



Munich Personal RePEc Archive

Driving diversity, equity and inclusivity in workplaces and education via menstrual health management

Narang, Tanya

TSRS, Gurugram, India

2 September 2022

Online at <https://mpra.ub.uni-muenchen.de/114880/>
MPRA Paper No. 114880, posted 12 Oct 2022 04:54 UTC

Driving Diversity, Equity & Inclusivity in Workplaces & Education via Menstrual Health Management

Trends, Insights & Implications from Indian Menstrual Hygiene Management Survey 2022

Tanya Narang

5 Oct, 2022

Economics student

Institution: TSRS, Mousari Avenue Phase III, DLF City, Gurugram, India

Abstract

Menstrual Hygiene and Health (MHH) is critical for the well-being, prosperity and empowerment of young girls, women and menstruators. Not having access to menstrual products, access to water, safety, privacy, toilets and disposal options to manage menstruation can erode psychological and physical well-being of menstruators and leave them vulnerable and is termed as period poverty. It leads to menstruators not being able to step out, attend schools, colleges or commute to workplaces. To understand the magnitude of how big this problem is, a primary and secondary research was conducted to understand menstrual health management practices across India, challenges and barriers faced by menstruators, stigmas associated, and restrictions placed and finally benefits gained by menstruators by using period products. Comparison across cities, towns and villages yielded important insights about where effort and resources need to be deployed, e.g., shame factor was 2.5 times higher in villages vs cities, 42.3% of girls miss schools, colleges and workplaces due to lack of products and 1 in 5 (20.9%) have stopped going to schools after periods started, which translates to 23.1 Mn girls. With nearly 400 Mn menstruators in India, 296 Mn miss education and work for varying number of days due to period poverty. That's a lot of education and workdays lost and hence leading to social, human and economic capital loss. The Menstrual Health costs are unaffordable for a large percentage of population due to recurring costs of disposable period products. This calls for an urgent focus to drive distribution and encourage adoption of reusable alternatives that can effectively address period poverty.

Removing barriers like period poverty helps menstruators attend educational institutions & workplaces, which in turn strengthens their confidence and life achievement skills. By giving girls & women opportunities to flourish, we are not only building a diverse, inclusive & equitable society leading to socio-economic gains but also creating an environment that acts as a strategic multiplier in the long term.

Keywords: Diversity, Inclusion and Equity, Workplaces, Educational institutions, Menstrual Health Management, Period poverty, Menstrual survey, Gender equity, Healthcare, Menstrual Hygiene, Girl's Education and Impact on Society

1. Introduction

Background: About 1.8 billion people globally experience menstruation every month. In India, there are about 400 Mn menstruators. On any given day, more than 300 million women worldwide are menstruating, but an estimated 500 million lack access to menstrual products and adequate facilities for menstrual hygiene management (MHM). And millions don't have access to toilets at home, schools, offices to have privacy to manage periods. To safely manage their menstruation, menstruators(girls, women & others) require access to water, sanitation and hygiene (WASH) facilities, affordable & appropriate menstrual hygiene materials, information on good practices, and a favourable environment where they can manage their periods health without taboos or stigma.

Hypothesis & Problem Statement: Relevant five hypothesis were tested in research:

- H1: Girls and women have adequate access to period products for managing menstrual health
- H2: There is enough awareness and menstrual hygiene is well understood by menstruators
- H3: Having access to menstrual health products is enough to get menstruators to education & workplaces and there are no other barriers
- H4: Indian families are progressive, understand menstrual health and they don't associate any taboos or restrictions with menstrual hygiene practices
- H5: Menstruators have access to privacy, water and sanitation for managing periods at home & outside

Objective of the Study: To understand the magnitude of how big the problem of period poverty is, a primary and secondary research was conducted to understand how menstrual health management is practiced across various parts of India, challenges and opportunities, barriers to access and stigmas associated and finally benefits gained by menstruators by using period products. It then measures the quantum of the problem by estimating the national impact in terms of days of education & work missed and how many girls and women suffer from period poverty. The study then summarizes various initiatives & best practices of different stakeholders and proposes what needs to be done to address period poverty that prevents menstruators from attending schools, colleges & workplaces and results in gender inequity.

Research Methodology: Primary research was done(sample size 468 menstruators across India, where women & girls were interviewed in health centres via paper inputs and in other cities, feedback was taken digitally from other menstruators) to understand background of menstruators, awareness, access to period products, menstrual health products and practices followed, channels of purchase & buyers, access to WASH(privacy, toilets, water), awareness & attitudes to safe disposal, stigma associated, availability of period products in schools and at workplaces, missed days in schools or workplace due to periods & reasons thereof, spend amounts by products, restrictions placed due to periods stigma and emotional and rational benefits of using menstrual hygiene products. Secondary research and analysis was done basis various global UN agencies, World Bank studies, research articles, websites, policy documents, infographics, news, and magazine articles to gain a better understanding of the menstrual hygiene management topic.

Results & Data Analysis Findings: There are multiple key findings and hypothesis results:

- **Hypothesis1: Girls and women don't have adequate access to period products**
 - **Nearly half use home products:** 48.3% don't spend and use home products, which are insufficient for managing periods outside homes. 42.9% said period products were not available, almost entirely in villages

- **Access is a luxury in schools & at workplaces** as 71.4% didn't have access to period products in case they needed them for 8-10 hours they were outside their homes. 70.5% menstruators said that they have missed schools & workdays due to periods
- **One in 5 girls were school dropouts:** 70.5% menstruators said that they have missed schools & workdays due to periods, and it was 49.5% in cities vs 82.3% in villages.
- **Reusable menstrual hygiene products can be effective in addressing period poverty:** Reusable menstrual cups & pads cost only about 9 to 19% vs. traditional disposable sanitary pads during their lifetime and hence can help reduce period poverty
- **Hypothesis 2: Menstrual health topic isn't well understood**
 - **Awareness or education doesn't equal to preparedness** 89% of menstruators were aware about periods but only 37.4% were prepared to handle them
 - **Not all facets of managing menstrual health are well understood:** 72.4% are aware about changing pads or cloth frequently, but only 1 in 5 were aware about eating healthy food and seeking medical help, if unwell
 - **Ignorance continues around Menstrual Health Management:** 72.9% said they have fallen ill due to periods-related issues and 60.9% sought no medical help at all
- **Hypothesis 3: Access to menstrual health products is not enough to get menstruators to education & workplaces, as there are multiple other barriers**
 - **Multiple reasons exist for missing schools:** Key reasons for missing schools are don't have access to menstrual products(42.3%), health-related issues(33.3%), lack of toilets & privacy(22.4%). Only 26.1% didn't miss schools, with rest missing them for varying number of days.
- **Hypothesis 4: Level of progressiveness varies in Indian families across cities, towns & villages and menstrual health topic isn't well understood. Multiple restrictions and taboos are associated with menstrual hygiene practices**
 - **Shame associated with talking about periods:** 63.5% of menstruators mentioned that there is shame associated with talking about periods. Girls in villages and towns faced the shame-factor up to 2.5 times higher than those living in cities
 - **Patriarchy and menstrual taboos continues:** 84% of menstruators said they have multiple restrictions placed on them due to taboos associated with periods like don't enter the kitchen, temple or touching various things or move freely in the house.
- **Hypothesis 5: Menstruators didn't have access to privacy, water and sanitation for managing periods at home & outside**
 - **More is needed for improving WASH conditions**(water, sanitation, toilets, privacy), a barrier which prevents menstruators from stepping out to schools & workplaces: 80.8% said they had privacy at home for menstrual health management, while only 48.6% had privacy in schools and 63.7% had it at workplace.
 - **Privacy varied:** In cities, it was at 96% while in villages drops to 14%. Those having access to toilets varied ~ at home(90.6%), schools(60.4%) and workplaces(77.4%). Those having access to water at home was(80.7%), in schools(55%) and at workplaces(77%).
 - **Less than half of people do proper disposal:** 48.1% could dispose off period products in a safe and hygienic manner. 51.9% couldn't!

