

Period Poverty Among Women in Poverty Pockets

Mafraq Governorate, Jordan

Researched by

Manar Abdullah Mohammad Swidat Nada Hamad Rana Shihabi







This study was prepared by the following participants of Lazord Fellowship Program which is implemented by INJAZ in partnership with Lazord International Foundation:

- Manar Abdullah Manariabdullah@gmail.com
- Mohammad Swidat sweidatmohammad@gmail.com
- Nada Hamad Hnada5080@gmail.com
- Rana Shihabi ranaagha98@gmail.com

The results of this study and its recommendations do not necessarily reflect the opinions of INJAZ.

Amman, Jordan 2022

Period Poverty

"Lack of access to sanitary products, WASH facilities, dignity, and information about menstruation"

72.5% of women suffer from period poverty



of women have not been introduced to menstrual education at school



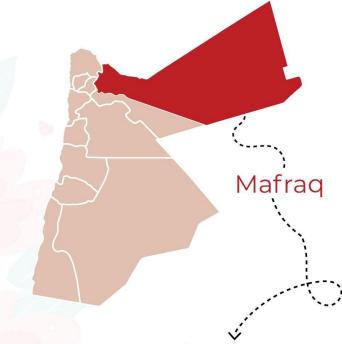
of women experience negative emotions due to period poverty



of women use harmful materials instead of menstrual hygiene products like: newspapers, rags, and cloths



of women do not shower during their period due to false inherited myths



- 11 Pockets of Poverty
 in Mafraq Governorate
- 346 Women Participants



Menstrual Hygiene Management Should Be Recognized as a Human Right

ملخص الدراسة باللغة العربية

هذا البحث جزءا من متطلبات زمالة لازورد ويهدف إلى دراسة مشكلة فقر الدورة الشهرية لدى النساء والفتيات البالغات في مناطق جيوب الفقر داخل محافظة المفرق في الأردن بمحاورها الأربعة وهي: قلة الوصول إلى منتجات الحيض الصحية، وعدم توفر المياه والمرافق الصحية الأمنة، وقلة الوعي والتثقيف حول الدورة الشهرية مما يولد وصمة عار مرتبطة بالدورة.

واستهدفت الدراسة عينة مكونة من 346 من النساء البالغات ضمن الفئة العمرية (51-18) عاماً. حيث أن 79.5% من نساء العينة أردنيات، 24.1% سوريات وفلسطينيات وعراقيات، و40% تتراوح رواتبهم (399-200) دينار شهريا، و36.6% ضمن الفئة العمرية من (44-35) سنة، و56.4% متزوجات، و37.2% أنهين تعليمهن الثانوي، و73.7 لا يعملن، و53.8% ومن النساء العاملات يعملن أعمال مياومة. وقد تنوعت أسئلة الاستبانة لتشمل الوضع الاجتماعي والاقتصادي لهن ولعائلاتهن وأسئلة متخصصة حول المحاور الأربعة لمشكلة فقر الدورة الشهرية.

وعلى الرغم من كون الحيض جزءًا لا يتجزأ من حياة النساء، حيث يقضين ما يقارب الأربعين عاما من حياتهن في المتوسط وهن يحضن، إلا أن ما يقارب 500 مليون امرأة وفتاة في العالم يعانين من فقر الدروة الشهرية.

وتتفاقم المشكلة في الأردن لارتباطها بالوضع الاقتصادي للنساء والفتيات، حيث تبلغ نسبة الفقر في الأردن 14.4%، أما في منطقة الدراسة فتبلغ نسبة الفقر 19.9% وهي الأعلى على مستوى المملكة. وعليه فإن الوضع الاقتصادي المتردي يقف عائقاً أمام الحصول على منتجات صحية وآمنة خلال فترة الدورة الشهرية، كما أن هذه المنتجات غير معفاةٍ ضريبياً باعتبارها سلعة كمالية غير أساسية.

علاوة على ذلك، فإن قطاع الخدمات في الوقت الراهن يشهد نقصاً حادًا في الخدمات الأساسية المقدمة للمواطنين (كخدمات التعليم والصحة والمياه والصرف الصحي) ويزيد الموقع الجيوسياسي للأردن المشكلة من خلال تأثره بالصراعات القائمة في دول الجوار والتي أدت الى تدفق عدد هائل من اللاجئين ليصل عدد المسجلين منهم إلى 750,000 لاجئاً، مما يعني مزيداً من الضغط على الموارد والخدمات الأساسية، ليصبح الحصول عليها ضمن حدها الأدنى أمراً غاية في الصعوبة، بالإضافة للإمدادات الشحيحة والرديئة والمرافق الصحية المتهالكة مما يجعل من التعامل مع فترة الحيض أمراً صعباً. فعلى سبيل المثال، تظهر الدراسة بأن \$92.5% من العينة صرحن بوجود عيوب في دورات المياه المستخدمة تتراوح بين نقص في منتجات النظافة الجسدية إلى وجود ثغرات في جدران دورات المياه.

ومن اللافت أيضاً أن 58.1٪ من عينة الدراسة لم يحصلن على أية معلومات عن الدورة الشهرية من مصدر موثوق ليفتح الباب أمام دخول مفاهيم ومعتقدات خاطئة تتوارثها أجيال من النساء دون تصويب، لتتحول بذلك إلى حقيقة ثابتة في أذهانهن. ولا يتوقف الأثر السلبي لفقر الدورة الشهرية على الصحة الجسدية للنساء، بل يتجاوزها الى صحتها النفسية فقد عبرت 91% من العينة بشعورهن بمشاعر سلبية مرتبطة بفترة الحيض تتنوع بين الغضب و النفور والاشمئزاز.

كما يشكل فقر الدورة الشهرية عائقاً كبيراً أمام تحقيق أهداف التنمية المستدامة فهي تتعارض بشكل رئيسي مع أربعة أهداف

وهي: الصحة الجيدة والرفاه، والتعليم الجيد، والمساواة بين الجنسين، والمياه النظيفة والنظافة الصحية.

