoided during menstruation (UNFPA & WaterAid, 2018). Such taboos and misconceptions are recognised to have an impact on the hygiene of menstruating individuals, undermine gender equality, lead to discrimination, prevent women and girls from obtaining an education, finding work, and other life possibilities.

In an attempt to address these findings pervasive in literature, the survey asked the respondents a series of questions which focused on the attitudes and perceptions related to menstruation and menstrual practices. These questions were designed to not only examine how menstruating individuals perceive the process of menstruation, but also to examine how respondents saw themselves while menstruating and how others may perceive them during menstruation.

In order to understand the general perception of respondents on discussing menstruation openly, participants were asked whether they felt embarrassed to talk about the topic. Overall, 59% (244/417) of the surveyed respondents stated they did not feel embarrassed discussing menstruation. Respondents belonging to older age groups were least likely to report feeling embarrassed, with 59-61% of respondents aged 20-49 indicating they were comfortable discussing menstruation. In contrast, respondents belonging to the 15-19 age group recorded the highest percentage of those feeling embarrassed compared to other age groups at 37% (23/62).

A chi-square test of independence was conducted to examine the association between marital status and feelings of embarrassment when discussing menstruation. The analysis revealed a statistically significant association, with married women being less likely to feel embarrassed compared to single women. This difference may be attributed to life experiences such as marriage and childbirth, which likely increase their comfort in discussing such topics openly.

Table 7: Association of feeling embarrassed to speak about menstruation based on respondent's age and marital status factors- chi-square results

Age group	Embarrassed		Not embarrassed	Chi-square (X^2)		p value
Age	n	%	n	%	2.3652	0.500
15-19	31	50%	31	50%	df =3	
20-29	48	39%	76	61%		
30-39	53	41%	75	59%		
40-49	41	40%	62	60%		
Marital status						
Married	111	38%	180	62%	4.7429	0.029*

Single	57	50%	57	50%	df=1	

*p<0.05

A follow-up question was directed to respondents who stated they were not embarrassed to discuss menstruation, asking whether they actually speak about it with others. Among the 244 respondents who indicated they were not embarrassed, 29% (69 out of 244) admitted that they do not openly discuss menstruation with anyone. This suggests a gap between their stated lack of embarrassment and their actual behaviour in real-life situations.

Among those who do speak about menstruation (175 respondents), 43% (75 out of 175) mentioned they only discuss the topic with other females, while 32% (56 out of 175) of the respondents indicated they were comfortable speaking about menstruation with female and male family members. However, only 25% (44 out of 175) of the respondents reported speaking with both male and female individuals, regardless of whether they were family members. This highlights that the majority of the sample discuss this only with female members, whilst talking openly with men outside the family is less.

3.4.1 Discrimination experienced during menstruation

Most of the survey respondents (86%; 360/417) stated that they had not experienced any type of **discrimination nor were they made to feel uncomfortable when menstruating**. Further, 63% (264/417) of the respondents clearly stated that they had not experienced any discrimination from their immediate/close family members. These findings come with a caveat as when probed, respondents indicated that except for their mothers or husbands, other family members rarely knew when they were menstruating, which prevented the possibility of being discriminated.

Among the 14% (57/417) of respondents who reported experiencing some form of discrimination during menstruation, the most common instances were attributed to when participating in cultural activities (83%; 47/57) or when participating in religious activities (77%; 44/57) respectively. The discrimination encountered during these activities corresponds to women and girls excluding themselves during menstruation, due to pre-existing public perceptions of what they can and cannot do during this time.

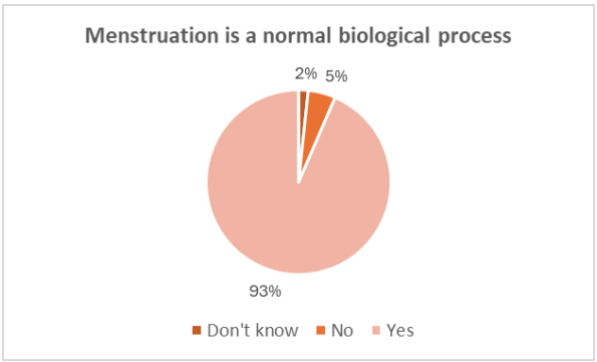
3.4.2 General perceptions related to menstruation

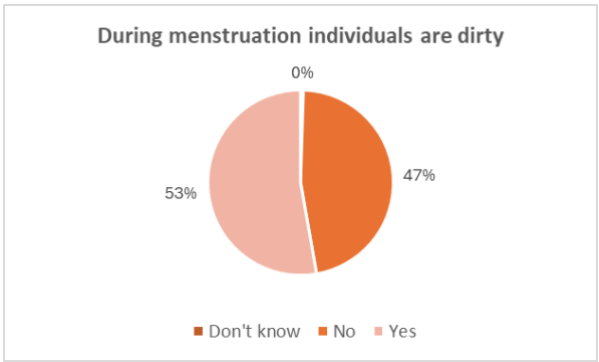
A series of statements about menstrual practices have been developed for this study, informed by the literature review undertaken, and selected key informant interviews. Survey respondents were asked about their **knowledge of these statements, their impressions/perceptions of them, and which practices they followed during menstruation**. The statements included:

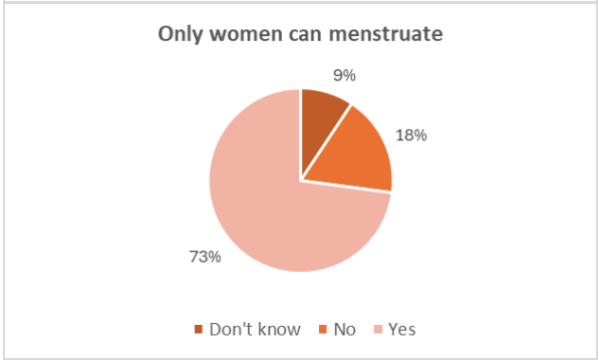
- Menstruation is a normal biological process
- Menstruating individuals are 'dirty'
- Menstrual blood is 'dirty' blood
- Only women can menstruate
- During menstruation, one should not go outside the home
- During menstruation, one should not visit religious places
- You should not have a head bath when menstruating

An overwhelming 94% (390/417) of the respondents agreed with the statement of **menstruation is a normal biological process**. A little over half the respondents 53% (220/417) agreed with the statement that **menstruating individuals are 'dirty'** or unclean during menstruation, while 47%% of the respondents disagreed with this statement. A similar trend is observed in responses recorded with regard to the statement which asks respondents if they believe **menstrual blood is dirty** with 51% of the respondents agreeing with this statement. The responses to these two statements indicate that respondents' knowledge and attitudes towards menstruation are informed by cultural norms which often exclude them from participating in religious and community-based activities when menstruating. This is reiterated in the responses recorded for the statement **'during menstruation, one should not visit religious places'** to which 81% (336/417) of the respondents were in agreement, due to the association that individuals are unclean during menstruation. Further reinforcing the cultural practices common in the research locations, during a focus group discussion with women from the community, the respondents indicated that they refrained from touching babies or certain plants (*thulsi*) in their garden when they were menstruating as they considered they were 'unclean' and would pass on their germs to the infant, and in the case of the plants, would cause the plant to whither.

Closer to three fourth of the respondents (73%; 304/417) agreed with the statement of **only women can menstruate,** while only 18% (74/417) of the respondents disagreed with this statement. Noticeably, the findings indicate that 9% (39/417) of the respondents indicated that they 'did not know' how to respond to this statement. Although this specific statement was included in the survey to inquire whether respondents were aware of menstruation as a phenomenon experienced by individuals of diverse genders, related findings cannot be derived from this data as the survey did not specifically probe for respondents' knowledge on persons of diverse genders. To say that respondents are aware of transgender men and other queer individuals who menstruate would be an assumption. The number of responses recorded as 'no' or 'don't know' to this statement could perhaps be explained through observations made during the field level data collection, where some survey respondents claimed that they have heard of men menstruating once they reached puberty, and that they have a white discharge instead of the blood that women pass during menstruation. These observations indicate that respondents may have mistaken the release of semen as menstruation of men and boys. The findings do however indicate that further knowledge on the process of menstruation and reproductive health is required amongst the respondents.







A majority of the respondents (67%; 279/417) did not agree with the statement of '**during menstruation, one should not go outside of the home**'; this is despite the fact that the same respondents had strong opinions about not engaging in religious activities while menstruating. As will be discussed later in the report, the decision to not isolate in the house during menstruation ensures that individuals continue to attend school or engage in income generating activities outside the home.

In response to the statement on **refraining from having a head bath during the menstruation,** only 29% (120/417) of the respondents agreed with the statement, while 38% (159/417) of the respondents disagreed with this statement. Conversely, 33% (137/417) of the respondents were of the opinion that they only should refrain from having a head bath on the first few days of their menstrual cycle. In an interview with a medical professional, it was explained that some individuals believed that washing their hair when menstruating would affect their menstrual cycle, however, the respondent went on to state that there was no scientific/medical evidence to support this belief; and further went on to reiterate the importance of promoting good hygiene practices during this period.

Attitudes and Perceptions on Menstruation and Menstrual Practices

Summary of Key Findings

- 86% of respondents said they had never been discriminated against because of their menstruation. This was attributable to the fact that outsiders were unaware that the respondents were menstruating.
- The majority of the 57 respondents reported feeling discriminated against or uncomfortable during menstruation, with 47 of them experiencing this while participating in cultural activities.
- 51% of respondents said menstruation blood is dirty.
- 53% believed that people are unclean whilst menstruating.
- 81% strongly agreed that one should not visit religious sites while menstruating.

3.5 Practices

Menarche refers to the first menstrual bleeding. The time/age of menarche is determined by a host of factors such as genetics, environmental variables, and nutrition. From both social and medical viewpoints, it is widely regarded as an important event of female puberty since it indicates the possibility of conception and reproduction (Leena et al., 2016). Menarche is honoured as a rite of passage in many cultures around the world and recognised as a girl's transition into womanhood (Kumar & Srivastava, 2011); in local parlance, it is referred to as becoming a 'big girl' or 'attaining age'. In numerous developing countries, women and girls experience limitations in movement and behaviour during menarche and menstruation influenced by societal perceptions and practices spanning generations. This section will provide insights into the practices associated with the period of menarche and menstruation as shared by the respondents from the study locations.

3.5.1 Practices during menarche

The practices observed at menarche vary based on socio-economic factors such as cultural norms and traditions, religious identity and income levels. In this research sample, as a majority of the respondents (83%; 347/417) identified as following Hinduism, and belonged to the same geographic locality, it is possible to observe similarities in practices when compared to responses recorded from respondents residing in the Colombo district.[10]

Table 8 below provides a snapshot of **practices followed during menarche** as reported by survey respondents**.**

Table 8: Practices observed during menarche

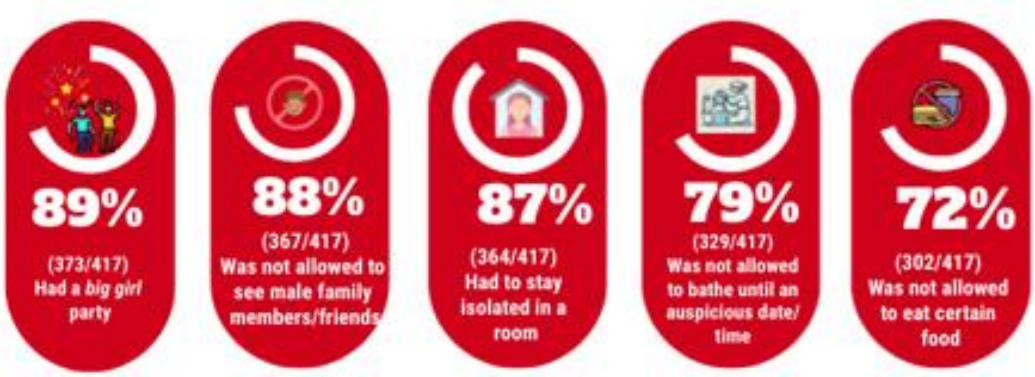
Practices followed during menarche[11]	Frequency	Percentage
Had a big girl party	373	89%
Was not allowed to bathe	329	89%

[10] In the research conducted in the Colombo district, there was a higher diversity in demographic characteristics of the research respondents.

[11] Survey respondents were allowed to select multiple options

Was not allowed to see their own face in a mirror	367	88%
Had to stay isolated	364	87%
Was not allowed to eat some foods	302	72%
No change in the daily routine	15	4%

Figure 7: Practices followed during menarche



Among the survey respondents, 87% (364/417) reported that they were **isolated in a room** when they got their first period; a practice reported as followed across all age groups. The practice of isolating during menarche, is recognised to have stemmed from prevalent cultural beliefs and taboos that menstruation conferred impurity, necessitating segregation to prevent perceived contamination of others or sacred spaces (Prakasan, Vennila, Rajeswari, Keerthana, Meenakumari and Sundaram, 2024). During this period of isolation, 88% of the survey respondents also reported that they had been asked to **refrain from seeing male family members or friends**. These practices were also validated during the FGDs where respondents mentioned having to stay in a 'hidden place' right after experiencing menarche. In houses where there were no separate rooms, girls were asked to isolate in an area covered by a sari. The respondents claimed that they were in isolation until an auspicious time was declared for them to be bathed in the presence of their relatives:

> "They kept me in a hidden place, which was covered with sarees. They called our relatives and bathed me with hot water around 7 o'clock in the night. After that, they asked me to stay in a private room in the house" (FGD-G, 2024).