Conclusion: Helping menstruators manage their periods enables them to continue their education and prevents women from missing their work and not fall behind and therefore has a multiplier effect on overall society. Accelerating enablers & removing barriers will help girls finish their

secondary and tertiary education and women to continue to work and leads to avoiding marrying early and helps eliminate child marriage, reduce early childbearing, and increase women's decision-making ability and psychological well-being. More girls and women in education & workplaces leads to diverse discussions, equitable opportunities & an inclusive society.

Limitations: The research relied on interviews conducted in health centres by health workers & also on Google forms. Due to travel constraints, in-depth interviews with menstruators were conducted over phone to better understand the topic and limited face to face discussions in Gurgaon area.

2. Introduction to Menstrual Health Management and Period Poverty

As per World Bank, there are 300 million women globally who menstruate daily. And about 500 million suffer from period poverty or lack access to period products and facilities for managing menstrual hygiene management (MHM). For managing their periods, women and young girls need WASH facilities(water, sanitation, and hygiene) facilities, cheaper period products and awareness materials for understanding menstrual hygiene, and a conducive environment where they can manage menstruation without taboos, stigma, or embarrassment. A more inclusive term used by informed health care providers these days is “menstruators”, meaning, people who menstruate or have periods. It includes transgender men and non-binary people as well. In my research, I used these terms interchangeably to refer to a wider all-inclusive “menstruator” meaning.

Not having access to good menstrual health management leads to period poverty situation. Period poverty is defined as the challenges and struggles many young girls and women face especially from lower socio-economic income groups when they can't afford to buy menstrual hygiene products. A wider definition includes lack of:

- awareness about menstrual hygiene management knowledge
- availability of adequate WASH facilities(water, sanitation, and hygiene facilities) and privacy
- access to quality period products continuously
- access to pain medication or healthcare guidance in case of periods-related health problems
- safe & hygienic disposal of sanitary products

Psychologically, it leaves women economically vulnerable, if they can't afford the financial burden due to menstrual hygiene products. Menstruation on one hand is a normal and healthy part of life for most women and girls, but on the other hand, in many countries, menstruators face societal taboos that are controlling and discriminatory. Lack of awareness and information around menstruation leads to unhygienic and unhealthy menstrual practices and creates misconceptions and negative attitudes, which leads to others shaming, bullying, and gender-based violence. As girls and women avoid such embarrassing situations, they stop going to schools and workplaces leading to loss of studies, falling behind and loss in incomes, thereby exacerbating social and economic inequalities and therefore their health and career development.

Good menstrual hygiene management (MHM) is critical in helping young girls, women, and other menstruators realize and reach their full potential.

The starting of menstruation, called menarche, starts between the age of 10 to 16 and may vary by region, person, and their economic & nutrition situation. Typically, it starts around 13 years. Menstruation may start earlier in girls, especially in high-income developed countries or high-income classes even in developing markets. This could be due to nutritional value of food consumed indicating that as a girl's health improves, they may experience earlier onset of menstruation. Also,

the average age at which menstruation ends is somewhere around 50, also called as menopause. This means, an average girl menstruates for nearly 37 years of her life or over 2000 days of her life, which is roughly 8% of the time an average woman lives, typically 72 years.

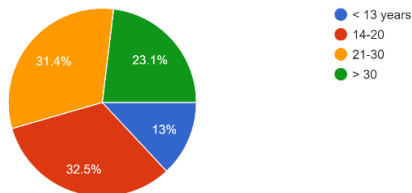
To manage monthly periods, there are the 'traditional' disposable options of sanitary pads and tampons, to the newer age reusable products ~ absorbent underwear, reusable cloth sanitary pads, menstrual cups and menstrual discs.

3. Insights from Consumer Survey: MHM Situation in India - Awareness, Usage, Privacy, Taboos

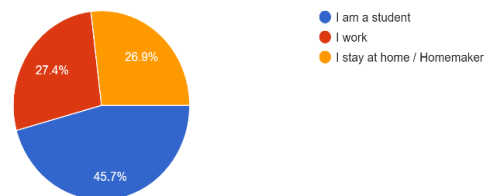
Results from my primary research survey of 468 menstruators across India conducted during Apr-Sep'22, across multiple cities, towns and villages in 13 states shows:

Respondent profile

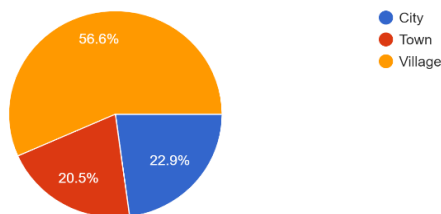
1. How old are you
468 responses



2. What is your profession?
468 responses

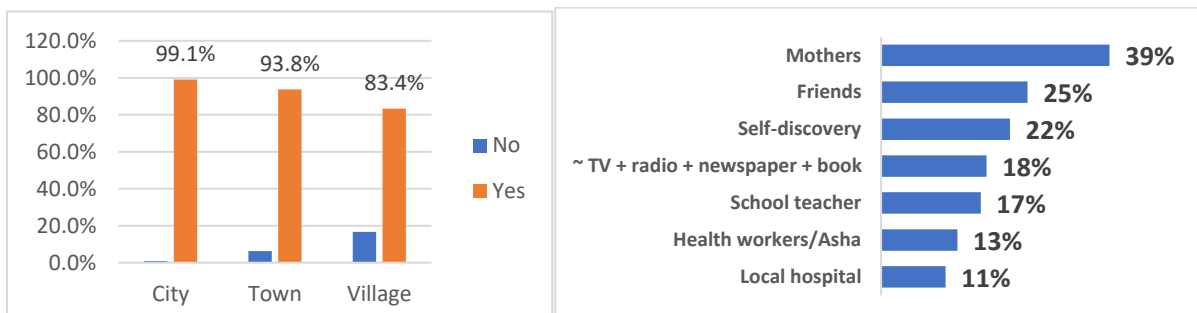


3. Where do you live?
468 responses



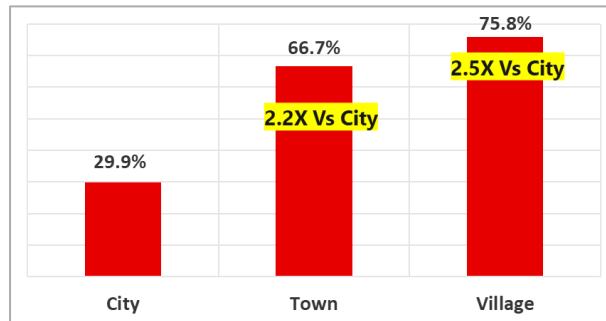
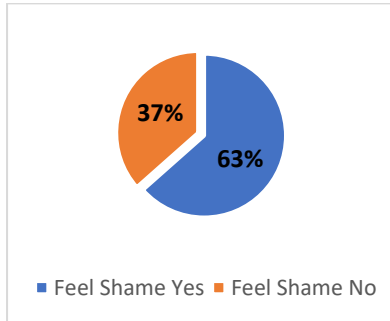
- **Awareness channels:** 89% are aware about periods. The top 3 channels of information or awareness were – Mothers(39%), Friends(25%), Self-discovery(22%) - learnt about periods when they first experienced periods. Other sources of info were ~ TV + radio + newspaper + book(18%), School teacher(17%), Health workers/Asha (13%) and Local hospital(11%). Menstruators became aware from multiple sources of info, hence total exceeds 100%.