وكانت مخرجات البحث على النحو التالي:

- 1. التأكيد على أهمية الدور الحكومي في الترويج للإدارة الصحية والأمنة لفترة الحيض بالإضافة الى إلغاء الضرائب عن المنتجات الصحية للدورة الشهرية.
- 2. تضمين حق الصحة العامة للمواطنين جميعا ضمن الدستور الأردني وما يترتب عليه من تعديلات تشريعية.
 - 3. تضمين المواضيع المتعلقة بالدورة الشهرية في المناهج الدراسية وتقديم شرح مفصل عنها لكلا الجنسين وذلك عن طريق تحديث مصفوفة القيم والتتابع الخاصة بوزارة التربية والتعليم لتشمل مواضيع الصحة الإنجابية والدورة الشهرية بشكل واضح.
- 4. بلورة دور منظمات المجتمع المدني في تقديم التوعية اللازمة وإشراك كافة أطراف المجتمع لإزالة وصمة العار المرتبطة بالحيض ونشر الثقافة الجنسية التي تحد من توارث الممارسات والعادات الاجتماعية الخاطئة والتي تؤثر سلباً على صحة النساء.
 - 5. التأكيد على أهمية استحداث منظومة بيانات كاملة مع عمل الإحصائيات الشاملة اللازمة للوصول إلى الإدارة الصحية والأمنة لفترة الحيض.

وقد واجهت هذه الدراسة عدة تحديات منها:

- 1. حساسية موضوع الدراسة وعدم تقبل المجتمع المحلى الحديث عنها.
- 2. عدم توفر بيانات حديثة وإحصاءات تخدم موضوع الدراسة.
- 3. عدم توفر در اسات محلية وعربية عن موضوع فقر الدورة الشهرية.
- 4. عدم تعاون القطاع العام والخاص في توفير المعلومات المطلوبة لإتمام الدراسة.
- 5. تردي الوضع الوبائي خلال فترة جمع البيانات وإدراءات الحظر الجزئي والشامل الصارمة.

Table of Contents

A. List of Tables	2
B. List of Figures	2
C. List of Abbreviations	3
1. Introduction	4
2. Methodology	6
3. Data Collection Tools	7
3.1 Primary Data	7
4. Civil Society Organizations (CSOs)	8
5. Discussion and Results	9
5.1 Access to Sanitary Products	9
5.2 Water, Sanitation and Hygiene (WASH)	13
5.2.1 Water	13
5.2.2 Sanitation	15
5.2.3 Hygiene	17
5.3 Education.	18
5.4 Stigma and Indignity	21
6. Period Poverty and SDGs	24
7. Demographic Data	26
8. Challenges and Solutions	29
9. Recommendations and Conclusion	30
10. Deferences	22



A. List of Tables

Table 1: Stakeholders	
B. List of Figures	
Figure 2: The average family income	
Figure 3: The average spent on menstrual hygiene products	
Figure 4: Average number of females menstruating in the family	
Figure 5: The materials used to manage menstruation	
Figure 6: The time it takes to reach the nearest supplier	
Figure 7: Constant Water Availability in Toilets	
Figure 8: Presence of Problems in Municipal Water	
Figure 9: Female-Friendly Toilets Key Components.	
Figure 10: Toilets Adequacy	
Figure 11: Missing Key Components in Toilets	
Figure 12: Sanitation-Related Stresses.	
Figure 13: Do you shower when menstruating?	19
Figure 14: How many pads does a woman use per day?	
Figure 15: Education levels among women in Mafraq	21
Figure 16: Have you received any education on menstruation at school?	21
Figure 17: Have you received any additional information on menstruation from other resources	
Figure 18: Reasons behind not using reusable pads	22
Figure 19: The first resource women learned about menstruation from	23
Figure 20: The adequacy of information provided by the first resource2	23
Figure 21: Reasons behind females not buying feminine hygiene products	25
Figure 22: The marital status of women using tampons	25
Figure 23: Myths on menstruation	25
Figure 24: do you prefer to call the period with other names out of embarrassment?	26
Figure 25: How does period poverty affects achieving the SDGs	26
Figure 26: The nationalities of the study sample	29
Figure 27: The Martial status of the study sample	29
Figure 28: The age groups of this study	29
Figure29: Employment2	29
Figure 30: Women's job contracts	30
Figure 31: Number of family members.	30



C. List of Abbreviations

CSOs	Civil Society Organizations		
DoS	Department of Statistics		
ESCAW	Economic and Social Commission for Western Asia		
EU	European Union		
FAO	Food and Agriculture Organization		
JOD	Jordan Dinar		
MHM	Menstrual Hygiene Management		
МоН	Ministry of Health		
MOPIC	Ministry of Planning and International Cooperation		
MWI	Ministry of Water and Irrigation		
NGOs	Non-Governmental Organizations		
OASH	Office of the Assistant Secretary for Health		
OHCHR	Office of the High Commissioner for Human Rights		
SDGs	Sustainable Development Goals		
SRH	Sexual Reproductive Health		
UN	United Nations		
UNDP	United Nations Development Programme		
UNFPA	United Nations Population Fund		
UNHCR	United Nations High Commissioner for Refugees		
UTIs	Urinary tract infections		
WASH	Water, Sanitation and Hygiene		

1. Introduction

What does it really mean to have no toilet and/or no working tap when you have your period? No access to painkillers or sanitary menstrual materials? How to deal with your period each month when you are ashamed or shunned? Who do you go to find out how to safely manage menstrual hygiene? (Snel and Da Silva Wells, 2014)

Menstruation, the natural monthly occurrence of vaginal bleeding, is a fact of life for 1.9 billion girls and women of reproductive age globally, of which 107 million alone are in the Arab Region (UNFPA, 2020). A girl might start her period anytime between the age of 10 and 14 and she gets her period for about 40 years of her life on average (Your Period, 2017).

However, most of these women and girls have no control nor the right to manage their periods in a dignified and healthy way by having access to feminine hygiene products, WASH facilities, or the proper education on menstruation, which is defined as period poverty. According to K4D, period poverty is defined as "lack of access to sanitary products, WASH facilities, dignity, and information about menstruation" (Tull, 2019, p.1). Period poverty is most notably seen within Arab countries that have a lack of basic services, the existence of cultural taboos, discriminatory social norms, and gender inequality. Nevertheless, accessing the necessary facilities, tools, and information to properly address menstrual cycles is vastly connected to the financial status of these women and girls which provides directly correlated results. Within the Arab region, the poverty headcount is 40.6% (ESCAW, 2017), and in Jordan alone, it is 14.4% (World Bank, 2020). The relationship between poverty and the inability to manage menstruation highlights the unavoidable fact that the existence of period poverty is an issue in Jordan. This issue is amplified within a low-income setting. According to the most recent study on poverty status in Jordan by the DoS in 2012, the highest poverty rate was recorded at the governorate of Mafraq at 31.9%.