The qualitative data also revealed that once the initial isolation period was over, the girls were made to stay at home until another ritual named *Veetukku Azhaithal* was performed by the *Dhobi*.[12] While the older cohort reported having had this ritual after seven days of isolation at home, the younger cohort reported having had this ritual performed after 15 days of isolation. The two age groups also reported slight variation in how the ritual was performed.

> "They asked me to wear a saree, and five married women came and asked me to cross the Balloon Vine[13]. Then they took a glass filled with paddy, placed a betel leaf on it, and cast off the evil eye. Then, they handed me an oil lamp and invited me inside the house" (FGD-W, 2024).

> "Fifteen days later, they called the *Dhobi* home to conduct the *Veetukku Azhaithal* ritual. After that, I could go anywhere inside the house. She gave me a sari to wear on the *veetuku azhaithal* ritual day and brought a *paal kodi* (garland) and told me to jump over it" (FGD-G, 2024).

Based on the responses recorded during the survey, on average, respondents indicated staying in isolation for 33 days. Interestingly, during field observations, a young respondent revealed that she had not wanted to tell her family that she had attained menarche due to the fear of having to isolate at home for such a long time. During the focus group discussion with women from the community, older respondents were able to attribute the long duration of isolation to waiting for the next menstrual cycle to begin. In interviews with the area mid-wives, they recognised the challenge associated with balancing medical knowledge with that of cultural practices,

[12] A term used to refer to women who do laundry for a living. This livelihood is often caste-based (Ekanayake and Guruge, 2016; Jabbar, 2005).
[13] An herbal plant

particularly with regard to the period of isolation as they were of the opinion that the absence from school for a month after menarche could have negative implications on the girls' education. However, they went on to state that teachers and community members would defend these practices and encourage its continuation considering it an important aspect of their cultural practices.

Having a big girl party was reported by 89% (373/417) of the respondents as a practice followed by menstruating individuals across all age groups. The qualitative interviews revealed that this celebration often takes place a month after menarche. In an interview with an area mid-wife, she attributed the celebration to be on the scale akin to a wedding. Therefore, it was further revealed that in instances when families were not able to finance the party/celebration, the event would be delayed until the finances were secured, with the young girl having to remain in isolation until the function was completed.

Interviews conducted with project partners and schoolteachers from the community drew a connection between menarche rituals and announcing a girls' availability for marriage, especially that of the *big girl parties*. While this is thought to be not the intention anymore, the interviewees revealed that in the past, having such an event was the only way for them to tell their community members that their child was ready for marriage;

> "In earlier times, it was considered as culture. Due to the limited exchange of communication, families wanted to inform society that they had a woman who attained puberty, which means a woman who could conceive. They conducted puberty ceremonies to convey this message to society" (KII-11, 2024).

This, however, is not limited to the study location. As evidenced in other research, this practice of having an event to mark a girl reaching menarche to announce her availability for marriage is found as a common practice in many parts of the world (Xijie, 2022; Houseman, 2007).

Another practice during menarche reported by 88% (115/417) of the survey respondents was **not being allowed to see their faces in a mirror**. Although a majority of the respondents had selected this specific option, many were not able to attribute the reason for engaging in this practice. However, during the focus group discussions with women and girls in the community, the reasons for the practice was associated with preventing the formation of pimples on their faces (FGD-G, 2024; FGD-W, 2024). The application of a paste of turmeric on their face and body when they got their first period, although referenced during the focus group discussions, was only reported by 2% (9/417) of the survey respondents.

Food related rituals and/or practices during menarche in the study location were reported in different forms during the qualitative data collection process. Many of the food items or dishes encouraged for consumption during menarche were believed to be full of nutrients needed for the child going through puberty. These foods included sesame oil, dosa, idli, jaggery, *ulundhu kali*[14], rice cooked with gram dal without salt, and puttu. Additionally, the respondents also reported having to drink milk infused with the tropical amaranth seed (*siru keerai*). It is believed that having this beverage prepared by someone without menstrual pain will help the consumer not experience menstrual pain during their menstrual cycle as well. The practice of drinking/consuming a raw egg mixed with sesame oil[15] for the duration of the first menstruation, was only recorded by 5% (22/417) of the respondents.

Of the total survey respondents 72% (302/417) reported that they were **not allowed to eat certain foods.** During the qualitative interviews, it was revealed that certain food items were believed to have different effects on the body during menarche and to continue to have an impact throughout one's menstrual cycle. A few examples are "they told me not to eat brinjal and raw bananas. They said it would cause stains during menstruation" (FGD-W, 2024), and "they told me not to eat mackerel. They told me it smells bad during periods, so the body will also smell

[14] A pudding made out of urad dal – this is made by grinding urad dal to a fine powder and blending it with jaggery syrup.

[15] This practice was mentioned during the research conducted in Colombo and was included as an option for this study.

bad" (FGD-G, 2024). In addition to children refraining from consuming certain food items, they were also told not to feed any of their leftover food to their pets while they were isolating at home.

These rituals mentioned above, i.e., isolation, ritual bathing, celebration are performed by many communities in the Asian region, largely in South Asia and Southeast Asia, leading Winslow to say that such rituals are part of a "structured universe of social relations" (as cited in Lennox, 2013, p.90). These rituals are performed with the intention to keep girls safe from evil spirits and onlookers, and to protect men from the supposed pollution of the first menstruation, i.e., menarche (Lennox, 2013). These sentiments were reiterated during the focus group discussions, with participants stating that they were instructed to be wary of evil spirits when they reached menarche, especially when leaving the house. This practice also seemed consistent between the two age cohorts, as an adult community woman claimed "they told me to take a knife and a broom when going out. They say that if we don't do that, we will be affected by evil spirits (FGD-W, 2024), and similarly, a school going girl said "[the Dobi] told me to cover my face with a *veshti*[16] when going out and to carry a knife and/or broomstick when going outside; otherwise, I could be possessed by a ghost (FGD-G, 2024).

While these rituals are widely practised in Sri Lanka, including in the study locations, key informants who provided their insight on the matter brought up concerns regarding the negative impact such rituals may have on children's mental health, especially those who have to isolate at home for longer periods.

3.5.2 Practices during menstruation

As part of the research study, respondents were asked if they had ever heard of certain practices associated with menstruation, and which of these statements they practiced in their day to day lives. Table 9 below clearly shows that while respondents were more likely to have heard of

[16] A traditional cloth similar to a sarong

certain practices associated with menstruation, the adherence to these practices in their daily lives was comparatively lower.

Table 9: Practices heard of and adhered to during menstruation

Menstruating individuals should …	Heard of		Practice	
	Frequency	Percentage	Frequency	Percentage
Refrain from cooking for family members	59	14%	14	3%
Refrain from taking part in religious and cultural events	315	76%	277	66%
Refrain from entering religious places	366	88%	327	78%
Menstruating individuals should stay indoors	111	27%	29	7%
Refrain from being physically active	73	18%	20	5%
Menstruating individuals should not wash their hair	224	54%	136	33%
Menstruating individuals should not eat fish or meat	145	35%	140	33%
Do not allow carry babies	14	3%	13	3%
Do not touch plants	6	2%	8	2%
Menstruating individuals should not eat fried food	71	17%	71	17%
Not allowed to go to the garden	8	2%	8	2%
Do not follow anything	-	-	35	8%

The practices most commonly heard of among the survey respondents with smaller gaps between heard and practiced, were associated with **entering places of religious worship** (88%; 366/417), followed by **engaging in religious and cultural events** (76%; 315/417), with both these practices recording correspondingly higher instances of practice at 78% (327/417) and 66% (277/417) respectively than other statements. Refraining from engaging in religious activities is noted to extend religious observances within the home too, with menstruating individuals refraining from lighting the oil lamp or laying garlands for the gods in the shrine room. During the FGDs with the men and boys, they stated that one of the ways they would know if a family member was menstruating would be if they observed that they refrained from engaging in religious observances as this would not always be communicated, particularly to fathers or brothers in the household (FGD-B, 2024; FGD-M, 2024).

Restrictions pertaining to types of food not recommended to be consumed during menstruation include **refraining from the consumption of meat and fish**. Among the survey respondents, 35% (145/417) indicated that they had heard of this practice, while 33% (140/417) of the respondents reported adhering to this practice. The reasons attributed to avoiding these foods included the belief they would cause stomach aches and cause the menstrual discharge to the smell; with respondents indicating that these practices were communicated to them by their mothers or grandmothers. Interviews with the midwives indicated that although they would inform menstruating individuals of the importance of consuming protein and having adequate nutrition during this period, it was sometimes a challenge to convince them to change years of practice and beliefs.

The custom of refraining from **cooking for family members** were noted to have a large gap between the number of respondents indicating they had heard of and actually practised at 14% (59/417) and 3% (14/417) respectively. This was attributed to the direct impact this practice would have on meeting daily household responsibilities if adhered to. To this end, during the FGDs and field observations, respondents revealed that although they had heard of the practice of not cooking for their family members, the reason as to why it is not as widespread in practice is because there is usually no one else at home who is capable of cooking for the family members. This also interestingly reveals how certain customs change due to practical considerations. “No, we can cook. If we don't cook, who will cook? If we don't cook, no one in the house can eat” (FGD-W, 2024).

As per responses recorded, the largest gap between heard of, and actual practice is with regard to the statement that **menstruating individuals should not wash their hair** at 54% (224/417) and 33% (136/417) respectively, followed closely by the statement that individuals should remain indoors when menstruating at 27% (111/417) and 7% (29/417) respectively. During qualitative interviews, participants reported that practical aspects of everyday life influenced their decisions related to practices adhered to during menstruation. For instance, instead of refraining from washing hair till they had completed menstruating, they would try and refrain at least for the first three days and wash their hair subsequently (FGD-W, 2024).

Among the 2% (8/417) of respondents who adhere to the custom of **not touching plants** and the 2% (8/417) of respondents who do not go to the garden during menstruation, attribute these decisions to their religious and spiritual beliefs. The plants that they cannot touch or tend to include Tulsi[17] and any vegetable or fruit saplings and/or plants grown in their own home gardens. It is believed that tending to plants in your garden when menstruating will negatively affect their growth. In the qualitative interviews, respondents engaged in tea plucking stated that they do not adhere to this practice outside the home as even missing a day's work would have negative implications on their income stream (FGD-W, 2024).

An interesting finding related to these claims is how if a menstruating woman or girl was to hold a baby when menstruating, they could only do so once they have washed their hair or bathed, and they allow droplets of water to trickle down their damp hair onto the baby. The field researchers were also informed that at times this practice has a validity period of up to one day.[18] To hold a baby during menstruation otherwise was believed to cause the baby to cry uncontrollably. While this practice was only reported by 14 respondents (representing 3% of the total sample) it is recorded here as it is a practice that has not been mentioned in any existing literature thus far.

Only 8% (35/417) of the survey respondents reported that they do not abide by any of these practices during menstruation. When these responses are disaggregated by age, 12% (15/124) of the respondents belonged to the 20-29 age group, while only 5% (5/103) of the respondents belonged to the 40-49 age group. This is indicative that younger respondents are less inclined to follow some of these practices, however, the data is not significant to say this with certainty.

3.5.3 Association of the menstrual practices and the respondents' level of education

To explore the association between menstrual practices and the highest level of educational attainment of the respondents, chi-square independence tests were conducted. The results revealed statistically significant associations for certain practices: not washing hair during

[17] Holy basil – a plant that is significant for those of the Hindu faith
[18] Field observations

menstruation (X^2 (5) = 14.1062, p = 0.015), avoiding fried foods (X^2 (5) = 14.1054, p = 0.015), and avoiding meat or fish during menstruation. These findings suggest that respondents with higher educational levels are less likely to follow such practices compared to those with lower educational attainment.

However, there was no statistically significant association between practicing religion-related customs, such as entering religious places or participating in religious activities, and the respondents' education level.

3.5.4 Foods avoided

In this study, the survey explored the aspect of foods avoided during menstruation. Accordingly, 34% (140/417) of the total respondents reported that they **avoid certain foods and meat during their periods**. Out of 140 respondents who avoid certain foods during periods, 74% (103/140) and 71% (100/140) reported that they avoid fish and meat respectively. 36% (50/140) of the respondents reported that they avoid deep fried foods while 35% (49/140) avoid raw banana during periods. Closer to one third of the respondents (31%; 43/140) highlighted that they avoid eggs as well. Among the different food types avoided by the respondents highlighted, there are some other specific foods avoided by a few, but still noteworthy which are brinjal (14%; 19/140), tomato (3%; 4/140) and papaya (1%; 2/140). When comparing food-related practices between the responses gathered in Colombo with that of the estate community respondents, only 24% (145/602) of surveyed menstruating individuals in the urban Colombo sample reported avoiding certain food items during menstruation (CEPA, 2025). Among them, 46% (67/145) specifically avoided consuming meat and fish. In contrast, among the respondents representing the estate sector, 74% reported avoiding certain foods such as fish and meat during menstruation, indicating a higher prevalence of dietary restrictions in the estate context.

When considering the reasons for avoiding certain foods during menstruation, 47% (66/140) of the respondents noted that they want to eat but cannot as elders do not allow to do so, while 43% (60/140) reported that they do not like the smell of the food that is avoided. Further to that, 9% (13/140) reported that they avoid certain foods during menstruation because they lose their

appetite. An equal number of respondents (6%; 9/140) reported that they believe it will increase the tendency of heavy bleeding and the staining of clothes.