Have you heard about periods?

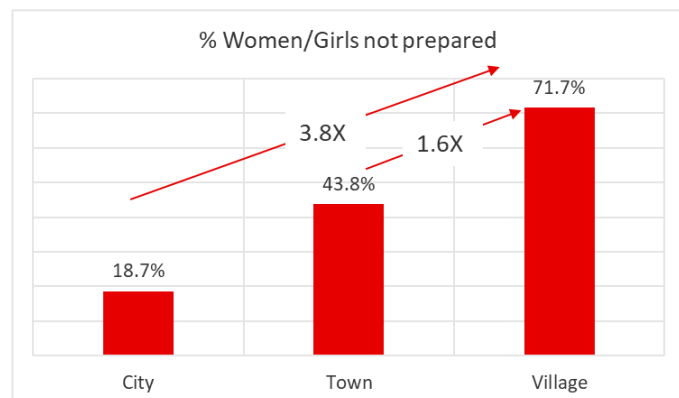
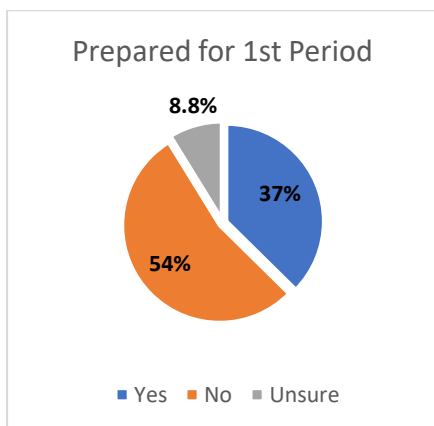


- **Shame associated with menstrual health:** 63.5% of them mentioned that there is shame associated with talking about periods. Girls in villages and towns faced the shame-factor up to 2.5 times higher than those living in cities.

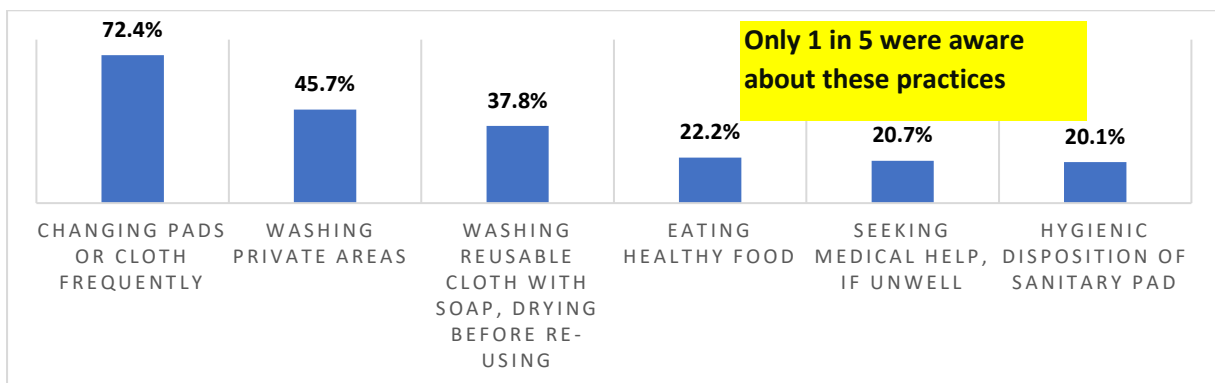
% Of women/girls feel shame



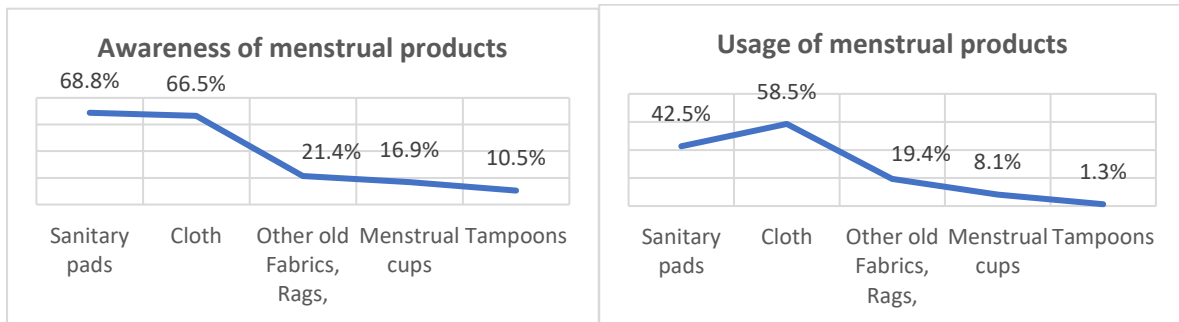
- **Awareness doesn't equal to preparedness:** While 89% were aware about periods before or after experiencing it, only 37.4% were prepared to handle periods. 53.8% were not prepared and 8.8% were unsure. Those in cities were nearly 3 times better prepared vs those living in villages. Those living in villages were 1.6 times more likely to be unprepared vs those living in town(71.7% vs 43.8%).