In Jordan, MHM lacks the proper attention. This contributes to the growth of period poverty, especially in vulnerable and poor areas. Available facilities, tools, and resources play a role which results in a poor MHM. According to the MWI, "Jordan is a resource-starved, middle-income country with insufficient supplies of water" (MWI, 2016, p.1). According to the same

study, Jordan also ranks as the world's second water-poorest country, resulting in the failure of Jordanian women and girls to manage their periods sufficiently. Nevertheless, Jordan hosts over 750,000 refugees of nearly 60 different nationalities, being the second-highest country in the world in comparison to its population, and these refugees are predominantly from Syria, but are also from countries such as Iraq, Yemen, Sudan and Somalia (UNHCR, 2021). Consequently, this places immense pressure on Jordans overstretched resources, including water, at one of the most difficult economic periods in its history. On the other hand, according to the DoS, Jordan has 22 out of 27 sub-districts where the poverty rate of their citizens exceeds 25% (DoS, 2010). Furthermore, according to the DoS, around 7.5% of the total women population that are above the age of 15 in Jordan are illiterate because they have not received formal education (2020). Hence, many of these girls didn't receive any formal nor accurate education on menstruation to aid them in managing their periods in a healthy and dignified way. These indicators stress the existence of period poverty to a broad cross-section of people in Jordan based on factors that trigger this issue.

In Mafrag, the poverty headcount reached 19.2%, which accounts for 6.2% of the overall poverty rate in Jordan. Also, the governorate contains 11 poverty pockets: Ruwaished, Khaldieh, Salheyah, Dayr Al Kahf, Umm Al-Quttayn, North West Badiah District, Hosha, Balama, Umm al-Quttayn, Rihab, and Umm El-Jimal (DoS, 2010). Thus, women residing in these areas are less likely to have access to menstrual hygiene products than females living in wealthier settings. They are also less likely to have access to clean, private, safe and lockable spaces to lead MHM. Moreover, in reference to the DoS in 2020, Mafraq ranks the second governorate in the highest rate of illiteracy among women at 11.5% (2020). This statistic shows the deprivation of women and girls of their fundamental right of education and the necessity to learn about menstruation formally to overcome poor MHM. On the other hand, Mafrag suffers from many problems related to the availability or access to clean water. According to the National Water Strategy 2016-2025, the per capita share of water in Jordan is 60 cubic meters per year, which is below the global water poverty line of thousand cubic meters. Not to mention the water loss, which is the amount of distributed drinking water that does not reach customers, reaches 52% of the total water volume delivered into the pipes network. In Mafraq alone, the water loss reaches 53% due to the large area of the governorate (Al-Mefleh et al., 2019). Besides all these problems and the limited water resources in Mafraq, the pressure placed on these resources have increased because the



governorate hosts 24.9% of the total number of refugees in Jordan, composing 166,827 refugees (UNHCR, 2021).

This research looks into the issue of period poverty in poor context in Jordan to be the first of its kind that addresses this issue covering the four components: access to sanitary products, WASH, education, and stigma and indignity. The objective of this research is to investigate the existence of period poverty in Mafraq governorate, considering that the current setting of the governorate might indicate poor MHM by analyzing the components that this issue stems from. It also studies the role of the Jordanian Government in reducing period poverty, and more specifically, in poverty pockets. It also highlights the vital role of CSOs in advocating MHM and their engagement in working on period poverty in hopes of reducing it. On the other hand, this research explores the efficiency of schools and households in promoting MHM as well as the available resources to lead MHM.

2. Methodology

This research was built on a mixed-method approach in gathering data and engaging with stakeholders in discussions and reflections in order to answer the research questions and study period poverty by covering its four pillars deeply, which are:

- 1. Access to Sanitary Products
- 2. WASH
- 3. Education
- 4. Stigma and Indignity

The research team chose this method to ensure the complete and early understanding of contradictions that may arise throughout the research timeline, which may not be apparent when separately using qualitative or quantitative data collection and analysis methods.

The geographical area selected for the research was the 11 poverty pockets in Mafraq governorate. The sampling technique used in this research is the non-probability of the purposive sampling method as the target group is women who are between 18 years old, as it equals the



senior level of school and are in their legal age of getting married and they need no consent form to answer the questions which will give them a free space to answer the survey questions without their parents' permission, and 51 years old which is expectedly the age of menopause (Franciscan Health, 2019). The inclusion criteria included women of different socio-economic status and nationalities: Jordanian, Syrian, Palestinian, and Iraqi.

This analysis was guided by methods and tools that analyze the data collected accurately in which it was used content analysis and grounded theory to analyze the qualitative data using excel tool and average, range, hypothesis testing, and standard deviation to analyze the quantitative data using Canva tools.

Concerning data analysis, **three hundred forty-six** survey respondents answered forty-six questions that took an average of twenty-five mins to answer.

3. Data Collection Tools

3.1 Primary Data

In-person and online surveys

The research team developed a survey that was disseminated both in the field and online. The field surveying took place in the geographical area with the support of volunteers which had ensured the inclusion of target group segments who may not have had access to the online survey. As for the online survey, SurveyMonkey was used as the platform through which the survey was disseminated. A total of three hundred seventy-five respondents completed the inperson and online surveys. Twenty-nine respondents were excluded as they have not met the determined eligibility criteria. And the collected data has been coded to give accurate results.

Focus group discussions

One focus group discussion was conducted with six participants who supported this research by distributing and filling out the surveys. These volunteers are the people who experienced the target group's perception of the subject and their reactions towards the questions of the survey.

In-person and online key informant interviews:

Four semi-structured interviews were conducted with a variety of stakeholders: primary healthcare professionals, humanitarian and development workers, policy-makers, and private sector representatives.

Name	Stakeholder	Category Expertise
Mahmoud Nabulsi	Humanitarian and development worker and policy-maker	Youth and Outreach Program Manager at the Royal Awareness Society
Sawsan Majali	Primary healthcare professional and policy- maker	Local politician and Secretary General of Higher Population Council
Mercy Corps		
Zena Itani	Humanitarian and development worker	Gender Advisory
Bessun Jaber	Humanitarian and development worker	Gender and Safe Spaces Coordinator
UNICEF Jordan		
Fatema Nabhani	Humanitarian and development worker	Water and Sanitation Project Officer

Table 1: The Stakeholders

The protocols for conducted interviews and focus group discussion were created by the research team to ensure research ethics. The following considerations were identified and implemented throughout the research: voluntary participation, the right to withdraw from participation, the secure storage of the data collected, the secure use and publication of the data collected. The research goals were explained, and verbal consent was taken.

In addition to this, the research relies on other reliable related resources, such as governmental websites and international organizations like PLAN International, United Nations Agencies and other sources cited in this report. Unfortunately, these resources show a huge gap in providing inclusive and detailed data on the research topic with its four components.