During the qualitative data collection component, it was mainly school going girls who revealed that they had to refrain from consuming certain foods. Much like the household survey findings, they were told to avoid certain foods such as brinjal, jaggery, pineapple, papaya, salmon, dried fish, and eggplants as they were believed to either cause a heavy blood flow during menstruation or cause the menstruating person to smell bad; “They said that if I eat jaggery, I will get heavy blood flow, and if I eat eggplant, I will smell bad when I sweat” (FGD-G, 2024).

However, a majority of the respondents (66%; 277/417) reported that they do not avoid any foods when menstruating because they believe it is important to have nutritious food (65%; 179/417) while 33% (90/140) noted that they do not have a specific reason to avoid certain foods during menstruation. Interestingly, 7% (20/277) highlighted that their appetite increases during menstruation.

Based on the age categories, respondents belonging to the age group of 15-19 reported the highest percentage (45%; 28/62) of avoiding certain foods compared to respondents belonging to the remaining age groups. Further while not statistically significant, a noticeable finding of the study is that higher the educational attainment among the respondents, the lower the tendency of avoiding certain foods during periods. For instance, while the respondents who have only attended school from grade 1-5 show the highest tendency of avoiding certain foods during menstruation (47%; 18/38), only 13% (1/7) of the respondents who have graduated school reported avoiding certain foods during that period.

3.5.5 Nutritional considerations

In Sri Lanka, undernutrition among mothers and children under five, especially those living on plantations, remains a chronic development issue. Aligning with this, the rate of stunted children and underweight adult women in estates is respectively 2.9 and 3.4 times higher than in urban areas in Sri Lanka. Similarly, low birth weight rates in the estate sector were recorded as 2.4 times higher in the estate sector (World Bank Group, 2023). As per the findings of World Bank Group

(2023), poor dietary practices result from high-priced nutritious foods, inadequate dietary information and traditional beliefs are some of the significant reasons for this.

Corresponding to the existing contextual data, the findings of this study also highlighted some significant dietary practices during menarche and menstruation which can lead to nutritional concerns for menstruating individuals. For instance, 34% (140/417) of the respondents indicated that they avoid certain foods during periods. Out of this 140, 71% (100/140) refused to eat meat, 74% (103/417) avoided fish and 31% (43/417) refused to consume eggs; the foods rich in nutrients such as proteins, thiamine, vitamins, minerals, iron, zinc and magnesium, important in building muscles, bone health, fluid balance and immunity (Vedantu, 2024). Notably, in the 15-19 aged respondents in the sample 42% (26/62) of the respondents mentioned that they avoid eating meat, fish or eggs during menstruation. This is a significant problem as protein supports physical and hormonal changes during adolescence. Avoiding animal protein during menstruation risks nutritional deficiencies critical for overall well-being (Ozdemir,2016).

Furthermore, the respondents who avoided certain foods were also reluctant to have certain fruits and vegetables such as brinjal (14%, 19/140, tomato (3%, 4/140), papaya (1%, 2/140) and raw banana (35%, 49/140) during menstruation which are scientifically and medically recognized as rich in a number of vitamins and antioxidants while reducing the risk of heart disease (Falcomer et al., 2019).

3.5.6 School attendance during menarche and menstruation

Puberty represents a transitional phase for all adolescents, although it poses particular challenges for females, who are unprepared for the physical alterations that may disrupt their education. In Sri Lanka, when an individual experiences their first menstrual discharge or menarche, it is customary to refrain from going outside the house, and by extension this includes staying away from school. While this practice is partly to ensure the comfort and well-being of the menstruating girl during their first menstrual cycle, this practice is also influenced by cultural and religious rituals and practices.

Among the respondents surveyed, 67% (282/417) reported that they stayed away from school when they reached menarche, while 21% (86/417) indicated that they did not have to stay away

from school as they were already on school vacation at the time. Only 2% (7/417) of the surveyed respondents indicated that they did not skip school upon menarche.

Of the survey sample, 36 respondents (representing 9% of the sample) indicated that they had already ceased attending school at the time they reached menarche. Although it is not possible to determine if there was a correlation between menarche and the decision to drop out of school, it is still a cause for concern that should be explored further.

As already extrapolated from the survey findings, the average duration of isolation practiced upon reaching menarche was 34 days. This is attributed to the rituals practiced during menarche by followers of Hinduism of which the sample represents a majority. While concern for the duration stayed away from school and its negative impact on the students' education attainment was raised during the key informant interviews, it was also stated that teachers from the locality and elders in the community did not think it was a cause for concern. When compared to findings from a similar survey conducted in urban Colombo, where the average number of school days missed due to menarche was reported as 13 days, the figure recorded in the estate sector was almost thrice as high. Considering the fact that the majority of the estate sector respondents follow Hinduism, it is notable that Hindu respondents in the Colombo sample reported an average of 20 missed school days which is 14 days fewer than the responses recorded from the respondents in the estate sector.

Respondents currently enrolled in school or educational activities were asked whether they stayed away from school when menstruating. Of those surveyed, 67% (37/55) indicated that they did not skip school or university on days they were menstruating, while 33% (18/55) of the respondents indicated that they did not attend school or university when they were menstruating. The reasons attributed for not attending school on selected days were distributed as follows: 14 did not go to school when they had heavy menstrual flow; 4 reported skipping school on days when they had menstrual pain or cramps. During the qualitative interviews, the respondents elaborated that the reasons for skipping school – particularly on heavy flow days – was due to the fear of staining their uniforms, a factor that is reinforced by the stated lack of suitable facilities to change and dispose of used menstrual hygiene products. Among the survey

respondents, the relatively lower rate of school absenteeism during menstruation was attributed in part to the close proximity of the school to the residences of the selected study locations.

3.5.7 Employment during menstruation

Of the 139 respondents engaged in income generating activities outside the home, a majority (68%; 95/139) reported that they always go to work even when menstruating. Conversely, 32% (44/139) reported that they do not attend work during menstruation. Of them, 55% (24/44) reported that they do not attend work on some days, while 25% (11/44) noted that they do not attend only when they are suffering from period cramps. The remaining 14% (6/44) reported that they do not go to work throughout the entire period of menstruation. Among the total number of employed respondents who work in the estate sector (80), 60% (49/80) of the respondents reported that they continue to engage in work on days they are menstruating.

The survey also asked all respondents if they thought menstruating individuals engaged in employment outside the house should be entitled to paid leave in the event they had pain or discomfort, and a majority of the respondents (70%; 291/417) were in agreement with this suggestion. When disaggregated by those employed on the estate, 81% (65/80) of the respondents were in agreement with this suggestion. For those engaged in tea plucking, the lack of accessible washroom facilities was an important consideration as they usually must resort to refraining from using the washroom the entire day or make their way back to their homes if the need arises.

Although the respondents recognised that the suggestion of paid leave during menstruation was not the current practice, they considered this would be a positive practice to be considered by policymakers in the future.

3.5.8 Menstrual pain

Dysmenorrhea, or menstrual pain, is characterised by discomfort that commences just before menstruation and persists throughout its duration, with discomfort experienced noted to be typically more intense on the first and second days (Iacovides et al., 2015). Approximately 80% of women encounter menstrual discomfort at some point in their lives. While a majority of women endure considerable discomfort during menstruation, global literature estimates that for

approximately 20% of these individuals, the pain is severe enough to interfere with their daily lives, often leading to absenteeism from work or school, decreased productivity, and difficulties in daily activities and social engagements (Leon-Larios, et al., 2024; Chen, et al., 2016). It is further noted that for 40% of women, menstrual discomfort is accompanied with premenstrual symptoms, including bloating, breast tenderness, abdominal swelling, impaired attention, mood fluctuations, clumsiness, and fatigue (Women's Health Concern, 2022).

Among the surveyed respondents, a majority (84%; 352/417) reported **experiencing some form of menstrual pain**. Individuals between the ages of 20-29 were most likely to report experiencing menstrual pain at 90% (111/124), with respondents between the ages of 40-49 reporting experiencing the least amount of menstrual pain at 76% (78/103). Having over 75% of respondents across all ages reporting some form of menstrual pain is concerning and should be communicated to relevant health authorities as a matter to be addressed.

According to the findings of the survey, **the most common types of menstrual pain** were abdominal pain and back pain as reported by 88% (310/352) and 80% (282/352) of the respondents respectively. Other types of pains reported included, pain in the legs among 65% (228/352); while some of the respondents mentioned that they experienced fatigue (34%; 118/352), headache (28%;97/352), muscle cramps (17%; 59/352), bloating (14%; 50/352), breast tenderness (14%; 49/352), nausea (8%; 29/352) and diarrhoea (3%; 9/352). Although not related to pain, a few respondents also mentioned that they experienced dizziness, excessive urination, fever, and white vaginal discharge.

Among the respondents who experience menstrual pain, the **most common occurrence of pain** was reported as before the start of menstruation by 63% (220/352) of the respondents, followed by 52% (182/352) who reported experiencing pain on the first day or first few days. Comparatively, only 16% (55/352) mentioned they experience menstrual pain throughout their periods.

Further, 21% (86/417) of the respondents reported that they had **experienced pain so severe it had caused them to faint.** When disaggregated by age, a majority of such respondents belonged

to the 15-19 age group 32% (20/62), and the least number of responses were recorded from the age category 40-49 which was at 14% (14/103).

Among the survey respondents, an overall 41% (145/352) indicated that their **daily routine is disturbed due to menstrual pain.** The highest attribute was recorded by 68% (99/145) of the respondents reporting that the pain had a direct impact on engaging in daily activities such as eating, bathing and completing household activities. Participating in community-based activities and engaging in livelihood activities were the next most impacted activities due to menstrual pain at 26% (38/145) and 25% (36/145) respectively. While only 12% (18/145) of the respondents reported menstrual pain affecting their education, the qualitative interviews recorded respondents stating that they had instances when they were not able to participate in extra-curricular activities such as sports or dance competitions at school due to menstruation.

3.5.8.1 Managing menstrual pain

Respondents reported engaging in various **practices to minimise the pain** experienced during menstruation. Among those who experience menstrual pain, the most common method of pain management as reported by 51% (180/352) of respondents, was the use of medication (painkillers like Paracetamol); this was followed by 35% (122/352) of the respondents reporting that they resorted to sleeping or resting till the pain subsided, while drinking coffee or a hot beverage was reported by 29% (103/352) of respondents as a form of pain mitigation. Additionally, during the FGDs, some of the participants also mentioned resorting to natural/herbal remedies such as consuming cumin water or the preparation of a hot beverage made with fenugreek and cumin to ease the pain (FGD-W, 2024). While similar measures were mentioned by the younger cohort during the FGD, they also mentioned additional measures such as drinking turmeric powder mixed in water, ground cinnamon mixed with milk, and water with added sugar (FGD-G, 2024).

The complete list of responses from the survey respondents is elaborated in Table 10 below.

Table 10: Mitigation measures for menstrual pain

Method adopted to minimise pain	Frequency	Percentage (out of the respondents who experience pain (460))

Take medicine/pain killers	180	51%
Sleep off the pain	122	35%
Drink coffee or a hot beverage	103	29%
Use a hot water bottle	81	23%
Ignore the pain	78	22%
Having a herbal concoction	47	12%
Stay at home	11	3%

Moreover, among the respondents who used any form of pain mitigation strategies, only 30% (106/352) were able to reduce their menstrual pain effectively while the remaining 70% (246/352) reported that they were **unable to manage the pain** following use of one of the above-mentioned methods. Of the respondents who stated that they cannot mitigate pain via pain-reducing strategies, 50% (123/246) stated that they do not take any painkillers but follow other methods, while the remaining 50% (123/246) have stated that even though they took painkillers, they were not able to manage their pain. When considering pain management across age categories, it is noted that the majority of the respondents across all age groups reported that they were not able to manage their menstrual pain when needed.

During the focus group discussions, the older participants also mentioned that they refrained from taking painkillers as they had been advised by their mothers when they were younger that it would lead to infertility (FGD-W, 2024). In the same FGD, it was stated that there was a belief that if they consumed painkillers even for a headache, it would contribute towards an irregular menstrual cycle. In an interview with a medical professional however, this notion was dismissed on the basis of there being no medical evidence to this effect: "… when talking about infertility caused by Panadol,[19] it is a false belief" (FGD-W, 2024).

[19] This is a type of paracetamol

As part of the survey, respondents were asked if they would feel comfortable **seeking help from a health care provider in the event of a medical concern** regarding menstruation. An overwhelming 91% (378/417) of the respondents stated that they were comfortable speaking with a healthcare professional about menstruation or menstrual health; with 72% (273/378) of the respondents indicating that they would be comfortable consulting a doctor (273/378) and 44% (168/378) of the respondents reporting that they felt comfortable consulting a midwife. However, these responses do not correspond with the number of respondents indicating that they experienced un-manageable pain during menstruation. It is therefore possible to infer that respondents do not consider menstrual pain to be a medical concern as it is normalised as a part of the menstrual experience. This sentiment was reiterated during an FGD, where a majority of the participants indicated that they did not experience severe menstrual pain, however, the few who did experience it stated that they had not consulted a health professional regarding their menstrual pain. One person even mentioned that *"[my period] lasts for five days, and I have severe lower abdominal pain. I also have hip pain, leg pain, nausea, dizziness, fatigue, and diarrhoea. I'm scared to go to the hospital, so I take it as a normal thing"* (FGD-W, 2024). On the other hand, another participant mentioned how her concerns were disregarded by health professionals even after seeking healthcare; "*For me, it lasts for six days. I had heavy bleeding and fever, so I went to the hospital and took medicine, but the doctor said it is a normal thing*" (FGD-W, 2024).