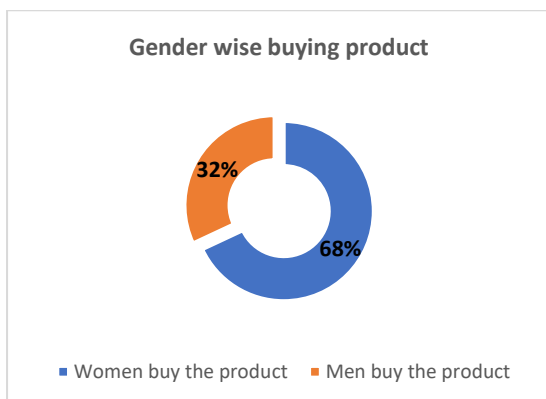
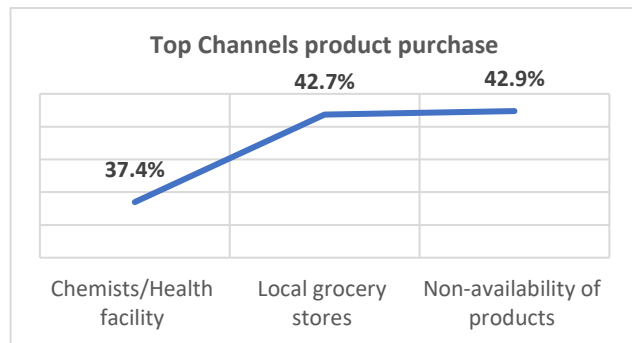
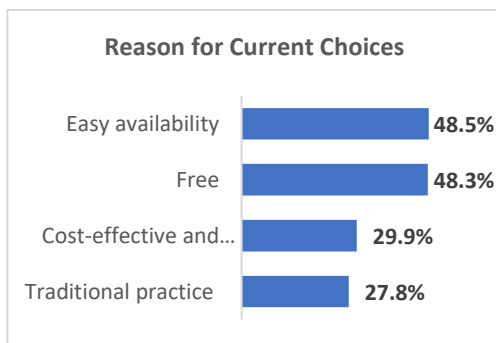
- **Not all facets of managing menstrual health are well understood:** 72.4% are aware about changing pads or cloth frequently, washing private areas(45.7%), washing reusable cloth with soap, drying before reusing(37.8%). The bottom practices were: only 1 in 5 were aware about- Eating healthy food(22.2%), Seeking medical help, if unwell(20.7%) and Hygienic disposition of sanitary pad(20.1%).



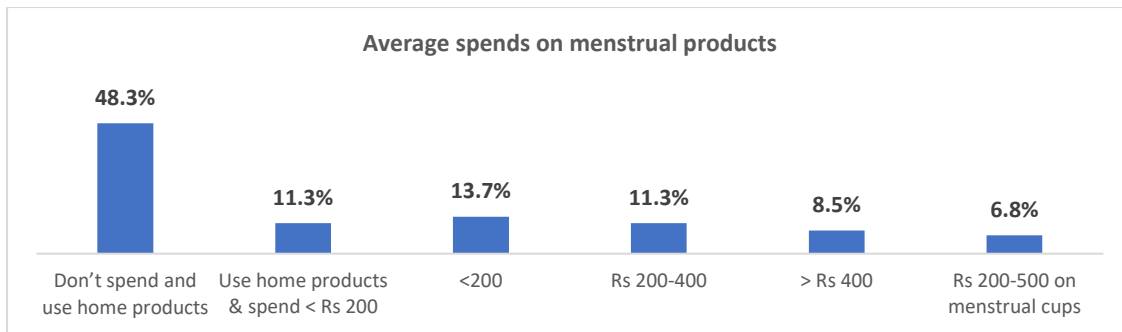
- **Awareness and usage of menstrual products varied:** In terms of awareness, sanitary pads came first (68.8%) followed by cloth(66.5%), other home products(rags, newspapers, old fabric, dried leaves etc.) (21.4%), menstrual cup(16.9%) and tampons(10.5%). However, usage-wise, products used were cloth(58.5%), sanitary pads(42.5%) other home products(rags, newspapers, old fabric, dried leaves etc.) (19.4%), menstrual cup(8.1%) and tampons(1.3%). After speaking to multiple menstruators, I found that many menstruators used multiple products, e.g., at home, they would wear cloth or home-made options, but when stepping out for long commutes or work, they would use disposable sanitary pads. Tampons usage was for special occasions like swimming etc.



- **Reasons for current choices:** Top cited reasons were - Easy availability(48.5%), Free(48.3%), Traditional practice(27.8%), Cost-effective and reusable(29.9%). Top channels of purchase were ~ Local grocery stores(42.7%), Chemists/Health facility(37.4%). Non-availability of products came at 42.9%. Women were 2X times shoppers for female hygiene products vs men(45.9% vs 21.6%)

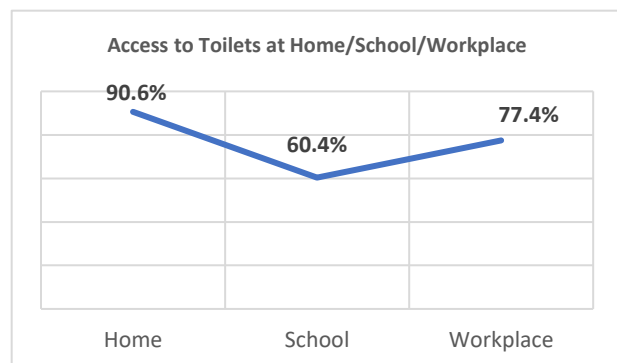
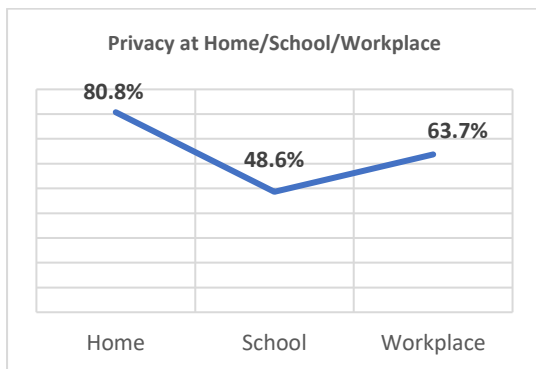


- **Average spends on menstrual products:** 48.3% don't spend and use home products. 13.7% spend below Rs 200, 11.3% Rs 200-400, 8.5% over Rs 400. 11.3% use both home products & spend below Rs 200. 6.8% have spent Rs 200-500 on menstrual cups. Some received products free as part of government and non-profits dignity kit distribution drives and hence usage and paying data varies.



- **More is needed for improving WASH conditions**(water, sanitation, toilets, privacy), a **barrier which prevents menstruators from stepping out to schools & workplaces**: 80.8% said they had privacy at home for menstrual health management, while only 48.6% had privacy in schools and 63.7% had it at workplace. Privacy in cities was at 96%, while towns was 80%, but in villages drops to 14%, nearly one seventh of cities.

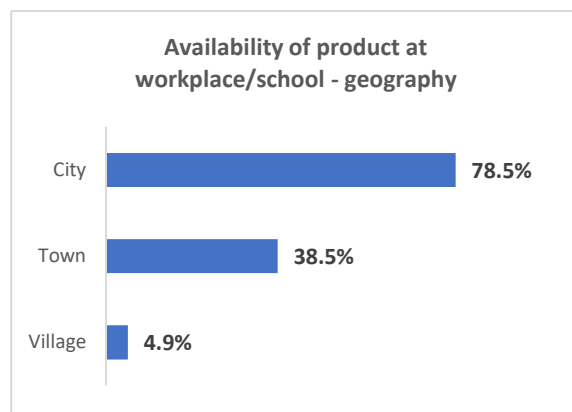
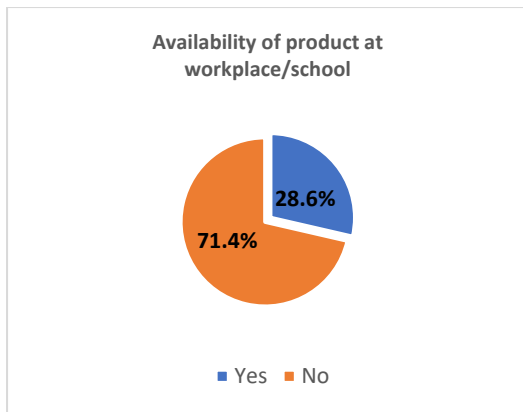
Those having access to toilets varied ~ at home(90.6%), schools(60.4%) and workplaces(77.4%). Those having access to water at home was(80.7%), in schools(55%) and at workplaces(77%).