4. Civil Society Organizations (CSOs)

During the process of the research, the team approached multiple stakeholders including CSOs in Jordan who might be working on MHM or addressing period poverty. However, a gap

has been found in CSOs in Jordan who play a role in promoting MHM. The CSOs who participate in addressing MHM are covering or working on the topic superficially without covering all parts that are crucial to promote MHM and reduce period poverty.

There has been found that multiple CSOs are engaged in the process of distributing feminine hygiene products. However, this keeps the sustainable aspect of the process on hold. On the other hand, it has been found that some NGOs work on MHM but cover only certain aspects. For example, Mercy Corps, in partnership with Be Girl, a social enterprise that focuses on menstrual health, tested and integrated Be Girl's SmartCycle® menstruation education tool and curriculum content into WISE Girls, an existing sexual and reproductive health (SRH) peer education program run by adolescent girls in Za'atari Refugee Camp. On the other hand, United Nations Children's Emergency Fund (UNICEF) are focusing and working on WASH in addressing environmental sustainability standards and adequacy of toilets to lead MHM, particularly in schools. However, many aspects of period poverty have been left off the table with no attention from CSOs in Jordan. This includes the access to feminine hygiene products and coming up with sustainable solutions, focusing on menstrual education, and deconstructing the stigma and indignity associated with menstruation.

However, the passive role of CSOs in addressing MHM or working on reducing period poverty stems from different factors. This is greatly associated with the negligence menstruation receives, as Fatema Nabahani, Mahmoud Nabulsi and Dr. Sawsan Majali stressed, due to the sensitivity of the topic and how people accept to discuss or receive awareness on such topics that are considered social taboos. On the other hand, this is also a result of excluding men from being part of promoting MHM. Mahmoud Nabulsi also mentions the power dynamics and the effect of a male figure in discussing such a topic might change how people address menstruation in regards to the context of the Jordanian society, especially in underprivileged communities.

5. Discussion and Results

5.1 Access to Sanitary Products

Many women and girls around the world cannot afford sanitary products. Though some countries have lifted the tax on period products, which are considered luxury items for other countries who still impose taxes as a form of gender-based discrimination. However, gender

equality must commit to the notion that feminine hygiene products must be affordable, healthy, and available to all women given that periods are not only something that happens inside the women's bodies but are a huge part of the community and it affects its wellbeing. Therefore, sanitary products must be considered as a tax-free basic material in every house relative to products like bread, water, and sugar. Hence, this research defines the lack of access to sanitary products over three main levels; the low income which affects buying fair feminine hygiene products, the impact of the taxation on the prices of the sanitary products, and the distance between the residential areas and the local stores.

Poverty in Mafraq is the major indicator of the existence of period poverty in the governorate as the latest published report of the DoS of the situation of poverty in Jordan shows that based on the Expenditure Survey and family income in 2010, the poverty rate in Mafraq is 19.2%, compared to 14.4% in Jordan. On the other hand, the Household Expenditure and Income Survey report indicates an average decrease in annual family income in Mafraq Governorate of 7276.3 JOD, in comparison to the general average in Jordan which is 8823.9 JOD (MoPIC, 2017-2019, p.12). On the other hand, as maintained by the same report, the average monthly family income in Mafraq is 606.36 JOD which is already below the average in Jordan.

According to the representative sample of Mafraq as part of this study, the average perfamily income is (200-399) JOD (see figure 2), which is much below the monthly family income, and it costs 50.6% of these families (5-10) JOD to buy the pads monthly (see figure 3) based on the average number of women who menstruate in each family is three females (see figure 4).

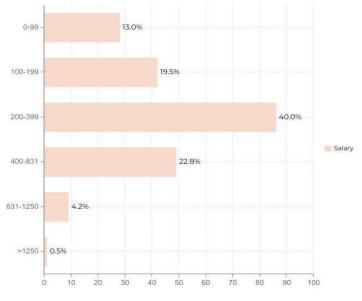


Figure 2: The average family income



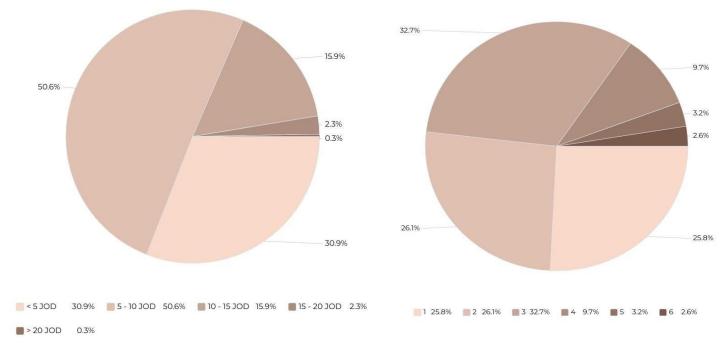


Figure 3: The average spent on menstrual hygiene products

Figure 4: Average number of females menstruating in the family

And in reference to (figure 3) of the average might spend on feminine hygiene products in this study, the amount represents almost 8% of the families' monthly salaries. The study also finds that 32.8% of breadwinners in Mafraq governorate cannot afford to buy feminine hygiene products monthly. As for the adequacy of feminine hygiene products, there are many components to be considered when identifying the suitable and safe products for women's bodies, such as the physical activities, cost, and ease of use. The most frequently chosen product for maintaining menstrual hygiene is pads and closely followed by tampons (UT Health Austin, 2020). Nevertheless, 31.6% of women in Mafraq use unhygienic materials during their periods, such as rags, cloth, sponges, newspapers, and baby diapers. In comparison, 69.8% of the women who are using harmful materials tend to use unsanitary cloth and rags (see figure 5).



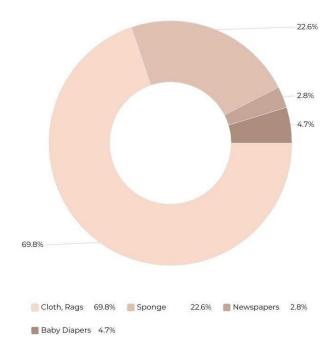


Figure 5: The materials used to manage menstruation

Another factor that also affects accessibility to sanitary products is the long distance between residential areas and the local stores. Due to the large area of Mafraq governorate, especially between inhabited areas, 44.9% of women, according to the sample, need (15-30) minutes to get to the nearest store to buy any menstrual hygiene product (see figure 6).