These findings reinforce the need for comprehensive collaboration and targeted knowledge sharing by community medical professionals such as midwives with whom the respondents already have a relationship with, in an effort to minimise misinformation and to also understand and address the issue of pain management during menstruation, as the inability to manage pain and its subsequent impact on their daily lives is a serious issue that should be given due consideration. A pre-requisite to ensuring successful communication and a supportive environment for menstruating individuals to be able to reach out to medical professionals is their attitude and ability to communicate in the language of the patient; a concern that was raised during interviews with the area midwives and representatives of community-based organisations.

3.5.9 Purchasing menstrual hygiene products

As mentioned earlier, 95% (396/417) of the sample used single-use sanitary napkin either as their sole menstrual hygiene product of choice or in combination with cloth. This section explores respondents' practices and attitudes involved with purchasing menstrual hygiene products. The analysis of this section excludes the 21 respondents who only uses cloth (repurposed from used fabric as their menstrual product of choice) as they do not purchase menstrual hygiene products.

The most popular location to purchase menstrual hygiene products is the small shop in close vicinity to their homes as reported by 72% (287/396) of the respondents, followed by the supermarket at 62% (244/396), and 40% (157/396) of the respondents indicating that they have purchased menstrual hygiene products from a pharmacy. None of the respondents indicated the use of online purchasing platforms for purchasing of menstrual hygiene products. In terms of availability of choice of sanitary napkins and the size of the packets, responses obtained from the qualitative interviews indicated that the proximity to the town or main road would play a contributory factor, with shops closer to the town having more varieties and packet with 10-12 pads, while shops located away from the town were more likely to stock the smaller packs with only two pads enclosed.

Among the survey respondents who purchase disposable menstrual hygiene products, 86% (339/396) reported that they purchase the product by themselves; with the same number of respondents indicating that they did not feel any embarrassment or discomfort in making the purchase. As part of the survey, the respondents were also asked if they thought the shopkeeper experienced embarrassment associated with selling the product, to which 95% (377/395) of the respondents disagreed. They did go on to state however that when they purchased sanitary napkins, it would always be wrapped up in a paper so that it was not visible when carrying it back home.

The chi-square independence test results reveal that there is no significant association between age group and the practice of purchasing menstrual hygiene products independently($p=0.344$). It suggests that age does not play a significant role in determining whether individuals purchase menstrual hygiene products on their own in the estate sector. A vast majority (over 80%) of

respondents from all age categories demonstrated this self-purchasing behaviour while implying that purchasing menstrual hygiene products may be a widespread practice across different age cohorts in the sector.

Table 11 Association between age group and purchasing menstrual hygiene products independently – Chi-Square Results

Age Group	Yes (n)	Yes (%)	No (n)	No (%)	Chi-square (X^2)	p-value
15-19 years	48	82.8%	10	17.2%	3.3292	0.344
20-29 years	105	90.5%	11	9.5%	df=3	
30-39 years	103	83.1%	21	16.9%		
40-49 years	83	85.6%	14	14.4%		

Out of the 56 respondents who responded that they do not purchase menstrual hygiene products by themselves, a follow up question was asked of who purchases the products on behalf of them. A majority of 45% (25/56) have reported that a male member of the family would make the purchase, followed by 36% reporting that a female family member would be involved in the process, while 20% (11/56) of the respondents indicated that both male and female members would purchase the menstrual hygiene products on their behalf.

The respondents were asked if any male family member had purchased menstrual hygiene products for them. Given that menstruation is not a topic openly discussed even within a family – particularly among male household members, this question attempts to understand if respondents felt comfortable asking their male family members to purchase sanitary napkins for them when necessary. Among the survey respondents, 74% (294/417) indicated that a male family member has purchased menstrual hygiene products for them at least once. When responses were disaggregated by age, 83% (52/62) of respondents belonging to the youngest age cohort of 15-19, indicated that male family members have purchased menstrual hygiene products for them, while 69% (67/97) of the respondents belonging to the oldest age group stated that a male family member had purchased menstrual hygiene products for them in the past.

3.5.9.1 Cost incurred related to purchasing menstrual hygiene products

The respondents were asked to indicate the average monthly cost they incurred for purchasing menstrual hygiene products. In households that have more than one menstruator (other than

the respondents), the costs incurred for each menstruating member was recorded separately. The cost figures are reported in the table below:

Table 12: Cost incurred for purchasing menstrual hygiene products

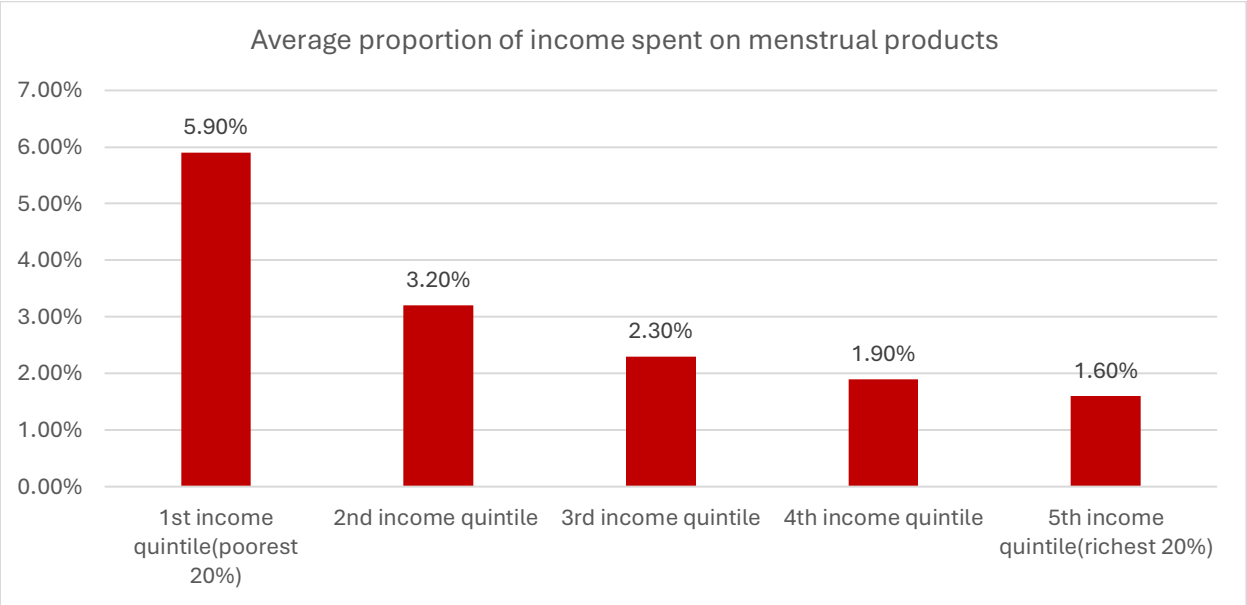
	Mean in LKR	Median in LKR
Individual (respondent's) Cost	408	350.00
Total family	780	600.00

The average monthly cost that a surveyed household incurs was reported as LKR 780; this accounts for on average 3% of the total household income. Moreover, the results reveal that respondent who were employed as estate sector workers, spent on average LKR 397 per month on menstrual hygiene products which represents 4% of their individual income; while respondents who were students spent on average LKR 412 per month on menstrual hygiene products. The disaggregation of expenditure by age group reveals that the respondents who belonged to the oldest age cohort had the lowest average monthly spending of LKR 363 while the 20-29 age group reported the highest average spending of LKR 480. These results reflect the menstrual hygiene product usage practices among different age groups, with respondents belonging to the oldest age group reporting the lowest usage of sanitary napkins, resulting in the lowest monthly average cost. This could be attributed to older respondents using a mix of single use sanitary products in combination with cloth in an effort to minimise the amount spent. Furthermore, younger respondents were more likely to use single use menstrual hygiene products for fear of leakage and to minimise staining of clothes, particularly for those still enrolled in school.

Figure 8 illustrates the share of monthly total household expenditure on menstrual hygiene products out of the total household income. A Kruskal-wallis test was conducted to examine differences in the proportion of monthly income spent on menstrual hygiene products across income groups. The results revealed significant disparities in the share of monthly household income spent on menstrual hygiene products across income quintiles ($X2=117.056$, $p<0.0001$).

The clear regressive pattern is visible with the lowest income quintile bearing the highest relative burden (rank sum:26,376) compared to other quintiles. This burden progressively decreased through each income level with the highest income quintile showing the lowest proportion of spending from total income. These findings provide statistically significant evidence that lower income households in the sample allocate significantly higher proportions of their monthly income to purchase menstrual hygiene products compared to the higher income earning houses.

Figure 8: Average household income spent on single use menstrual hygiene products



3.5.9.2 Impact of the economic crisis and choice of menstrual hygiene products

Sri Lanka faced a severe economic crisis in 2022 which contributed to a severe economic downturn impacting the consumption patterns of its citizens in multiple aspects. Given these circumstances, the survey attempted to study the ways which the economic crisis influenced respondents' menstrual hygiene product usage and adaptive strategies they employed in response to the rising costs.

The results indicate that since the economic downturn, 17% (70/417) of the respondents reported having to forego buying other essential household goods to be able to afford menstrual hygiene products. Furthermore, 10% (43/417) reported that they had reduced the number of sanitary napkins they used by using the napkins for longer periods. A further 15% (61/417) of the respondents reported that they had resorted to using cloths as an alternative to the disposable

menstrual hygiene products due to financial constraints, with 23% (20/417) of the respondents belonging to the wealthiest income quintile in the sample admitting to this particular adaptation. This reported shift in use of products likely involved the combined use of cloth and single use pads, rather than exclusively relying on disposable pads alone. In addition, 13% (54/417) of the respondents reported adopting stockpiling behaviour for single use sanitary napkins at the beginning of the crisis. However, among those who stockpiled, 50% (27/54) belonged to the richest income groups, indicating that their higher financial capacity allowed them to engage in this practice compared to respondents belonging to lower income groups. Moreover, 15% (63/417) stated changing the product type such as transitioning to cheaper brands or opting for less diverse products (eg: using pads without wings instead of winged pads).

3.5.9.3 Taxation on menstrual hygiene products

Approximately half of the global population needs menstrual hygiene products for a duration of three to four decades of their life. Restricted access to menstrual health goods and services is recognised to adversely impact the dignity, health access, education, employment, and participation in public activities for girls, women, and other menstruators (Crawford, 2017). Therefore, the taxation of menstruation products is recognised to significantly hinder access to these items due to economic constraints, a fundamental aspect of menstrual poverty (Crichton et al., 2013) and illustrates systemic gender subordination and the marginalization of women's needs (Calderón-Villarreal, 2024).

The pink tax, or tax on menstrual hygiene products, denotes the sales tax imposed by state, county, or local governments on the retail purchase of such items (Alliance for Period Supplies, 2024). In recent years, civil society initiatives have garnered heightened attention about the taxation of menstrual hygiene products across numerous countries and regions. Jamaica was the first country in the American Region that eliminated the tax of menstrual goods, such as sanitary napkins and tampons in 2012 (Calderón-Villarreal, 2024). In 2017, the government of Guyana classified sanitary napkins and panty liners as 'home needs', hence applying a zero-rated tax (Guyana Revenue Authority, 2021). In Colombia, the tax rate on menstrual hygiene products was reduced from 16.0% to 5.0% in 2016 as part of the political initiative "Menstruacion Libre" (Free Menstruation) (Calderón-Villarreal, 2024).

In Sri Lanka, access to safe and affordable menstrual hygiene products is still a luxury for many women (International Media Support (IMS), 2023). This is particularly apparent due to the reduction in purchasing power resulting from the COVID-19 epidemic and the subsequent economic crisis (The Family Planning Association, 2024). To this end, 65% (273/417) of the survey respondents indicated that they considered single use sanitary napkins/products to be expensive.

In Sri Lanka, menstrual hygiene products have always been subject to elevated tax rates. Before 2018, menstrual hygiene products incurred a tax rate of 101.2% (Sri Lanka Customs, 2018), whereas in October 2022, the government declared the elimination of Value Added Tax (VAT) on imported sanitary napkins and the raw materials used in the manufacture of domestic sanitary napkins with the objective of eliminating all tariffs; nevertheless, this enhancement was short-lived (The Family Planning Association, 2024). The tax rate in Sri Lanka in 2023 stood at 51.07% (Sri Lanka customs, 2023), which perpetuates the impediment to menstruators' access to sanitary items; this most recent figure available records a reduction in tax rate to 21% since. Research undertaken by The Advocata Institute (2019) indicates that the absolute period poverty rate in Sri Lanka is almost 40%; with approximately forty per cent of households with menstruating women indicating that they do not purchase sanitary products within their household expenditure.[20]

The elevated expense of menstrual hygiene products in Sri Lanka adversely affects girls' and women's education, health, and career opportunities, with a survey of adolescent Sri Lankan girls revealing that over one-third of respondents reported missing school due to menstruation (International Media Support (IMS), 2023). As already evident from the survey results, girls and women have reported wearing single use sanitary napkins for longer periods of time than recommended or switching to alternatives which puts them at an increased risk of infections or UTIs. If the taxation on menstrual hygiene products is not regulated going forward, and individuals continue to use single use menstrual hygiene products for longer than recommended, it stands to reason that health services may need to incur the cost of resulting ailments – an

[20] The Absolute Period Poverty Rate is calculated by the Advocata Institute as: No. of HHs with women of menstruating age which have not spent money on sanitary napkins/Total no. of HHs with at least one woman of menstruating age.

additional cost for a government that is presently using taxation on menstrual hygiene products as a source of revenue.