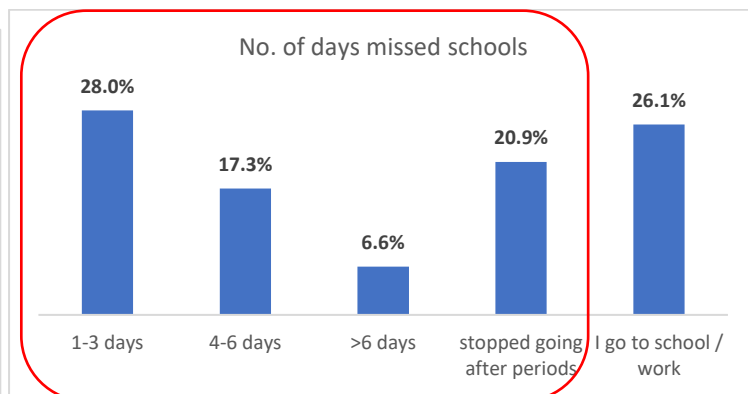
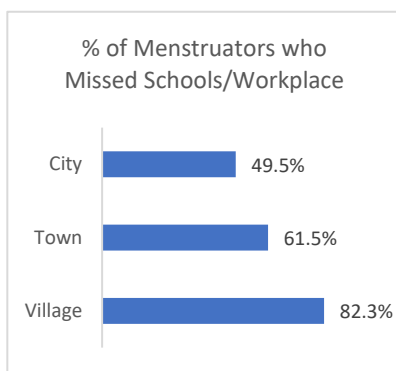
- **Less than half of people can do proper disposal**: 48.1% said that after using period products, they could dispose them off in a safe and hygienic manner. 51.9% couldn't! After speaking to some of menstruators, I found that they used to burn, bury them in ground, dump in fields or even flush them toilets. Many expressed anxieties in towns and villages about disposal or even drying reusable pads.



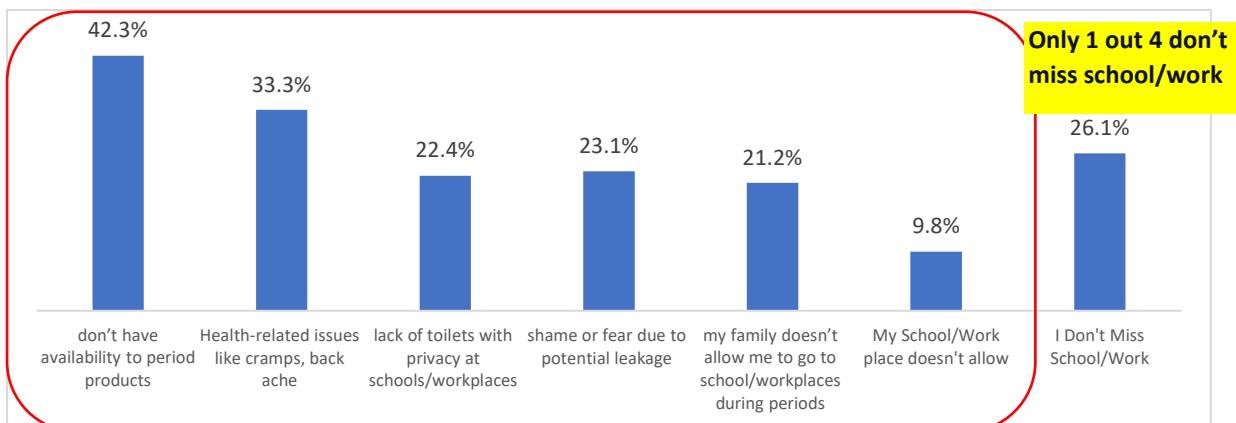
- **Access is a luxury in schools & at workplaces for 8-10 hours menstruators are outside**: Overall 71.4% menstruators mentioned they don't have access to menstrual products in schools or workplaces in case they needed them. This leads to anxiety due to possible leakages and results in missed days at schools & workplaces. While the national availability of period products in schools & workplaces was 28.6%, it was 78.5% in cities, 38.5% in towns and drops to a meagre 4.9% in villages.



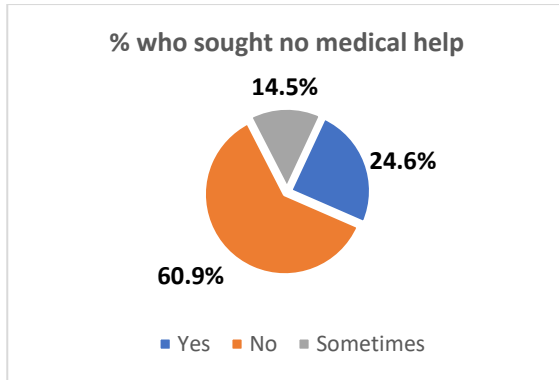
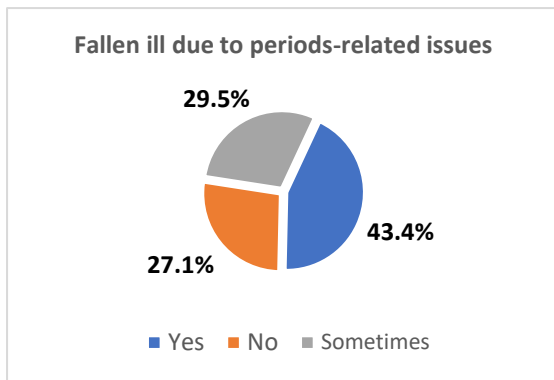
- **One in 5 girls were school dropouts:** 70.5% menstruators said that they have missed schools & workdays due to periods, and it was 49.5% in cities vs 82.3% in villages. 28% have missed schools for 1-3 days, 17.3% (4-6 days), 6.6% (> 6 days) & 20.9% stopped going to schools after periods started.



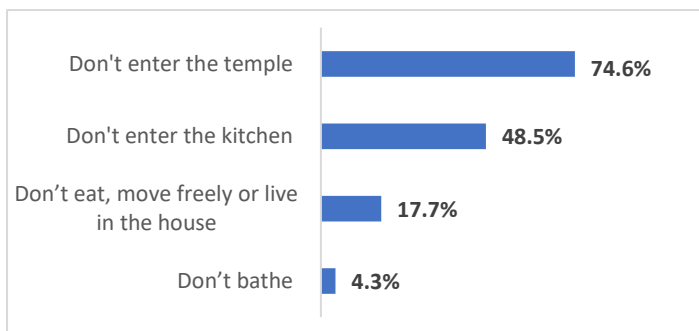
- **Gender inequity continues:** Key multiple reasons cited to miss schools/workplaces were ~ don't have availability to period products(42.3%), Health-related issues like cramps, back ache(33.3%), shame or fear due to potential leakage(23.1%), lack of toilets with privacy at schools/workplaces (22.4%) & my family doesn't allow me to go to school/workplaces during periods(21.2%).