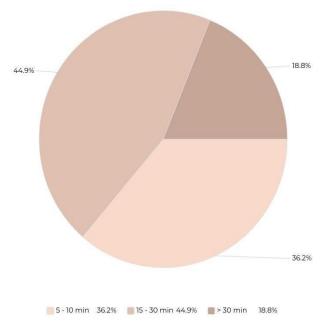


Figure 6: The time it takes to reach the nearest supplier



5.2 Water, Sanitation and Hygiene (WASH)

Menstrual health is essential to maintaining women's productive health, well-being, and health in general, which goes in line with the SDGs, yet millions of girls and women around the world are denied the right of accessing a good WASH infrastructure which raises the issue of period poverty. Where periods are a monthly hormonal internal process that comes with hygienic requirements that require to comply with the external circumstances of MHM, it is poor in Mafraq governorate as the findings of this research indicates.

This research was constructed to disaggregate the questions into three main categories relating to WASH which include: availability, accessibility, quality of water, access to sanitation, and hygiene infrastructure and services.

5.2.1 Water

Jordan is considered the second most water-scarce country in the world (UNICEF, 2017), where an individual in Mafraq receives less than 98.5 m³/capita/year of water (MoPIC, 2017). This is considered less than the estimated required amount for water consumption, in comparison to the international Absolute water scarcity level that equals 500 m³/capita/year. (FAO, 2012).

On the other hand, the total amount of water which is pumped from the MWI to the targeted population holds large amounts of non-revenue water, which is the leakage, theft, evaporated, and faulty metering of water, which cuts the amount of water an individual receives in Mafraq by 53% (MWI, 2016). This data is confirmed by the results shown in this study as one-third of the research sample does not have regular access to water in their toilet (see figure 7), and 28% confirmed that the water reaching them contains turbidity and a presence of an unpleasant color or smell (see figure 8).

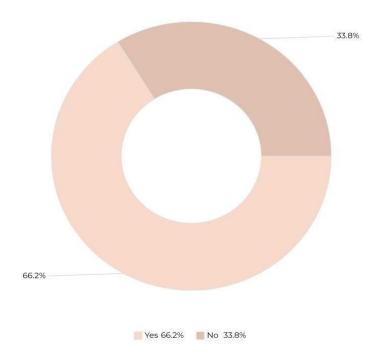


Figure 7: Constant Water Availability in Toilets

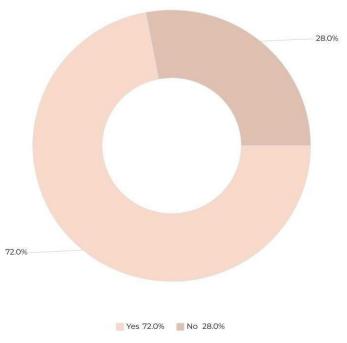


Figure 8: Presence of Problems in Municipal Water



5.2.2 Sanitation

The accessibility to safe facilities for human waste disposal in addition to having the ability to maintain hygienic conditions (CDC, 2018). and menstruation has become a concern for women and girls, whether at home or in public due to sanitation. Therefore, sanitation facilities are the only space for them to safely manage their periods. However, for these facilities to fulfill their purpose, they must contain a set of essential elements regarding the required specifications and tools according to the female-friendly toilet key components as set by IRC shown in (figure 9). The targeted sample was asked about the adequacy of their used toilets and the results in show that 38% of toilets are inadequate (see figure 10) and lack key components that female-friendly toilets require (see figure 11).

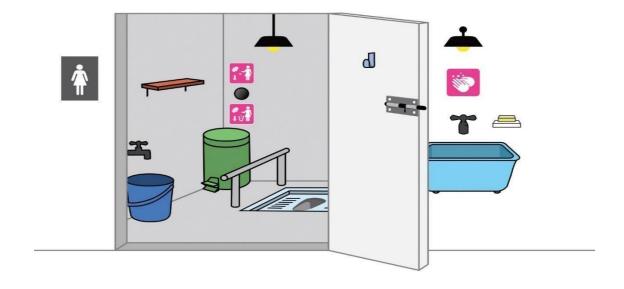


Figure 9: Female-Friendly Toilets Key Components. Source: IRC, 2020

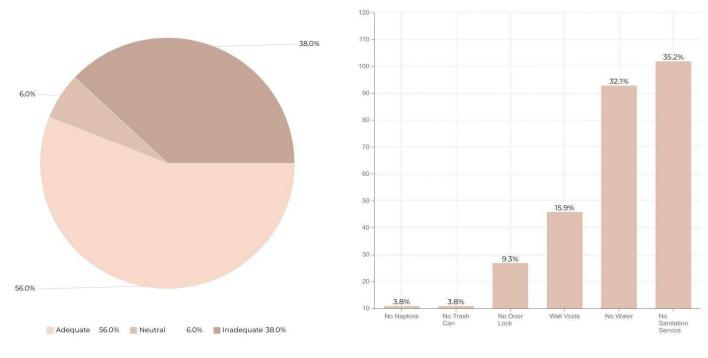


Figure 10: Toilets Adequacy

Figure 11: Missing Key Components in Toilets

Furthermore, as a result of the poor sanitation infrastructure, the target group participants were asked about the negative feelings they experience regarding menstruation. The results show that the vast majority of women and girls are suffering from sanitation-related psychosocial stresses because of the available WASH infrastructure and services (see figure 12), showing that more than 314 of 345 women or 91% of our sample display negative emotions during their

menstruation cycle.

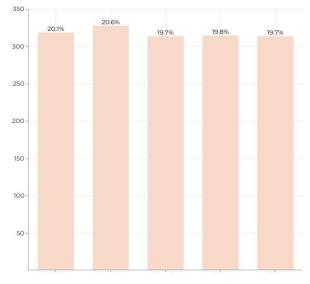


Figure 12: Sanitation-Related Stresses



5.2.3 Hygiene

It is the conditions and practices that help maintain health and prevent the disease prevalence, by maintaining personal hygiene (Ministry of Health and Medical Services, Solomon Islands, 2021). Poor hygiene expands to become a serious issue during menstruation, especially where the difficult economic conditions, bad education, and social patterns that stigmatize the menstrual cycle have become matters that prevent achieving personal hygiene.

As this study finds, menstruation is strongly associated with social myths and taboos. Most of these myths result in practicing habits that are unhygienic and might affects women and girls' health. In this study, it is found that 58.7% of the sample do not shower during their menstruation due to inherited myths like showering during menstruation might cause reproductive system diseases, disorders, and cancers (see figure 13).

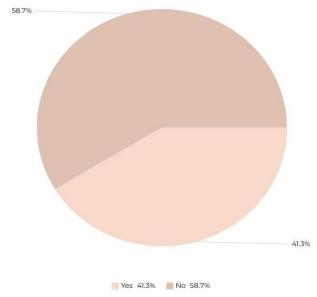


Figure 13: Do you shower when menstruating?