Therefore, it is necessary to reconsider the taxation on an essential item which is required by approximately half the country's population. Efforts should be made to ensure that they are able to experience a dignified menstruation.

3.5.10 Sustainable or reusable menstrual hygiene products

Among the survey respondents, only 5% (21/417) claimed that they primarily use a reusable menstruation product which is just cloth and another 21% (90/417) use cloth in combination with the single use sanitary pads. None of the respondents reported the use of menstrual cups, reusable sanitary napkins, or menstrual underwear. Among the respondents who use cloth, the predominant reasons cited for opting for cloth were personal comfort (54%, 47/111), followed by cost-effectiveness (47%, 52/111), and ease of use (23%, 26/111). One participant reflected these concerns during an FGD:

> "I don't like to use pads. I have gotten used to it [cloth], and because of financial issues, we only use pieces of cloth. We wash the used cloths and use them again… Since we use cloths, it causes injuries, and there is itching in the inner thighs. We rinse that area with water and apply coconut oil" (FGD-W, 2024).

This claim, however, is closer to habitual practice rather personal comfort as evidenced by the injuries caused by long-term use of cloth as a menstrual hygiene product. To this end, the survey results recorded 86% (96/111) of respondents who used cloth, indicating that they have been using this method since they began menstruating.

Perhaps this also highlights an area which development organisations and health professionals need to focus on during their awareness sessions. In contrast, the predominant reason for the reluctance to use reusable or sustainable menstrual hygiene products, excluding cloths, as reported by 89% (373/417) of respondents, was the lack of awareness regarding these products and insufficient information (6% (23/417)); with 3% (11/417) of the respondents reporting that they believed these products would be uncomfortable to use.

While the use of cloth as a menstrual hygiene product does belong to the sustainability category, during interviews with key informants belonging to development agencies and medical professionals, there is stated concern of its continued use particularly within the estate sector. These concerns stem from the fact that if cloth is to be a suitable alternative to single use products, they must be washed and dried in the sun in order to prevent the growth of harmful bacteria. Due to the weather patterns characteristic of the estate sector, the opportunity to dry the cloth completely in sunlight is not always feasible and drying of these cloths is often stated to occur indoors due to existing negative perceptions, as well as concerns about the perceptions of those around them. This is reiterated by 52% (45/86) of the survey respondents who indicated that they used cloth (more than once), reporting that drying of the used cloth once washed takes place on a clothesline inside the house. While 19% (16/86) of the respondents indicated that they would dry the cloth used during menstruation outside the house, during the qualitative interviews, the participants stated that even when dried outside, they would not be exposed to direct sunlight, as they were often covered by another item of clothing;

> "…we wash the [cloths] in the same place where we bathe, and we dry them on the clothesline. However, we spread another cloth over the used one to secretly dry it" (FGD-W, 2024).

Given the familiarity with the use of cloth, the transition to reusable sanitary napkins is considered to be a cost effective and sustainable alternative for communities that are finding it economically challenging to access single use sanitary napkins. In an interview with a representative from Tea Leaf Vision, it was stated that an initiative is being developed to produce and distribute reusable cloth-based sanitary napkins among the estate community. Although this is positive intervention, concern was raised during another interview with a key informant regarding the mitigation of existing challenges associated with the use of cloth, particularly with regards to drying product before re-use.

The promotion of the reusable menstrual cup is stated to be ongoing within the estate sector by several community-based organisations as it circumvents the need for drying or disposal that is associated with the use of cloth or single use products respectively. However, due to the

requirement of insertion for its use, and the corresponding concern about the hymen, it is noted that the menstrual cup is currently being promoted among older/married women.

These responses provide a chance to raise awareness of alternative menstrual hygiene products and to address misconceptions around reusable menstrual items. Additionally, these information-sharing sessions could be utilised to convey specifics regarding costs, comfort, and challenges menstruators may encounter alongside potential benefits they could experience based on their distinct contexts and socio-economic conditions.

3.5.11 Access to WASH facilities during menstruation

Menstrual Health and Hygiene (MHH) is crucial for the welfare and empowerment of women and adolescent girls. Approximately 500 million individuals lack access to menstrual hygiene products and sufficient facilities for menstrual hygiene management (MHM). To manage menstruation effectively, girls and women need access to water, sanitation, and hygiene (WASH) facilities, affordable and suitable menstrual hygiene products, information on best practices, and a supportive environment that allows them to manage menstruation without embarrassment or stigma (World Bank Group, 2023).

In developing countries, 50% of schools lack sufficient water, sanitation, and hygiene facilities essential for enabling girls and female educators to manage menstruation (UNICEF 2015). Numerous studies contend that insufficient sanitary facilities adversely impact girls' educational experiences, leading to absences during menstruation or potential dropouts. Schools that provide female-friendly amenities and integrate menstruation guidance into the curriculum for all genders can mitigate stigma and enhance educational and health outcomes.

A survey by the Government of Sri Lanka (GoSL) and UNICEF (2021) indicated that in government-sponsored schools, soap availability was at 41%, but only 1% of principals and 6% of teachers reported the availability of emergency sanitary pads. Moreover, only a limited number of schools in Sri Lanka satisfy the minimum criteria for toilets (UNICEF, 2015). A deficiency of water facilities in toilets was a significant factor for 12-15% of adolescent girls to refrain from utilizing toilet facilities for changing and cleansing during menstruation, whereas 16-25% attributed their reluctance to insufficient privacy (UNICEF, 2015). A lack of recent information from the national

school census has meant that it is not possible to provide insights/analysis based on the current national context.

As a part of this study, respondents were asked about **access to WASH facilities at schools**. Accordingly, 87% (49/55) of the respondents who were at school stated that they have access to a washroom at school. Among those 49 respondents, 73% (36/49) responded that running water was available at their school washrooms. However, only 63% (35/49) of the respondents who were schooling indicated that they are comfortable with the level of cleanliness in their school washrooms. During the qualitative interview with a schoolteacher, it was reported that the students were expected to clean the bathrooms based on a roster as there was no dedicated staff to undertake this task. As such, she went on to state that the washrooms remained in a satisfactory condition. While the students engaged in cleaning the school washrooms in the study locations, this respondent went on to state that students in bigger schools were less inclined to contribute to cleaning the washrooms, leaving the washrooms in a deplorable condition.

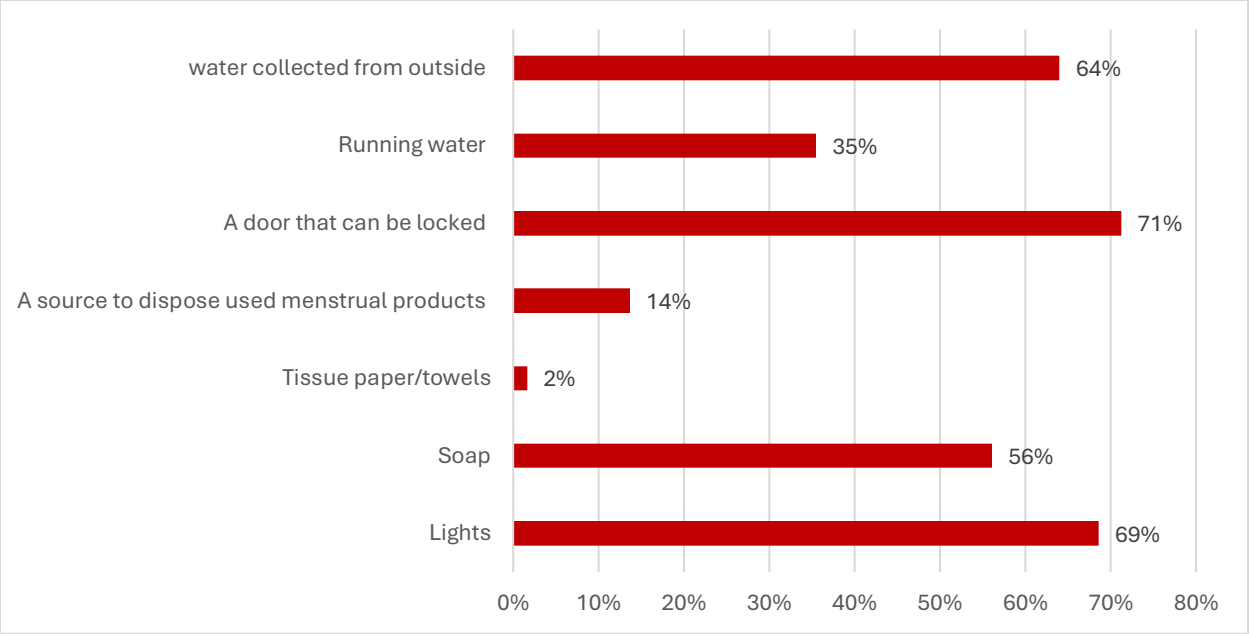
When considering the **facilities available in school washrooms,** 73% (36/49) of the respondents indicated that they had access to running water in their school washrooms, while 45% (22/49) stated that they used water collected from outside. The qualitative interviews revealed that water is supplied to the school intermittently, and if the supply ran out, they would need to fetch water from a stream close by. It is noted that this periodic loss of running water supply could influence a menstruating individual's decision to use the washroom unless deemed essential. With regards to other facilities in the school washrooms, 76% (37/49) of the respondents indicated that the washrooms had a lockable door, while 53% (26/49) of the respondents indicated that there were light bulbs/illumination; 61% (30/49) indicated that there was no soap available in the washroom.

For respondents who did use the washroom at school during menstruation, only 35% (17/49) of the respondents reported that the school had a facility to dispose of used menstrual hygiene products. This meant that majority of the students would have to carry the used product home if they needed to change when in school resulting in decisions to wear the sanitary napkins for longer than the recommended duration.

Similar to access to WASH facilities at schools, **access to WASH facilities at the respondents' home** was also explored through the survey. Accordingly, 49% of the respondents (206/417) indicated that they had their own toilets inside the house, while 43% (178/417) of the respondents indicated that they had their own toilets located outside the house. A total of 8% (33/417) of the respondents indicated that they did not have a bathroom of their own, 27 of them indicated that they used a neighbours bathroom, six respondents are using a communal bathroom.

With regard to **WASH facilities available at home/or at their residence**, 64% (267/417) of the respondents reported that they obtained water for use from water collected from outside, with only 36% (148/417) of the respondents stating that they had running water available in their washrooms. 71% (297/417) of the respondents reported that the washrooms they used had lockable doors, thus contributing to a sense of safety, particularly in instances when using washrooms outside the home or for those using neighbours' washrooms. In terms of illumination, 69% (286/417) of the respondents stated that light bulbs are available in their washrooms; this means that approximately 31% (131) of the respondents had to use a torch or candle for illumination if they needed to use the washroom at night. This limitation is further compounded for 30% (58/178) of the respondents whose bathrooms are outside the house and do not have lights, particularly as the dense foliage that characterises the estate sector, can leave individuals at risk of encountering wild animals or snakes when using these bathrooms at night. Among the survey respondents only 14% (57/417) indicated that they have a dedicated space to dispose of the used menstrual hygiene product in their bathroom at home. Detailed findings related to disposal of used menstrual hygiene products will be discussed in more details in the following section. However, notable disparities were observed between the WASH facilities in the estate and urban sectors. In the urban sample, over 90% of respondents reported that their school washrooms were equipped with pipe-borne water, lockable doors, and soap. In contrast, the estate sector reported significantly lower WASH facilities, underscoring the infrastructural inequalities between the two settings.

Figure 9: Facilities in washrooms at home



Among the surveyed respondents who were engaged in paid employment outside the home, only 35% (45/128) indicated that they had **access to a washroom when working**. For respondents working on the estate, an overwhelming 93% (74/80) indicated that they did not have access to washroom facilities. Even among the 6 respondents working in the factories, indoors, only 3 (50%) indicated that they had washroom facilities. This meant that if they needed to use the washroom facilities they would either have to go back to their homes, a neighbours' house nearby, or refrain from using the washrooms while working. This would mean that when menstruating, individuals working on the estate would have to resort to wearing a menstrual hygiene product for longer than recommended, putting them at increased risk of infections, rashes, and subjecting them to increased discomfort. Comparatively, majority of the respondents employed in government or private entities indicated that they had access to washroom facilities (84%; 37/44).

Survey respondents who had access to WASH facilities at their place of employment indicated positively to the facilities available, with 89% (40/45) indicating they had a lockable door, 87% (37/45) reporting having access to running water, and 76% (34/45) reporting they had adequate

illumination in the facilities. While access to basic amenities were positive, only 40% of the respondents indicated having a dedicated source to dispose of used menstrual hygiene products within the washroom at the workplace, indicating there is some room for improvement.

3.5.12 Disposal of used menstrual hygiene products

The survey reveals that when at home, the majority of respondents, 37% (154/417), **disposed the used menstrual hygiene products** by burning, followed by 19% (78/417) reporting that they bury the used product. An equal number of respondents (13%; 53/417) reported that they would dispose the used product in the garbage or flush it down the commode. The qualitative interviews provided some insights into choices for disposal made by the respondents; while disposal of the used product in the garbage would be the most convenient and popular method (with 93% of the respondents surveyed in Colombo adopting this (CEPA, 2025), the infrequency of garbage collection within the estates makes this one of the less popular choices for respondents. Therefore, burning or burying the used product are recorded as the most popular options. The choice to flush the used sanitary napkin is adopted by respondents who do not feel comfortable with burning the product or have no space to bury the used product; however, this can contribute towards long-term consequences in the form of causing the plumbing blocks. Furthermore, due to its non-degradable nature and the limited space, burying the used product is not considered a feasible option for many respondents as they also risk it being unearthed by domestic animals. An unusual practice reported by 8% (32/417) of the respondents entailed throwing the used menstrual hygiene product into the nearby river/stream due to lack of viable alternatives (as perceived by the them) however, this method of disposal is noted to have a negative impact in terms of potentially polluting a drinking water source.