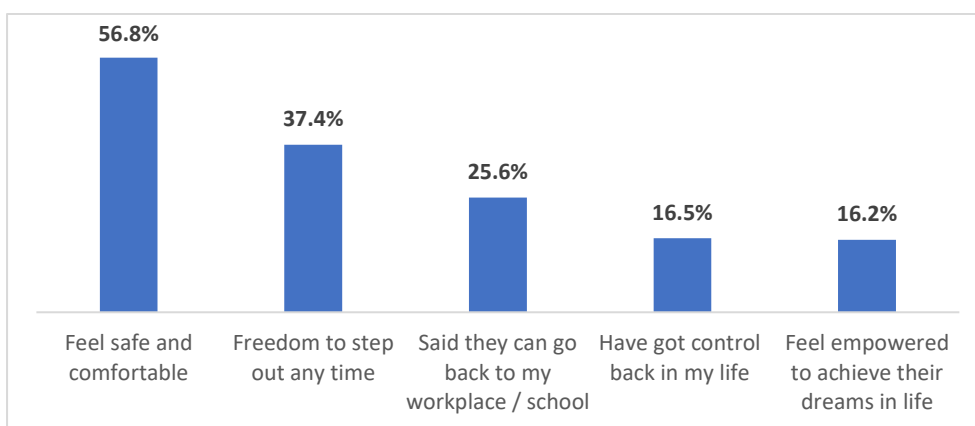
- **Ignorance continues around Menstrual Health Management:** 72.9% of them have fallen ill due to periods-related issues and 60.9% sought no medical help at all. This led to various medical & health-related issues like UTI, heavy bleeding, bleeding between periods, inconsistent periods etc.



- **Menstrual taboos & patriarchy continues:** 84% of menstruators said they have multiple restrictions placed on them due to taboos associated with periods. In fact, some restrictions are considered normal way of life, like not entering a temple or walking into a kitchen. These were ~ Don't enter the temple (74.6%), Don't enter the kitchen (48.5%), Don't eat, move freely or live in the house(17.7%), don't bathe (4.3%).



- **The road to equality & freedom:** After using period products, menstruators cited both rational and emotional reasons. Rational reasons cited were ~ 56.8% feel safe and comfortable, 25.6% said they can go back to my workplace / school even during periods. Emotional reasons cited were ~ 37.4% liked the freedom to step out any time, 16.5% have got control back in my life and 16.2% feel empowered to achieve their dreams in life



4. MHM Situation Globally

It is a misnomer that period poverty exists only in developing markets and the developed markets don't face this issue. In fact, as per a new study by Columbia University Mailman School of Public Health and the CUNY School of Public Health showed that low-income women in US faced period

poverty during Covid pandemic as they couldn't afford to pay for menstrual hygiene products. A study commissioned by Thinx and PERIOD in 2021 found that 23% of students in the U.S. have struggled to afford menstrual products, 51% have worn period products for longer than recommended, and 38% often or sometimes cannot do their best schoolwork due to lack of access to such supplies.

Even 70% of Canadian women say they've missed school or work because of their periods.

Another study by 'Share The Dignity' charity in Australia showed that "Of the 3.2 million Australians currently living below the poverty line, 52% of those are women and young girls and many of them are experiencing period poverty. Girls miss out on 400 days during school years as their families can't have access and afford to buy the basic of necessities"

As per a 2018 YouGov survey across U.K. secondary schools, more than 9 out of 10 girls worry about attending school because they fear they will be shamed. 350,000 girls miss school every year in the U.K. because of their periods, which leads to about 2.1 million hours in lost education.

Hence, period poverty does not only affect women and girls in developing countries, but also menstruators in developed countries and therefore leads to less inclusive schools & workplaces.

5. Cost of Managing Menstruation Via Disposables and Reusables Products

So, how much does it cost to manage periods?

Cost of managing menstrual health via disposable pads	Higher income	Lower income
Pads used p.m.	35	15
Pads changed after x hrs	3.4	8.0
Pads used annually	420	180
Total menstruation years in a lifetime	37	37
Total pads used in lifetime	15,540	6,660
Cost / pad (Rs.)	9	6
Monthly investment (Rs.)	315	90
Annual investment (Rs.)	3780	1080

Reusable alternatives: The reusable products allow millions of girls & women who cannot access or afford disposable pads to get accessible, affordable and eco-friendly products, thereby ending period poverty. Reusable pads typically cost Rs 150-200 and with an investment for 5 pads, that can last for 2 years, they cost only about 19% of disposable sanitary pads. Similarly, the reusable menstrual cup cost Rs 500 and with an investment for 2 cups, that can last for 5 years, they cost only about 9.9% of disposable sanitary pads.

Challenges faced by Menstruators

Not having access to period products creates different challenges for menstruators. These include - restriction in mobility, school dropouts, missing schools, colleges, workplaces, participation in social

events and life and unnecessary restrictions on what not do. This impacts the menstruators in multiple ways - mental stress and anxiety, safety compromise, loss of income and inability to earn, inability to learn & falling behind and health risks due to unhygienic menstrual products used.

6. Implications: Missed Education & Work and Role of Government, Private & Non-profits

There are about 459 million school-going children in India. 48% of them are girls and this translates into 220.3 million girls. With girls experiencing menstruation in schools from age of 13 to 18, this works out to be 110 million girls. As per my research survey, 20.9% of girls dropout of school altogether upon reaching puberty due to not being able to afford menstrual products, period bullying, getting humiliated by their peers and unable to access clean, private toilets. Out of the estimated 110 Mn Indian menstruating girls in schools, this translates into nearly 23.1 Mn girls.

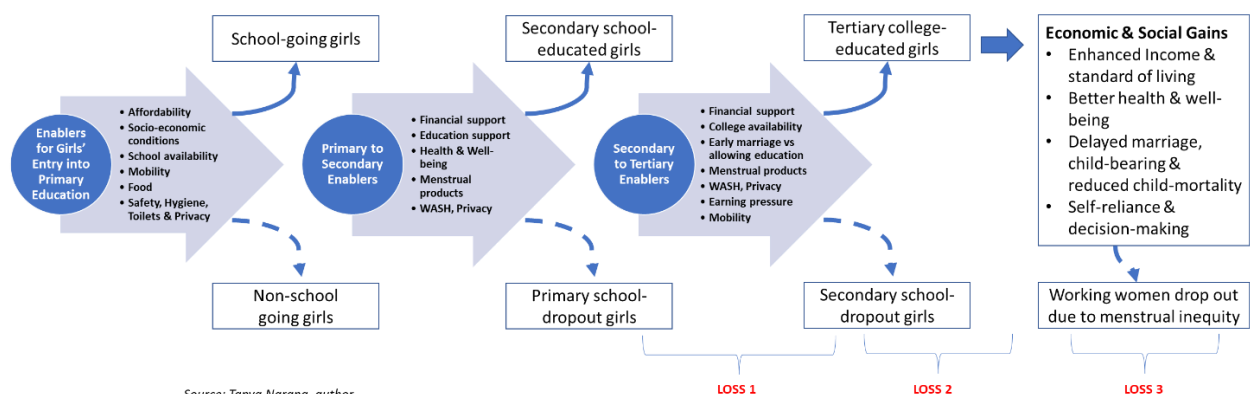
About 74 million girls in India miss schools every year once they start menstruating, due to multiple reasons and this translates into about 2.2 Billion days of lost education.