Given that poor hygienic practices cause diseases and disorders, the right to public health is not guaranteed in Jordanian legislation, and this means the denial from the right of health services, adequate sanitation, health-related education and information, and other health-related rights.

Besides, poor MHM can pose physical health risks and has been identified as the cause of reproductive and urinary tract infections (UNICEF, 2018). Also, most studies associate unsafe menstrual management with the reproductive tract infections (RTIs) (Torondel, B., Sinha, S.,

Mohanty, J.R. et al., 2018.p2). In addition to that, Dr. Sawsan Majali stressed that period poverty, especially the lack of access to safe and healthy feminine hygiene products or using the unhygienic material are responsible for severe infections of the vagina, vulvovaginitis, skin irritation, and vagina odor. The study also demonstrates that many women use unhygienic materials to manage periods which impose risks to their health. Moreover, a menstruating female should change pads at least every 3 to 4 hours to avoid odor from bacteria growth, leaks, aches, discomfort, smell, irritation which could lead to major infections (UT Health Austin, 2020). However, 35.8% of women in Mafraq according to the sample change their pad only once a day

(see figure 14).

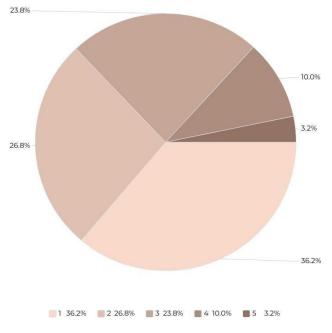
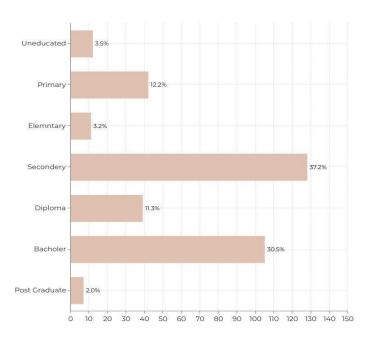


Figure 14: How many pads does a woman use per day?

5.3 Education

Menstrual education provides information on WASH, sanitary products and their disposal process, and basic menstrual hygiene and health education to lead MHM. Given that there is an extensive and rapidly growing need to cover menstrual topics, there is a lack of accurate puberty education and menstrual awareness which is considered to be a major factor affecting poor MHM. Girls generally have no menstrual education, facing menarche shock, shaming, and fear of seeking medical attention when required (UNFPA, 2017). This results in a lack of knowledge about women's bodies and management of menstruation itself, which leads to poor menstrual habits, misconceptions and more taboos regarding women's bodies.

As Mafraq ranks the second governorate in the highest rate of illiteracy among women at 11.5% (DoS, 2020), 3.5% of this study's sample are illiterate and 52.5% did not complete their formal education. This shows that 7 in 10 women did not receive any proper education nor presumably correct information about their menstruation (see figure 15). Moreover, 42.2% of these women have not been introduced to menstrual education at school (see figure 16). On the other hand, 58.1% of women did not get any additional or complementary reliable information on menstruation from different resources like books, social media platforms or worship places (see figure 17). These are considered credible resources because of the information and guidance from communities as highlighted by Mahmoud Nabulsi during the interview. These percentages show lack of menstrual education which justifies the harmful habits practiced by women when menstruating. This study also highlights that the scarcity of menstrual education led 48.6% of women not to use reusable pads because of the lack of information on them. 34% of these women think these products cause infections (see figure 18). On the other hand, 59% of the sample mentioned that they avoid bathing when menstruating because they were taught that it negatively affects their menstruation.



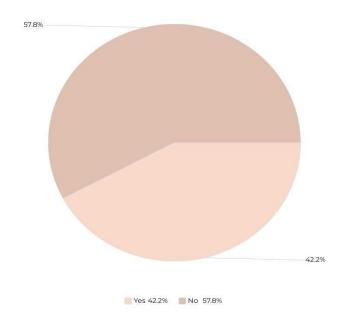


Figure 15: Education levels among women in Mafraq

Figure 16: Have you received any education on menstruation at school?



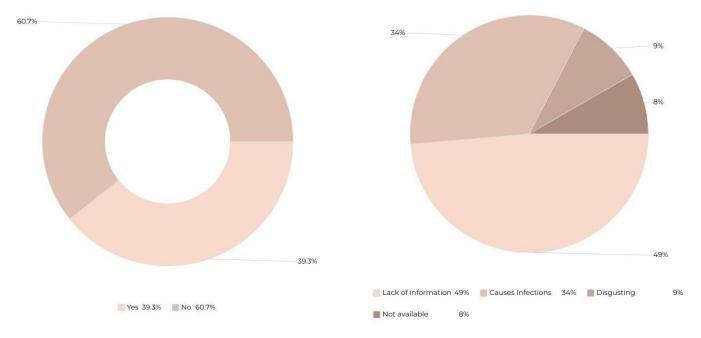


Figure 17: Have you received any additional information on menstruation from other resources?

Figure 18: Reasons behind not using reusable pads

The other barrier is related to the quality and variability of menstrual content and topics covered in the school curricula resulting in an accumulation of beneficial information. Mahmoud Nabulsi mentioned that reproductive health education is being barely and superficially covered in the school curricula based on the values matrix provided by the Ministry of Education which depended on the openness of schoolteachers and their cultural backgrounds. Nevertheless, teachers report that they do not always feel it is their role nor that they have the skills to educate girls on menstruation. Though girls report that male teachers are likely to tease them. A study from MESDAR notes that students are keen to be taught by someone other than their homeroom teacher, as they cannot speak freely and are afraid to be punished (UNFPA, 2018). Moreover, men and boys are mostly excluded from being introduced to such topics which increases the stigma and misconceptions on menstruation, as Mahmoud Nabulsi emphasized. As a result, females and males will rely on misleading resources to gain reproductive health and menstrual information. They may also avoid learning about these essential topics. As this study shows, this leads women to rely on different resources to get more information about their menstruation regardless of the accuracy of this information (see figure 19). Moreover, 40.5% of women admitted that the menstrual and puberty information they received from their first resource was not adequate (see figure 20).