Respondents currently attending school or an educational institution were also asked how they disposed their used menstrual hygiene product. Less than half of the respondents (44%;21/48) reported using a specific sanitary bin to dispose the menstrual hygiene product, while 21% (10/48) of the respondents stated that they would take the used product back home with them due to the lack of disposal facilities at school. An equal number of respondents (13%; 6/48) indicated that they either flush the used product down the commode or do not change until they

go back home. Another 3 respondents reported that they disposed it with other garbage and 2 respondents stated that the used sanitary napkins are burnt at school.

For respondents engaged in employment outside of the home and having a washroom at their workplace, 40% (18/45) indicated that they disposed of the used sanitary product in a specific sanitary bin. However, 18% (8/45) of the respondents indicated that they were compelled to take the used sanitary product back home with them as there was no dedicated space for disposal at their place of work. An equal number of respondents reported that they either flushed the used product down the commode or disposed of it in the garbage, representing 16% (7/45) of the responses each, while 9% (4/45) of the respondents indicated that they do not change their menstrual hygiene product when working. For respondents working in the fields as tea pluckers, the lack of WASH facilities means that they have a very limited opportunity to change or dispose of their menstrual hygiene product of choice.

The environmental impacts of the disposal choices recorded by respondents highlights the need to develop suitable alternatives that also take into consideration contextual elements requiring careful consideration and consultation with all relevant stakeholders, in an effort to ensure the needs of all are met.

While many of these practices recorded in the survey were not reflected during the qualitative interviews, participants did mention that burning or burying single-use sanitary napkins was the most common methods of menstrual hygiene product disposal. These practices were consistently reported by respondents belonging to both the older and younger age cohorts during the FGDs. For users of cloth menstrual hygiene products, respondents indicated that they would re-use the cloth for approximately two to three months before burning it with the garbage, much like the single-use sanitary napkins.

4 Conclusion and Recommendations

It is recognised that the existence and perpetuation of period poverty adversely impacts entire communities, establishing obstacles to education, health, and economic equity. It transcends mere inaccessibility to menstrual hygiene products, affecting education, health, and overall well-being while often resulting in the different menstrual practices, stigma, and discrimination attached to the lives of menstruating individuals. The findings from this study reiterate the complex interplay of factors that contribute to the sample population's experiences pertaining to menstruation.

Knowledge is recognized as playing a vital role in disseminating factual information and by extension influencing attitudes and informing practices associated with menstruation. The findings of this study revealed that more than half of the survey respondents (66%, 276/417) had **no prior knowledge about menstruation before menarche**. Although younger respondents showed higher levels of awareness than older respondents, there remains a need for improvement in providing young girls with adequate knowledge about menstruation before menarche. This lack of awareness can create an environment of misunderstanding and fear associated with menstruation. To this end, the survey respondents were of the overwhelming opinion (96%; 401/417) that girls should be **taught about menstruation at school before menarche.**

At present, the **primary source of information** for a majority of respondents regarding menstruation or menarche was from their mothers (67%; 280/417). Therefore, by extension it is safe to say that current menstrual practices are transferred through generational knowledge. This highlights the potential for the perpetuation of misinformation in the event that mothers themselves are not adequately informed. Therefore, when designing interventions aimed at knowledge dissemination, it is recommended that programs target mothers with young children as well, so that the channel of communication is not disruptive to existing practices.

Weaknesses in the existing **formal education** system are recognized to compound challenges associated with the transfer of knowledge to students. Despite having educational resources available, it is recognized that these are introduced later than is necessary to be able to make an

impact. Concerns were raised during the qualitative interviews regarding dissemination of information in mixed schools, with teachers themselves hesitant to teach the subject matter due to embarrassment or discomfort. Where supplementary secondary resources exist, their accessibility is questionable as they are housed via a digital platform and only available in the Sinhala language, to the exclusion of individuals without digital literacy or those conversant in the Tamil language.

Apart from knowledge sharing through the school curriculum, it is also important to consider the role of medical practitioners in raising awareness on menstruation, and reproductive health. The contribution of area mid-wives is commendable in providing community members the necessary support and assistance on their menstruation-related concerns based on their expertise. However, limitations were identified when additional screening or testing was necessitated and individuals were referred to the hospital; in such instances they were noted to express reluctance to attend due to feelings of embarrassment stemming from the predominance of male doctors perceived to lack sufficient awareness of reproductive issues, exacerbated by a **language barrier**, as most doctors were unable to communicate in the native tongue of the community.

The findings also provide insight into the respondents' level of comfort when discussing menstruation openly. Discrimination experienced during menstruation remains a concern. Although a majority of respondents (86%) reported not experiencing direct discrimination, this is largely attributed to their non-disclosure of menstruation except to their mothers when young or husbands after marriage. However, it was noted that many individuals practiced self-imposed isolation during menstruation by refraining from participating in religious or social activities as they considered themselves “unclean” during this period. In addition, practices such as refraining from washing their hair, avoiding eating fish, meat, or fried foods, avoiding lifting babies, avoiding touching plants reiterate the influence of socio-cultural norms and beliefs that perpetuate practices of exclusion and stigma during menstruation.

Dietary practices during menarche and subsequently during menstruation have been linked to nutritional concerns for menstruating individuals. For instance, the survey findings indicated that foods including meat, fish, eggs, fruits, and vegetables such as brinjal, papaya, and tomato are

some of the common foods that menstruators refuse to consume during menstruation. However, these foods are rich in nutrients that support physical and hormonal changes, especially during adolescence, and avoiding them during menstruation risks nutritional deficiencies critical for overall well-being.

The findings from this study highlight critical insights related to menstrual hygiene product usage patterns, awareness levels, and the financial difficulties encountered by respondents. Although single-use sanitary napkins were the predominant menstrual hygiene product used (86%) by respondents, there exists a considerable deficiency in information regarding alternate menstrual hygiene products, including menstrual cups, reusable sanitary napkins, and menstrual underwear. Awareness of the menstrual cup was notably low, with merely 6% of respondents recognizing it, despite prior efforts stated to have been undertaken to promote the product in proximate localities.

Furthermore, the survey findings reveal the influence of age, income, and economic constraints in the choice of menstrual hygiene product used. Individuals from lower-income households were more likely to utilize cloth as an economical substitute for disposable sanitary napkins. The study revealed a substantial rise in use of cloth as a consequence of the ongoing economic crisis, indicating that financial limitations influence individuals to pursue more economical, if maybe less hygienic alternatives.

The findings also indicated that respondents lacked adequate awareness regarding the recommended duration for menstrual hygiene product usage, with a significant percentage using them beyond the prescribed duration, potentially elevating the risk of infections. This underscores the necessity for enhanced education regarding menstrual health and hygiene habits, including improved access to adequate disposal and changing facilities. The difficulty in accessing affordable menstruation supplies, intensified by taxes on these essential goods, significantly increases the financial strain on menstruators, especially those from low-income households. The study indicates that the expense of menstruation products represents a significant percentage of household income, thus contributing to aggravating experiences of period poverty.

Access to WASH facilities is noted to contribute to an individual's menstrual experience. To this end, school students and women working on the estates were noted to avoid changing their menstrual hygiene product during the day due to the lack of adequate WASH facilities or means of disposing used products. With regards to access to WASH facilities in their homes, only 49% of the surveyed respondents reported having their own toilet inside the house, while 43% reported their toilets were located outside the house, and 8% of respondents indicating that they had to share their bathroom.

Based on the findings of this report, the following recommendations are suggested in an effort to promote and ensure dignified menstruation experiences among the study respondents residing in the estate communities in the Nuwara Eliya district:

1. **Comprehensive menstrual health education**: Implement age-appropriate, culturally sensitive menstrual health education programs in schools, targeting both girls and boys. These programs should aim to provide accurate information about menstruation, address misconceptions, and promote positive attitudes towards menstruation.
2. **Community awareness initiatives**: Conduct community-wide awareness campaigns to challenge stigma and discrimination associated with menstruation. These initiatives should involve community leaders, mothers, as well as men and boys in an effort to foster a supportive environment for menstruating individuals. However, it is observed that one-off community-based interventions have limited reach in organic distribution of knowledge given the sensitivity of the topic, reiterating the need for regular periodic engagement with community members.
3. **Accessible and affordable menstrual hygiene products**: Improve access to affordable and safe menstrual hygiene products by reducing taxes and promoting sustainable alternatives. Explore options for distributing free or subsidized menstrual hygiene products to low-income individuals allowing menstruators the opportunity to choose a menstrual hygiene product of their preference.
4. **Improvement of WASH facilities**: Upgrade WASH facilities in schools, workplaces, and public spaces to ensure they are equipped with running water, privacy, and safe disposal mechanisms for used menstrual hygiene products.

5. **Healthcare access and sensitivity**: While the services rendered by midwives in the areas is recognised and appreciated, healthcare providers - including male doctors - in the formal institutions should be provided training on menstrual health, and culturally sensitive communication. Given the sensitive nature of the subject matter, efforts must be undertaken to ensure availability of female healthcare providers, as well as ensuring that staff are conversant in the local language of the community in an effort to address the existing language barriers and to improve the doctor-patient relationship.
6. **Policy advocacy**: Advocate for policies that support menstrual health, including paid menstrual leave, and the provision of free or subsidized menstrual hygiene products to menstruators from low-income families.

By addressing these interconnected challenges, it is expected to be able to contribute towards creating a society where menstruation is managed with dignity, free from stigma, discrimination, and with limited barriers to access and support.

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Annex A: List of Interviews and Discussion Conducted and their Corresponding In-text Citations

	Type of Data Collection	Date of Interview/Discussion	In-Text Citation
1.	Focus Group Discussion with community women	25.11.2024	(FGD-W, 2024)
2.	Focus Group Discussion with community men	23.11.2024	(FGD-M, 2024)
3.	Focus Group Discussion with school going girls	25.11.2024	(FGD-G, 2024)
4.	Focus Group Discussion with school going boys	23.11.2024	(FGD-B, 2024)
5.	KII – Medical Professional (with Civil Society Affiliation)	01.07.2024	(KII-1, 2024)
6.	KII – Representative of Single-Use Menstrual Product Manufacturer	05.07.2024	(KII-2, 2024)
7.	KII – Representative of Reusable Menstrual Product Manufacturer	10.07.2024	(KII-3, 2024)
8.	KII – Development Organisation	15.07.2024	(KII-4, 2024)
9.	KII – Medical Professional (Project Partner)	25.07.2024	(KII-5, 2024)
10.	KII – Representative of Reusable Menstrual Product Manufacturer	31.07.2024	(KII-6, 2024)
11.	KII – Medical Professional Representing the State	07.08.2024	(KII-7, 2024)
12.	KII – Development Organisation	08.08.2024	(KII-8, 2024)

13.	KII - Representative of Reusable Menstrual Product Manufacturer	12.08.2024	(KII-9, 2024)
14.	KII – Medical Professional Representing the State	20.08.2024	(KII-10, 2024)
15.	KII – Development Organisation (Project Partner)	21.08.2024	(KII-11, 2024)
16.	KII – Medical Professional Representing the State	30.08.2024	(KII-12, 2024)
17.	KII – School teacher	21.11.2024	(KII-13, 2024)
18.	KII – Area mid-wife Chrystlers farm	22.11.2024	(KII-14, 2024)
19.	KII – Development Organisation (Project Partner)	25.11.2024	(KII-15, 2024)
20.	KII – School teacher	25.11.2024	(KII-16, 2024)
21.	KII – Area mid-wife Dickoya South	21.11.2024	(KII-17, 2024)
22.	KII – Development Organisation (Project Partner - Estate)	26.11.2024	(KII-18, 2024)
23.	KII – Development Organisation (Project Partner)	21.11.2024	(KII-19, 2024)
24.	KII – Representative of civil society organisation	27.11.2024	(KII-20, 2024)

Annex B: Semi-Structured Interview Guides for Data Collection

Semi-structured Interview guide for the Focus Group Discussion with school-going teenage girls

Begin with a round of introductions where the research team introduces themselves, followed by each participant providing a brief introduction of themselves including the following information:

Age	
DS Division	
GN Division	
Marital status	
Highest level of education	
Employment status	

Introductory questions:

1. How many members do you have in your family?

Including yourself, how many in your household are menstruating individuals?

Menstruation experience(s)

After the introduction, to kick off the discussion, the participants will be asked to recall their first period (menarche) experience, and the following questions will be asked:

1. Where were you when you got your first period (menarche)?
2. Who did you tell?
3. How old were you when you first got your period?
4. Did you have any information about menstruating at that point?
    a. Were you able to understand that you had started your menstruation?
    b. Did you know about menstruation before your first period?
        i. If yes, When and where you got that information and who gave you that information?
5. How and where did you know/learn about menstruation at first?
6. Did you know about menstruation before your first period?
    a. If yes,

7. Did you have to follow any traditional/cultural rituals when you got your first period?
    a. If yes, please elaborate
8. What were your feelings/reactions when you got to know about menstruation?