	Urban	Rural	Remarks
Menstruating Girl students			110.1 million
Girl students Mn	38.6	71.6	
Girls missing schools	49.5%	76.7%	
Girls missing schools	19.1	54.9	74.0 million
Days missed in school annually	12	36	
Million Days missed in school annually	229	1977	2206 million

During work life, women miss out of on an average of 2 days per month due to period poverty. Over the next 22-29 years of work life (depending on when one starts working) till menopause hits, women have missed out between 580 to 850 days of work life due to a variety of reasons – fears of stains, period poverty, restrictions by family or workplace limitations, taboos etc. With a majority of women working in informal sector, where taking leaves means no money, women are left economically poorer and miss out on other opportunities.

As per World Bank, when girls drop out of school before completing their education, it has cascading negative effects on the society. **The World Bank report estimates the losses in lifetime productivity and earnings for girls of not completing 12 years of education at \$15 to \$30 Trillion globally. This is so as there is strong co-relation between one's education educational background and the potential earnings.**

MENSTRUAL HEALTH MANAGEMENT: DRIVING DIVERSITY, INCLUSIVITY & EQUITY IN EDUCATION AND WORKPLACES



Steps Taken by Indian Government

Over the past decades, Indian Government has been taking various positive steps to uplift health of girl child and women, like menstrual hygiene scheme focused on adolescent girls(10–19-year-olds) in rural areas by India's Ministry of Health and Family Welfare, distribution of Freedays sanitary pads for Rs. 6, via Asha(Accredited Social Health Activist) sisters; The Ministry Of Women & Child Development's Kishori Shakti Yojana (KSY) that focuses on enhancing adolescent girls' health & development by ensuring access and availability of period products in schools and 5 crore sanitary pads delivered to poor women from 6,000 Janaushadhi Kendras.

Steps Taken by NGO's & Start-ups

Multiple start-ups who are doing pioneering work in menstrual health management area are Sirona Hygiene that offers menstrual hygiene products like menstrual cups, Saukhyam Reusable pads that makes reusable sanitary pads, and Menstrupedia that offers education content on menstruation in the form of comic books, workshops, and animated videos.

Multiple non-profits who are helping drive education and awareness, advocacy and product distribution drives include ~ The Tata Water Mission that promotes menstrual hygiene management in 900 villages by educating over 200,000 women and 45,000 men by promoting the use of innovative mud pot incinerators to ensure hygienic and at home disposal of used sanitary pads in the villages of Maharashtra and Jharkhand; The Pad Project that empowers women to run their own businesses by making and selling menstrual pads via donating pad machines and driving menstrual awareness workshops and Purehearts, an NGO that drives menstrual health via management donating reusable menstrual cups as a sustainable and period-poverty ending initiative.

Several innovations that are breaking menstrual taboos include ~ Period charts in villages of Haryana, Uttar Pradesh and Rajasthan that reduces taboos around menstruation and encourages open conversations; Period homes made in Gadchiroli, Maharashtra that offer a decent place for menstruating women to stay in instead of a dilapidated hut lacking basic amenities; Arunachalam Muruganantham, a social entrepreneur from Tamil Nadu, India who invented the low-cost sanitary pad-making machine that have been installed in 23 of the 29 states of India in rural areas.

To drive diversity, inclusivity & equity in educational institutions & workplaces, the Government needs to invite multiple players to play an active role in menstrual health management:

- **Drive awareness and make menstrual health management topic mainstream** by involving well-known celebrities
- **Invite Indian corporates** to fund menstrual product distribution effort across India
- Help set up **menstrual products manufacturing** units in various villages and towns
- **Ensure easier disposal by** inviting corporates to **set up incinerators** across villages, towns in schools, colleges & public toilets
- **Reduce menstrual waste** by using both government and private sector labs to drive R&D for developing organic and bio-degradable pads
- **Encourage reusable alternatives** by driving awareness & encouraging start-ups to scale-up
- **Pass a law** that makes period products free or available at a nominal cost similar to Scotland that became the first country in the world to make period products free for all

7. Conclusion: Menstrual Hygiene Management is a strategic multiplier and can drive Diversity, Inclusivity & Equity in Education & Workplaces

In India, there are over 400 million menstruators, and an estimated 23.1 million young girls drop out of schools every year basis my research when they start menstruating due to period poverty. A staggering 296 Mn miss education and work for varying number of days due to period poverty. That's a lot of education and workdays lost and hence leading to social, human and economic capital loss.

Not being able to afford period products can create conditions that forces girls & women to stay home away from school and work and this can have long-term consequences on their education and economic opportunities. It can amplify existing vulnerable situations, forcing women and girls to make sub-optimal decisions like prioritizing food over menstrual products or vice-versa. Over 2 Billion education days are lost due to period poverty.

Menstrual health management is a strategic multiplier and is a compelling business case for all governments and offers predictive and measurable returns on investment and multiple tangible and non-tangible benefits to not only menstruators, but also to the society.

Period poverty can be removed by multi-stakeholder engagement from individuals, corporates, non-profits and government's collaborative effort. The primary focus has to be mothers, schoolteachers and local Asha health workers and removing period stigmas and ensure that they are made aware about menstrual hygiene management practices. Ensuring privacy, working toilets and WASH conditions and safe disposal are hygiene elements that we need to ensure for menstrual hygiene management.

By removing period poverty, governments can remove one of key barriers to the girl's child education. The World Bank report estimated that the losses in lifetime productivity and earnings for girls of not completing 12 years of education at \$15 trillion to \$30 trillion dollars globally.

The benefits of attending secondary school have a multiplier effect. Ensuring universal secondary education for girls could virtually eliminate child marriage, reduce early childbearing, reduce fertility rates in countries with high population growth, and increase women's decision-making ability and psychological well-being and have large benefits for young children, by reducing under-five mortality and malnutrition.

Government, companies, non-profits and individuals should work together to drive awareness, momentum and remove barriers to menstrual health. This will ensure girls are continuing their education and work and creating an equal and level playing field for all genders. **By strengthening confidence and life achievement skills of girls & women and giving them opportunities to flourish, not only a diverse & inclusive society can be built, leading to socio-economic gains but also acts as a strategic multiplier in the long term.**

8. Bibliography, References & Citations

"Missed Opportunities : The High Cost of Not Educating Girls." Open Knowledge Repository, <https://openknowledge.worldbank.org/handle/10986/29956>. Accessed 2 Sept. 2022.

Hub, IISD's SDG Knowledge. "World Bank Report: Not Educating Girls Costs Countries Trillions | News | SDG Knowledge Hub | IISD." SDG Knowledge Hub | Daily SDG News | IISD, <https://sdg.iisd.org/news/world-bank-report-not-educating-girls-costs-countries-trillions/>. Accessed 2 Sept. 2022.

“Breaking the Menstruation Taboo - NielsenIQ.” NielsenIQ, <https://nielseniq.com/global/en/insights/report/2016/breaking-the-menstruation-taboo/>. Accessed 2 Sept. 2022.