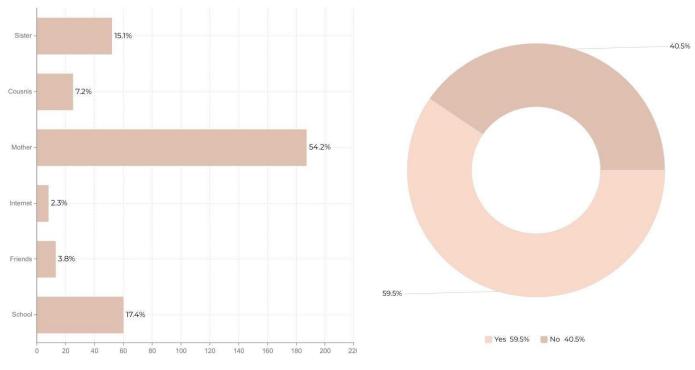


Figure 19: The first resource women learned about menstruation from

Figure 20: The adequacy of information provided by the first resource

5.4 Stigma and Indignity

"We consider menstruation shameful and no one admits that it does exist!" This is how one of the women answered when asked about the problems she faces when menstruating. Menstruating females are usually considered untouchable, dirty, and disgraceful. With all the obstacles females may face regarding the lack of access to feminine hygiene products, shortage of suitable water, sanitation and adequate toilets, and the lack of education, most women and girls have to suffer in silence due to the stigma associated with menstruation forcing indignity upon them. Stigma or shaming, which prevents people from healthily managing their periods, usually stems from harmful myths, restrictions, and traditions. Most likely, topics regarded as taboos and shameful prevent people from asking for support or help. Hence, menstruation is considered a taboo topic to be discussed or mentioned in many places in the world. This study finds that women aged between 18 to 51 in pockets of poverty in Mafraq governorate are ashamed of the fact that they menstruate. This study found that 7 in 10 of the sample find embarrassment a problem that prevents them from managing their period sufficiently. Thus,



limiting their sense of control over their menstruation processes and management. The study also finds a direct correlation between the level of embarrassment and the marital status; showing that 49.3% of the single, divorced, or widowed women feel more embarrassed of their periods than married women.

Moreover, due to the shaming associated with menstruation and the embarrassment women and girls feel in buying menstrual materials, the study shows that in Mafraq, 45.4% of women can't buy the products themselves in fear of shaming, sexual harassment or due to reasons associated to poor MHM (see figure 21). Instead, they ask the males in the family; spouse, son, or brother, to get them the products to avoid being seen buying them in public. Moreover, the use of certain products is also associated with the marital status of women. In Mafraq specifically, the study shows that the use of tampons among the sample is quite limited due to the financial status and the unavailability of the tampons in poverty pockets. However, it is also associated with the myth that tampons cause girls to lose their virginity. The study shows that only 3.4% of the participants use tampons, and all of them are either married, divorced, or widowed (see figure 22). On the other hand, In the focus group discussion held with the volunteers, when asked about their experience and whether they experienced shaming, most of the answers were that people were surprised that they are working on the topic and made fun of them. One of the volunteers was shouted at and most of them experienced rejection from people and refused to fill out the survey due to embarrassment or shaming.

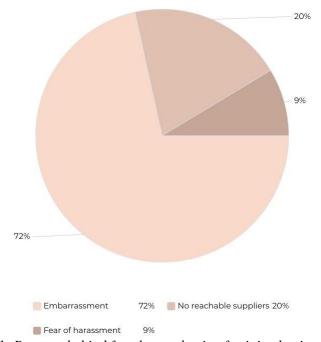


Figure 21: Reasons behind females not buying feminine hygiene products



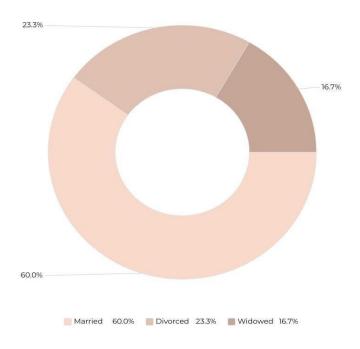


Figure 22: The martial status of women using tampons

While the social taboos and stigmatization affect females' ability to manage their periods in dignity, in Mafraq, when women are asked about the beliefs they have about menstruation, 87% of the answers were negative myths that affect women's dignity and stigmatize them (see figure 23). The remaining answers were positive beliefs or habits that help them to manage their periods effectively. On the other hand, this study shows that 77.2% of the sample labels period with other names that do not refer to menstruating directly because of the fear of discrimination or shaming (see figure 24).

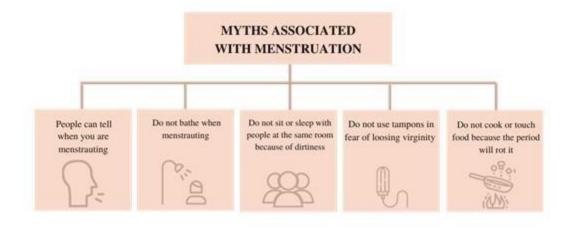


Figure 23: Myths on menstruation

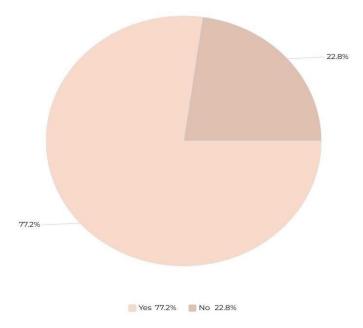


Figure 24: do you prefer to call the period with other names out of embarrassment?

6. Period Poverty and SDGs

PERIOD POVERTY AND SUSTAINABLE DEVELOPMENT GOALS

Lack of



Figure 25: How does period poverty affects achieving the SDGs



The importance of emphasizing period poverty emanates from its inextricable linkage to the SDGs which the UN implemented in 2015 with hopes of achieving a better future for all. Though MHM is not explicitly mentioned in any of these proposed goals, it is linked to at least four to achieve them. However, with period poverty being an issue, these goals will not be attainable, as demonstrated in (figure 25). On the other hand, poor menstrual hygiene practices can pose risks to women's health, safety, and well-being due to the lack of and cost of menstrual supplies.

The lack of access to sanitary products contrasts greatly with goal 3 to achieve "good health and well-being" considering being exposed to harmful and potentially serious infections due to the use of unhealthy feminine products is a huge health danger. Moreover, the most suitable way to ensure that all women have good health during their periods is to ensure a fair distribution of healthy feminine hygiene products to be available to all women at affordable prices and in good quality. Dr. Sawsan Majali, during the interview with her remarked that most of the disposal pads here in Jordan are not made from natural material and include some plastic which causes a lot of gynecological diseases. Moreover, women in Mafraq who live in challenging economic conditions are forced to use unhygienic products such as old dirty cloths, rags and newspapers.