Perception, Knowledge, and Beliefs

9. Do you know the approximate duration of the menstrual cycle?
10. Do you know the approximate/average duration of the menstrual bleed?
11. Do you and your family members talk openly about menstruation?
    a. If not, why?
    b. If yes, how is it received amongst your family members?
    c. Do you speak about it among male household members?
12. Do you go to a mixed school or an all-girls school?
13. Do you go to school during menstruation?
    a. If not, what prevents you from going to school?
14. Do you engage in sports or extracurricular (dancing, debate club, swimming, netball, basketball, etc.) activities while menstruating?
15. Have you consulted your school nurse or teacher when you had a concern regarding your menstruation?
    a. Explain your answer
    b. Are there facilities available to relieve your menstrual pain at school?
16. If you were isolated as a cultural practice during menarche, how did your peers/friends react to it?
    a. Did this practice take place against your wishes?
17. Were you allowed to take part in religious and cultural activities during and post-menarche (up to about three months)?
18. Did you have any dietary restrictions placed on you during menarche?
19. Did you learn about menstruation at school?
    a. Was it part of your curriculum?
    b. Was it an informal lesson by a teacher?
    c. Do you think what you were taught was sufficient to deal with menstruation afterwards?
    d. When/in which grade did this lesson take place?
20. When you menstruate:
    a. Do you refrain from cooking for family members?
    b. Do you refrain from eating certain foods?
    c. Do you refrain from taking part in religious and cultural events?
    d. Do you refrain from entering places of religious worship?
    e. Do you stay indoors?
    f. Do you refrain from being physically active?
21. Are there any practices you follow during your period?
    a. Are there any practices you used to follow that you no longer do?

b. Do you know any reason(s) behind the above-mentioned practices or changes in practices?

WASH Facilities

22. Do you have access to adequate WASH facilities in your school/home to wear/change your menstrual products?
    a. Clean bathrooms
    b. Running water
    c. Disposal facilities
    d. soap
    e. tissue paper or towel
    f. A door that can be locked
23. Are you allowed to excuse yourself during a lesson should you need to wear menstrual products/use WASH facilities due to menstruation?
24. How do you dispose your used menstrual products at school/home?
25. What would you do if you didn't have any menstrual products with you during menstruation at school?
    a. Can you get menstrual products from the school if so?

Stigma and Discrimination, and Practices

26. Do your peers/friends (especially boys) make fun of you/bully you during menstruation at school?
27. Do you feel embarrassed to take menstrual products to school?
28. Do you feel discomfort or pain during your menstruation, and does it affect your studies?
29. Are you allowed to step outside the house/play/meet with your friends during menstruation?
30. If you use cloth /reusable menstrual products:
    a. Who recommended it to you?
    b. How did you obtain it?
    c. Do you wash it by yourself?
    d. If not, who does it for you?
    e. Where do you dry it?
    f. How long do you use the cloth for before replacement?
31. Do you always carry an extra menstrual product or underwear with you when you go to school during menstruation?
32. How do teachers respond to your menstrual pain/discomfort, the need to use WASH facilities, staining your uniforms?

33. Has anyone ever told/made you feel like you're impure/unclean during menstruation or told you that your period blood is dirty?
    a. If yes, who?

Semi-structured Interview guide for the Focus Group Discussion with School-going teenage boys

Round of introductions for each participant the including name, age DSD, GN division, marital status and employment status, number of members in the family and household composition

Age	
DS Division	
GN Division	
Marital status	
Highest level of education	
Employment status	

Perceptions and knowledge on menstruation

1. Have you ever heard of the word "Menstruation"?
2. If yes, from where did you hear it? (From friends, school, internet)
3. Do you think it is a normal process?
4. Do you feel embarrassed to talk about it?
5. How do you refer to menstruation during conversations?
    a. Do you have any specific words that you used to refer to menstruation or menstruating individuals?

6. Do you think boys should not talk about such things?
7. Do you think that it is important for boys to get knowledge on menstruation? If yes, why?
    a. Do you know the average duration of the menstrual cycle?
    b. Do you know the average duration of the menstrual bleed?

8. When did you first get to know about menstruation? By whom? Where? Or is this the first time you are speaking about menstruation?

9. Are there any members in your household who menstruate?
    a. Who are they?

b. Do you usually know when a member of your household is menstruating?
c. Do you usually know when a friend is on her period?

10. Do you feel girls try to hide the fact that they are menstruating?
11. Do you know if your female school mates or friends skip school when they are menstruating?
    a. Do you know why?
12. Have you ever made fun out of your female friends who are menstruating?
13. Have you ever made fun out of your female friend who coming to school after her first period?

14. Do you think menstruating girls/women are dirty, impure?
15. Do you think when someone menstruates:
    a. They should refrain from cooking for family members.
    b. They should refrain from taking part in religious and cultural events.
    c. They should refrain from entering places of religious worship.
    d. They should stay indoors.
    e. They should refrain from being physically active.
    f. They should not go to school.
    g. They should not wash their hair?

Menstrual Pain

16. Do you know of menstruating individuals who feel pain, discomfort during their menstruation?
17. What is your perception of menstrual pain and discomfort? Do you think it is as severe as it is shown to be?
18. Do any of the menstruating individuals in your house experience pain/discomfort during their period?
19. Are you aware of the methods that they use to reduce their pain? (home remedies such as: massage using hot water, light exercise or use of pain killers, etc.)
20. In what way or how do you help them to reduce their pain/discomfort?

Menstrual products and WASH facilities

Show a range of menstrual products or pictures of products to the participants and ask if they can identify them?

21. Have you ever seen the menstrual products shown today before?
22. Where have you seen them? *Probe for in the home or store or television advertisements*

23. Do you know what products/items are most commonly used in your home?
24. Do you know if menstrual products are available in the school?
25. Have you ever had to, or do you purchase menstrual products for your family members, household members?
    a. If yes, did you do it willingly?
    b. If not, explain
    c. Are you willing to purchase it for anyone else (not a family member)? If not, why?
26. Does your school have separate washrooms for girls?
    a. Do you know if it has water and light?
    b. Do you think it has adequate privacy for menstruating individual?
27. At home, do you have a private washroom or is it a common washroom shared with other households?

Awareness

28. Do you think, it is important to boys and men to be aware of menstruation?
    a. If no, can you please elaborate why you think so/
    b. If yes, what kind of knowledge should they have?
29. Do you think this information should be included in the school curriculum for young boys and girls?

How can you learn about menstruation? What platforms are best suited to share information about menstruation?

Semi-structured Interview guide for the Focus Group Discussions with men from the community

Round of introductions for each participant including name, age DSD, GN division, marital status and employment status, number of members in the family and household composition

Age	
DS Division	
GN Division	
Marital status	
Highest level of Education	
Employment status	

Perceptions on menstruation and knowledge

1. How many menstruating individuals are there in your household?

2. Do you feel embarrassed to talk about menstruation as boys/men? Do you think it is something that males should not talk about?
3. How do you refer to menstruation during conversations?
    a. Do you have any specific words that you used to refer to menstruation or menstruating individuals?
4. When did you first get to know about menstruation? By whom? Where?
5. Do you know when your mother/wife/sisters/daughters/friends are on their period?
    a. How do you know when they are on their period?
6. Do you know the average duration of the menstrual cycle?
7. Do you know the average duration of the period cycle/menstrual bleed?
8. If you are married, does your wife inform you when she is on her period? Or if you are in a relationship, does your girlfriend/partner inform you when she is on her period?
9. If you have children who menstruate at home, do they tell you if they are on their period?

Menstrual Pain

1. Do you think menstruating is a type of illness?
2. Do you know of menstruating individuals who feel pain and discomfort during their menstruation?
3. What is your perception of menstrual pain and discomfort? Do you think it is as severe as it is shown to be?
4. Do any of the menstruating individuals in your house experience pain/discomfort during their period?
5. Are you aware of the methods that they use to reduce their pain? (home remedies, massage using hot water, pain killers, etc.)
6. In what way or how do you help them to reduce their pain/discomfort?
    a. Adult menstruating family members
    b. children
7. Have you ever been to a medical professional with a member of your family regarding their period pain?
8. Have you ever encouraged anyone suffering from menstrual pain to seek medical help?
9. Have you noticed any mood changes in the menstruating family members/friends during menstruation? Are they being more emotional/ angry during the period of menstruation?
    a. How do you react to these changes in mood? What do you think causes such changes in mood?
10. Do they engage in household work, washing, cooking, cleaning with the pain? Have you ever helped them with household work during the menstruation?
    a. Do you help with their household work in general?
11. Have you noticed any of your menstruating colleagues being reluctant to work during menstruation? Why do you think that is?
12. Are you aware of any services available within your workplace to help the girls/women to reduce their pain/discomfort? If not, what initiatives do you think would be good to have and how it can be helpful?
13. Do you think women should be allowed to have flexible work schedules during their menstruation period?
14. Do you think women should be allowed menstrual leave (either paid or unpaid)?

Access to menstrual products and WASH facilities

Show a range of menstrual products or pictures of products to the participants and ask if they can identify them?

1. Do any of your family members use these products (shown above) when menstruating?
2. Are there any products used that were not shown?

3. Apart from those products, have you heard of any other available products? How do you get to know about these things (family members, the Internet, TV commercials, colleagues, friends, etc.)
    a. Have you ever had to, or do you purchase menstrual products for your family members, household members?
        i. If yes, did you do it willingly?
        ii. If not, explain
    b. Are you willing to purchase it for anyone else (not a family member)? If not, why?
4. Do you think that single-use, disposable menstrual products are expensive?
    a. Have you noticed a change in these prices?
    b. Do you know the average price(s) of sanitary products available in the market?
5. If disposable menstrual products are too expensive, are you aware of alternatives that can be used?
6. Do you have a private bathroom in your household?
    a. Does it have running water, light, tissue paper/towel?
    b. Do you think it has adequate privacy for a person who is menstruating?
    c. Do you have to share a bathroom with a menstruator at home/workplace?
    d. How does it make you feel to share a bathroom with a menstruator?
7. Are period products available at your workplace?
8. Do your wife/girlfriend/family members have a private bathroom at their school/workplace? with running water/light/toilet paper?
9. Is there a bin in the bathroom to dispose of their menstrual product?

Menstrual Discrimination and Stigma

1. Do you think menstruating women are impure and/or period blood is dirty?
2. Do you think it is okay for menstruating women to do the following when on their period? If not, why?
    a. Cooking for family members
    b. Having meals with family members
    c. Taking part in religious and cultural activities/festivities
    d. Go outside the house
    e. Be physically active
    f. Go to places of religious worship
    g. Wash their hair
3. Do you think girls who go through menarche need to be isolated?
    a. Elaborate your answer
4. Do you think girls who go through menarche bring ill-fortune to men?
    a. Elaborate your answer

Awareness

1. Do you think, it is important to men to be aware of menstruation?
    a. If no, can you please elaborate why you think so/
    b. If yes, what kind of knowledge should they have?
2. Do you think this information should be included in the school curriculum for young boys and girls?
3. How can you learn about menstruation? What platforms are best suited to share information about menstruation?

Semi-structured Interview guide for the Focus Group Discussion with Women

Round of introductions for each participant including name and other demographic characteristics:

Age	
DS Division	
GN Division	
Marital status	
Highest level of education	
Employment status	

Introductory questions

1. How many members do you have in your family?
2. How many menstruating individuals do you have in your family?

After the introduction, to kick off the discussion, the participants will be asked to recall their first period experience, and the following questions will be asked

1. Where were you when you got your first period (menarche)?
2. Who did you tell?
3. How old were you when you first got your period?
4. Did you have any information about menstruating at that point?
    a. If yes, When and where did you get that information and who gave you that information?
    b. Were you able to understand that you had started your menstruation?
5. How and where did you know/learn about menstruation at first?

6. What were your feelings/reactions when you got to know about menstruation?
7. Did you have to follow any traditional/cultural rituals when you got your first period?
    a. can you please elaborate?

8. Do you and your family/household members talk openly about menstruation?
    a. If not, why?
    b. If yes, how is it received amongst your family members?
    c. Do you speak about it among male household members?

Perceptions on menstruation and knowledge

1. Do you feel embarrassed to talk about menstruation in public with your female friends/family members?
2. Do you feel embarrassed to talk about menstruation in public with your male friends/family members?
3. How do you refer to it during conversations? Do you have any specific words that you use for menstruation?
4. How do your male friends/male family members perceive menstruation? What kind of attitude do they have on menstruation?
5. What is the normal range for a menstrual cycle? do you know every how many days it reoccurs? Do you know what is considered a normal duration to bleed per period?
6. Do you experience regular periods? If it is not regular, have you ever consulted a doctor?
7. How long does your period last? How many days do you experience a heavy flow?
8. Do you think when you menstruate,
    a. You should refrain from cooking for family members?
    b. You should refrain from taking part in religious and cultural events?
    c. You should refrain from entering places of religious worship?
    d. You should stay indoors?
    e. You should refrain from being physically active?
    f. You should wash your hair?
9. Are there any practices you follow during your period?
    a. Are there any practices you used to follow that you no longer do?
10. Do you know any reason(s) behind the above-mentioned practices?

Menstrual Pain

1. During your menstruation, do you feel any pain (Severe pain or mild pain)? Or discomfort? Does the pain last throughout the entire period?
2. Have you ever consulted a medical professional regarding your period pain?
3. What are the methods you use to reduce your menstrual pain? (home remedies, massage using hot water, hot water bottle, exercise, pain killers, etc.)
4. Do you experience any mood changes during menstruation?
5. Have you missed school, work or any important event due to menstrual pain?
6. Do other family members help you when you are in pain to reduce the pain?
7. Do you still have to do the household work, washing, cooking, cleaning when you are experience period pain/discomfort.
8. Do any other members in the family help you with household tasks during menstruation (Husband, brothers, kids, etc)?
9. Are your family members aware when you are menstruating? Do you inform them when you get period?