“Dasra | Spot On!: Improving Menstrual Management in India.” Dasra, <https://www.dasra.org/resource/improving-menstrual-health-and-hygiene>. Accessed 2 Sept. 2022.

“National Family Health Survey (NFHS-5).” District Level Household & Facility Survey, http://rchiips.org/nfhs/factsheet_NFHS-5.shtml. Accessed 2 Sept. 2022.

“Menstrual Equity and the Pandemic: It’s Time to Take the Gendered Experience Into Account | Columbia Public Health.” *Columbia Public Health* |, <https://www.publichealth.columbia.edu/public-health-now/news/menstrual-equity-and-pandemic-its-time-take-gendered-experience-account>. Accessed 3 Sept. 2022.

“A Culture of Silence Around the Issues of Menstruation Needs To Be Broken’ | Columbia Public Health.” *Columbia Public Health* |, <https://www.publichealth.columbia.edu/public-health-now/news/culture-silence-around-issues-menstruation-needs-be-broken>. Accessed 3 Sept. 2022.

“Menstrual Product Insecurity Resulting From COVID-19–Related Income Loss, United States, 2020 | AJPH | Vol. 112 Issue 4.” *American Journal of Public Health*, <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2021.306674>. Accessed 3 Sept. 2022.

Rangoli. “India’s Declining Youth Population Doesn’t Worry Ed-Tech Firms | Mint.” *Mint*, mint, 8 Sept. 2020, <https://www.livemint.com/news/india/india-s-adeclining-youth-population-doesn-t-worry-ed-tech-firms-11599547493474.html>.

“Rural Population (% of Total Population) - India | Data.” *World Bank Open Data | Data*, <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=IN>. Accessed 2 Sept. 2022.

“India’s Education Sector.” *India Brand Equity Foundation*, <https://www.ibef.org/industry/education-sector-india>. Accessed 3 Sept. 2022.

“Population, Female (% of Total Population) - India | Data.” *World Bank Open Data | Data*, <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS?locations=IN>. Accessed 3 Sept. 2022.

“Education GPS - India - Overview of the Education System (EAG 2021).” *Education GPS - OECD*, <https://gpseducation.oecd.org/CountryProfile?primaryCountry=IND&treshold=10&topic=EO>. Accessed 3 Sept. 2022.

| Written By: Saptarshi Dutta |. Edited By: Sonia Bhaskar. “23 Million Women Drop Out Of School Every Year When They Start Menstruating In India | Women’s Day.” NDTV-Dettol Banega Swasth Swachh India, Swachh India NDTV, 28 May 2018, <https://swachhindia.ndtv.com/23-million-women-drop-out-of-school-every-year-when-they-start-menstruating-in-india-17838/>.

“Period Poverty Impact on the Economic Empowerment of Women.” OpenDocs Home, <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/14348>. Accessed 2 Sept. 2022.

“1 In 5 Australians Forced To ‘Improvise’ On Period Products.” Share the Dignity, <https://www.sharethedignity.org.au/blog/period-pride-report-bloody-big-survey-findings>. Accessed 2 Sept. 2022.

Group, World Bank. “Menstrual Health and Hygiene.” World Bank, World Bank Group, 18 May 2022, <https://www.worldbank.org/en/topic/water/brief/menstrual-health-and-hygiene#>.

“Petition · Pass a Law to Get #Pads4All Menstruators in India · Change.Org.” Change.Org, <https://www.change.org/p/pass-a-law-to-get-pads4all-menstruators-in-india>. Accessed 2 Sept. 2022.

Gupta, Aditi. "India Annually Generates over 3 Lakh Tonnes of Waste from Sanitary Napkins and Baby Diapers: Report - Deleted News." WION, WION, 2 June 2022, <https://www.wionews.com/india/india-annually-generates-over-3-lakh-tonnes-of-waste-from-sanitary-napkins-and-baby-diapers-report-484389>.

"India Number of Students: Secondary School: Girl | Economic Indicators | CEIC." Global Economic Data, Indicators, Charts & Forecasts | CEIC, CEICdata.com, <https://www.ceicdata.com/en/india/number-of-students-secondary-school/number-of-students-secondary-school-girl>. Accessed 2 Sept. 2022.

"Knowledge, Practices, and Restrictions Related to Menstruation among Young Women from Low Socioeconomic Community in Mumbai, India - PMC." PubMed Central (PMC), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4080761/>. Accessed 2 Sept. 2022.

Kothari, Bela. "Perception about Menstruation: A Study of Rural Jaipur, Rajasthan." *Indian Anthropologist*, vol. 40, no. 1, Indian Anthropological Association, pp. 43–54, doi:10.2307/41920109. Accessed 2 Sept. 2022.

"Menstruation and Human Rights - Frequently Asked Questions | United Nations Population Fund." United Nations Population Fund, <https://www.unfpa.org/menstruationfaq#>. Accessed 2 Sept. 2022.

"Menstruators: A Gender Neutral & Inclusive Term for All Our Period Conversations - SheThePeople TV." SheThePeople TV, SheThePeople, 17 Aug. 2020, <https://www.shethepeople.tv/home-top-video/menstruators-a-gender-neutral-inclusive-term-for-all-our-period-conversations/>.

"Nine in Ten Girls Fear 'Period Shaming' | Tes Magazine." Tes Magazine, <https://www.tes.com/magazine/archive/nine-ten-girls-fear-period-shaming>. Accessed 2 Sept. 2022.

"Period Products: What Are the Options? | IPPF." IPPF, 18 Nov. 2020, <https://www.ippf.org/blogs/period-products-what-are-options>.

"Period.Org | Education." Period.Org, 1 Oct. 2020, <https://period-action.org/education>.

"Resources Database | MHDDay." MHDDay | Global, <https://menstrualhygieneday.org/resources-on-mhm/resources-mhm/>. Accessed 2 Sept. 2022.

"Resources for Menstrual Hygiene" MHDDay | Global, <https://menstrualhygieneday.org/resources-on-mhm/resources-mhm/>. Accessed 2 Sept. 2022.

"Rural Population (% of Total Population) - India | Data." World Bank Open Data | Data, <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=IN>. Accessed 2 Sept. 2022.

"Sustainability | Free Full-Text | A Study into Public Awareness of the Environmental Impact of Menstrual Products and Product Choice | HTML." MDPI, Multidisciplinary Digital Publishing Institute, <https://www.mdpi.com/2071-1050/11/2/473/htm>. Accessed 2 Sept. 2022.

"The Indian Government May Soon Make Period Products More Affordable." Global Citizen, <https://www.facebook.com/GLBLCTZN>, <https://www.globalcitizen.org/en/content/india-to-control-prices-of-sanitary-pads/>. Accessed 2 Sept. 2022.

Today, Telangana. "How COVID-19 Impacted Menstrual Hygiene in India." Telangana Today, <https://www.facebook.com/TelanganaToday>, 16 Feb. 2021, <https://telanganatoday.com/how-covid-19-impacted-menstrual-hygiene-in-india>.

"Types of Period Products: A Guide to Your Options - Green Valley OBGYN." Green Valley OBGYN, <https://www.facebook.com/pages/Green-Valley-OBGYN/165697290251157>, 15 Mar. 2022, <https://gvobgyn.com/types-of-period-products/>.