10. Do you have someone who you would feel comfortable asking for support (advice, resources, emotional support) for your period if needed? (Female members of the family, male members of the family, friends, teachers, medical professionals)

If engaged in paid employment:

11. Does your workplace allow you to take paid leave for menstrual pain and/or work flexible hours/work from home?
12. Are there any services available within your workplace to help you to reduce your pain/discomfort? If not, do you think it would be good to have such initiatives and how it can be helpful?

Access to Menstrual Products and WASH Facilities

In this section, the pictures, sample of the currently available menstrual products will be shown to the participants, and they will be asked to identify those menstrual products.

1. What are the menstrual products you are using now? How long have you been using that product? Are you using the same product for home and when going outside/work.
    a. In case you use different products at home and outside, what is the reason for that?

2. Is the same product used by all the menstruating individuals in your family? If you have menstruating daughters, sisters, do they also use the same product? If not, can you elaborate on why?

3. What are other types of menstrual products that you have heard of?

4. Do you think disposable/single-use menstrual products in general are expensive? Are you aware of the tax imposed on menstrual products?

5. (for those who use cloth) If the disposable/single use sanitary napkin was more affordable or available for no cost, would you consider using it as an alternative?

6. Do you think the money spent on menstrual products would be better spent on household groceries?
7. If disposable menstrual products are too expensive, are you aware of alternatives that can be used?

8. Have you ever used reusable sustainable menstrual materials and/or products? How do you get to know about the reusable menstrual materials and what is your experience of using it?

9. Do you have any barriers in accessing sustainable/eco-friendly menstrual products? (financial, myths, anxieties)

10. If you are using cloths instead of disposable pads, how do you prepare those cloths? (where do you find those cloths (materials, new or made from used cloths)

11. What is your perception regarding the price of the menstrual products? Have you ever changed your product due to the high cost?

12. Where did you buy your menstrual product or how do you prepare it?

13. How often do you change the menstrual product? Do you know how often you should change the menstrual pads/cloths?

14. Do you use the menstrual products longer than the recommended time period? If yes what makes you do so?

WASH

1. Does your home have adequate WASH facilities (running water, soap, light) to change the pads/cloths whenever you want?
2. Does your office have adequate WASH facilities (running water, soap, light) to change the pads/cloths whenever you want?

3. How and where do you dispose or change your menstrual products at home, work?
4. If you are using cloth or reusable pads, where do you clean it and how do you clean it (type of water (hot or normal), place of drying)
5. Is there a specific place for storing your menstrual product? Do you prefer to keep it hidden form the members of the family (male, female)
6. Do you to carry extra pads, underwear, cloth with you when you are going to work or out?
7. In case you did not have any product with you when you are at school or work, how do you manage such situation? Is there a place where you can get the products at the school or workplace? (free of charge or not)

Menstrual Discrimination and Stigma

1. Have you ever experienced discrimination or been made uncomfortable due to menstruation? (where- school, workplace, home, tuition classes)
    a. If so, who is most likely to make you feel discriminated?
    b. In which situations/places are you most likely to feel discriminated when menstruating?
2. Do you think you are dirty or impure during menstruation? Has anyone told you that you are dirty during that period?
    a. If yes, who?
3. Do you maintain any specific food habits during menstruation?
    a. Are there any specific food items that you avoid during menstruation (oily food, fish, meat)
    b. Can you explain why you avoid said item?
4. Do you have a head-bath during your period?
    a. If no, why?
    b. If yes, why?
5. Do you feel afraid of leaking menstrual blood on your clothes?
6. Who purchases the product? If you have male family members in the house, are they willing to purchase menstrual products for you?
7. When purchasing menstrual products, do you try to cover the menstrual product (wrapping it in paper) when you are bringing it home?
8. Do you feel embarrassing to ask for a menstrual product from a male shop keeper?
9. If you are wearing cloth pads, do you avoid sun drying your cloth pads as you are afraid that others would see them?

Awareness

1. Have you ever consulted a medical professional regarding menstruation or deciding your menstrual product?

2. Have your ever participated in an awareness programme on menstrual education? Who conducted it? What sort of knowledge did you gain through it?

3. Do you think you have enough knowledge about the menstrual health? If not, what sort of education would you like to gain?

Semi-structured Key Informant Interview questionnaire guide for schoolteachers/administrators

General

1. Please tell us your name, background, occupation, the scope and mandate of your organisation/institute, etc.
2. Do you think menstruation is something that can be talked about in public or with others?
3. Do you think menstruation is an area that needs to be researched on?
4. How do you understand the phrase/concept of period poverty?
    a. Have you heard this phrase before?
5. What do you see as the factors contributing to period poverty in Sri Lanka?
    a. Probe for cost of menstrual products, type of collection method, stigma associated with menstruation.
6. What (in your understanding) is the most common menstrual hygiene method for menstruating individuals in Sri Lanka?
    a. Can you tell us why you think this may be the case?
7. In your understanding of menstruation,
    a. Who do you think menstruates?
    b. At what age do they usually start menstruation?
    c. Do you know the average age for menopause?
    d. Characteristics of menstruation?
        i. How long is an average menstrual cycle? i.e. how many days between periods
        ii. How long on an average does one bleed during their period?
8. Do you think girl children should be isolated during menarche?
    a. Reasons for your answer?

School teachers

1. Have you conducted any awareness programmes for students on menstrual health, hygiene and practices?
    a. If yes, what age are the students when these programmes are conducted?
    b. Are they conducted for only female students or are male students included as well?
    c. Do these programmes also speak about stigma/discrimination related to menstruation?
2. Have you received any trainings to conduct education on menstruation? [
    a. Do you remember who conducted this training?
    b. Do you recall when this training was conducted?

3. Are health care professionals included in design or implementation of the awareness programmes?
4. Is there any association with healthcare professionals for menstruating students in the absence of awareness programmes?
5. Do students usually miss school when they have their period?
    a. What are the most common reasons for missing school when students are on their period?
6. Is there a correlation between students menstruating and their participation in sports or extracurricular activities?
7. Is there a distinction in missing school based on the student's ethnicity?
8. Does the school have bathrooms?
    a. Is there water flow in the bathrooms?
    b. Is there adequate privacy in the bathrooms for when students are menstruating?
    c. Are there disposal mechanisms for used sanitary napkins/pads?
9. Does the school provide free or subsidized disposable sanitary napkins/pads?

Semi-structured Key Informant Interview questionnaire guide for Representatives of commercial and re-usable menstrual product producers

General

1. Please tell us your name, background, occupation, the scope and mandate of your organisation/institute, etc.
2. Do you think menstruation is something that can be talked about in public or with others?
3. Do you think menstruation is an area that needs to be researched on?
4. How do you understand the phrase/concept of period poverty?
    a. Have you heard this phrase before?
5. What do you see as the factors contributing to period poverty in Sri Lanka?
    a. Probe for cost of menstrual products, type of collection method, stigma associated with menstruation.
6. What (in your understanding) is the most common menstrual hygiene method for menstruating individuals in Sri Lanka?
    a. Can you tell us why you think this may be the case?
7. In your understanding of menstruation,
    a. Who do you think menstruates?
    b. At what age do they usually start menstruation?
    c. Do you know the average age for menopause?
    d. Characteristics of menstruation?
        i. How long is an average menstrual cycle? i.e. how many days between periods
        ii. How long on an average does one bleed during their period?
8. Do you think girl children should be isolated during menarche?
    a. Reasons for your answer?

More specific questions

1. What is the most common product used during menstruation in Sri Lanka?
2. Is there a distinction based on:
    a. Geographical location (urban/rural/estate/ districts/provinces)
    b. Age
    c. Ethnicity
3. What are the contributing factors for the popularity of the above-mentioned products?
4. What are some of the common misconceptions related to menstruation in Sri Lanka?

5. Does your organisation engage in any activities to address misconceptions related to menstruation?
    a. If yes, can you elaborate on the programmes/interventions?
    b. If no, is there a reason for this?
6. To what extent have men and boys been incorporated in these efforts (of increasing awareness)?
    a. Do you think awareness programmes should target men and boys?
7. What are your thoughts on making single-use sanitary napkins more affordable – particularly for school going individuals?
    a. What are the perceived barriers to this?
8. How has the increase in VAT affected the sales or accessibility of disposable/single use pads?
9. Has there been an observed increase in the transition to re-usable eco-friendly products: reusable pads, menstrual cup, menstrual disc in recent years?
    a. Is there a reason for this?

Semi-structured Key Informant Interview questionnaire guide

For healthcare professionals [area midwives and health professionals

General

1. Please tell us your name, background, occupation, the scope and mandate of your organisation/institute, etc.
2. Do you think menstruation is something that can be talked about in public or with others?
3. Do you think menstruation is an area that needs to be researched on?
4. How do you understand the phrase/concept of period poverty?
    a. Have you heard this phrase before?
5. What do you see as the factors contributing to period poverty in Sri Lanka?
    a. Probe for cost of menstrual products, type of collection method, stigma associated with menstruation.
6. What (in your understanding) is the most common menstrual hygiene method for menstruating individuals in Sri Lanka?
    a. Can you tell us why you think this may be the case?
7. In your understanding of menstruation,
    a. Who do you think menstruates?
    b. At what age do they usually start menstruation?
    c. Do you know the average age for menopause?
    d. Characteristics of menstruation?
        i. How long is an average menstrual cycle? i.e. how many days between periods
        ii. How long on an average does one bleed during their period?
8. Do you think girl children should be isolated during menarche?
    a. Reasons for your answer?

Healthcare professionals

1. At what age (on average) do individuals have menarche (first menstrual bleeding)?
2. In what instances do menstruating individuals consult with health care professionals?
    a. Is there a difference in reasons for younger individuals vis-a-vis older individuals?
3. Is there any systematic awareness programme that takes place related to menstruation as part of the healthcare system?

    a. If yes, does the programme target cisgender (male and female) and trans/queer individuals?
    b. Where do these programmes take place?
    c. What age group is targeted as part of these programmes?
4. What is your opinion about level of discussion/openness about menstruation among family and in the community? *Probe for menstrual pain, customs, practices, norms*
    a. How and should there be a change?
    b. To what extent are men and boys aware of menstruation
5. What are some of the common stigmas/negative attitudes associated with menstruation?
6. Are there any restrictions on activities menstruating individuals should adhere to when on their period?
7. Are there any restrictions on foods menstruating individuals should adhere to when on their period?
8. What is the most common menstrual hygiene method?
    a. Can you tell us the possible reason for this? *Probe for cost, awareness, stigma*
9. Has there been a change in use of menstrual products and/or collection methods since the pandemic and/or economic crisis?
    a. Can you elaborate on possible reasons for this?
10. What are some of the issues that occur as a result of incorrect use of menstrual collection methods?

Semi-structured Key Informant Interview questionnaire guide

For Representatives from organisations working to improve awareness of safe menstrual hygiene and practices

General

1. Please tell us your name, background, occupation, the scope and mandate of your organisation/institute, etc.
2. Do you think menstruation is something that can be talked about in public or with others?
3. Do you think menstruation is an area that needs to be researched on?
4. How do you understand the phrase/concept of period poverty?
    a. Have you heard this phrase before?
5. What do you see as the factors contributing to period poverty in Sri Lanka?
    a. Probe for cost of menstrual products, type of collection method, stigma associated with menstruation.
6. What (in your understanding) is the most common menstrual hygiene method for menstruating individuals in Sri Lanka?
    a. Can you tell us why you think this may be the case?
7. In your understanding of menstruation,
    a. Who do you think menstruates?
    b. At what age do they usually start menstruation?
    c. Do you know the average age for menopause?
    d. Characteristics of menstruation?
        i. How long is an average menstrual cycle? i.e. how many days between periods
        ii. How long on an average does one bleed during their period?
8. Do you think girl children should be isolated during menarche?
    a. Reasons for your answer?

Specific questions:

1. Please provide a brief introduction to the organisation and its mandate in relation to Menstrual Practices and Policies including Ending Menstrual Stigma, Discrimination, and Access to Menstrual Products
2. What made you work in this specific area?
3. What sort of barriers have you been facing in making meaningful changes in creating better awareness on menstrual hygiene and practices?
    a. Probe for:

        i. Sociocultural barriers
        ii. Lack of bodily autonomy/agency of target groups
        iii. Lack/absence of access to menstrual products
        iv. Lack/absence of access to WASH facilities
4. Do you receive adequate support from the State to carry out these tasks?
5. What are some of the common misconceptions related to menstruation?
    a. Menstruating individuals being restricted from engaging in social/cultural events
    b. Menstruating individuals considered unclean or impure
    c. Types of foods they should and/or should not eat?
    d. Anything else?

6. How prevalent do you think period poverty is in Sri Lanka?
7. What is the most common product used during menstruation in Sri Lanka?
8. Is there a distinction based on:
    a. Geographical location (urban/rural/estate/ districts/provinces)
    b. Age
    c. Ethnicity
9. What are the contributing factors for the popularity of the above-mentioned products?
10. Do you think menstrual products are easily accessible in Sri Lanka? Is there an equitable distribution of such products throughout the country?
11. Do you think the Sri Lankan education system is conducive to create awareness on menstrual hygiene and practices?
    a. Please explain your answer

12. Do you think the Sri Lankan healthcare system provides adequate services for those who suffer from menstruation-related health conditions (endometriosis, PCOS, etc.)?
13. How do you ensure factual, scientific, and medical accuracy in the work you do?