In the light of SDGs, the lack of access to WASH services and infrastructure overlaps mainly with Goal 6: "Ensure access to water and sanitation for all" to preserve health and well-being. But based on the research results, the quantity and quality of the water received by the target group do not meet the standards of safe and adequate water use. In addition, the used sanitation facilities lack the basic requirements to be safely used, which will necessarily lead to create or exacerbate conditions in which the diseases are rapidly transmitted. That means most women and girls manage their periods in unhygienic conditions which makes other related goals like goal 11, that is directly concerned with providing basic services including WASH services, and goal 3 that is concerned with fighting communicable diseases including water-borne diseases and maintaining hygienic WASH services.

Furthermore, menstrual education is an integral part of achieving. However, the barriers and limitations on menstrual education prevent achieving the fourth goal, which aims to "Ensure inclusive and equitable quality education and promote lifelong learning for all", in which

menstrual education must be part of. Additionally, this education should target both genders to ensure inclusive education on the topic. This education is part of the lifelong goal to achieve gender equality and ensure the proper awareness of ensuring that women receive their basic human right of managing their periods sufficiently and in dignity, which is only achieved through equitable and inclusive education.

In reference to goal 5 which aims to "achieve gender equality and empower all women and girls," the social taboos and myths and stigma associated with menstruation prevent women prevent social inclusion and stop females from advancing their human capital accumulation. This results in disablement of achieving goal 5 of the SDGs of acquiring a better and more sustainable future for all by achieving gender equality through empowering women and girls. The reference to the number of women in Mafraq who are ashamed of their periods indicates that these women lack the sense of control over their periods and may be socially excluded and in need of empowerment.

Moreover, according to UN news, Jordan's Voluntary National Review delegation affirmed that achieving the SDGs is linked to the conflict situation in the region, refugees' influx and it will be more dependent on the commitment of the international community to fulfill its obligation to the refugee-host countries like Jordan (2017). which means there is no guarantee that Jordan will achieve the SDGs by 2030.

7. Demographic Data

The case study surveyed 346 women between the ages of 18-51 with varying nationalities which are Jordanian, Palestinian, Syrian, and Iraqi (see figure 26) who live in six pockets of poverty in Mafraq. The study included women from various social and employment status and academic backgrounds. About 36.6% of women from the sample aged between 35-44 years, 56.4% the women are married, 37.2% of them are secondary school graduates, 73.7% of women do not work and 53.8% of working women are pursuing day to day jobs (see figures 27-30). According to the sample, the average number of family members is 5.58 (see figure 31).

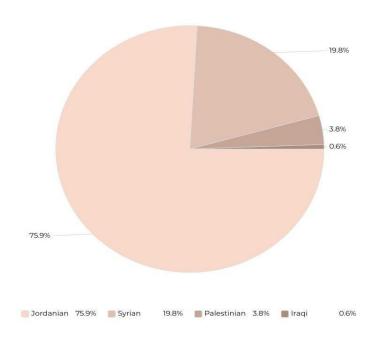


Figure 26: The nationalities of the study sample

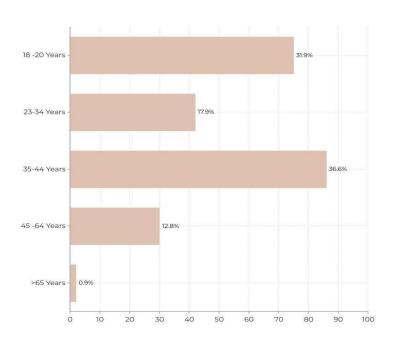


Figure 28: The age groups of this study

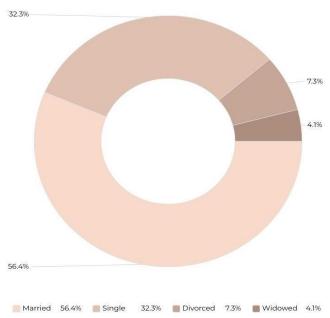


Figure 27: The Martial status of the study sample

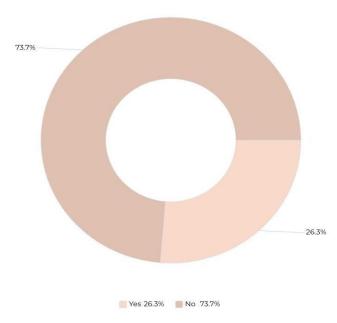


Figure 29: Employment



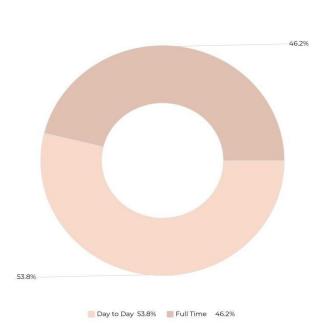


Figure 30: Women's job contracts

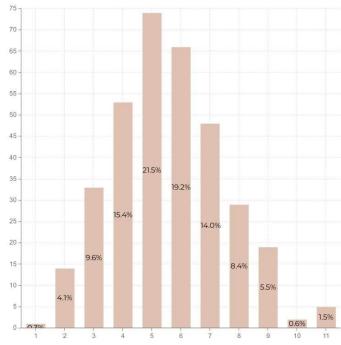


Figure 31: Number of family members

8. Challenges and Solutions

Sensitivity of the Topic



This challenge was solved with the help of CBOs, as they paved the way for the idea of working on this sensitive topic with the local community in collaboration with them. However, not everyone accepted to be interviewed.

Limited Studies & Research



This challenge was solved by reading and reviewing international studies and research papers that cover parts of the research. However, local studies rarely exist and almost all of this paper is based on primary data collected by the team.

Outdated Statistics



This challenge was not solved, because the DoS did not publish any report since 2010, so all the used numbers from the department are outdated.

COVID-19 Pandemic



This challenge was solved by conducting a lot of meetings, interviews and focus group discussions through Zoom platform. However, the pandemic limited the reach of the team.

Vast Area of Mafraq



This challenge was solved by collecting primary data through local volunteers from different districts in Mafraq.

Ineffectiveness of the Private Sector



This challenge was not solved, because the private sector was not cooperative and refused to assist in any part related to the research.

9. Recommendations and Conclusion

Governmental Policies

One of the main components that result in period poverty is the limited access to sanitary products due to the financial status of women residing in poverty pockets. To overcome this limited access, a response to reduce or lift the taxes on menstrual products should occur. This can cover two areas; lift or reduce any tax imposed along with the production and sales process; Value-Added Tax or sales tax, and lift or reduce any tax imposed on products or raw materials.

On the other hand, this study indicates that a lot of women suffer from infections and diseases due to poor MHM. Hence, the right of public health should be recognized as it's not part of the Constitution of The Hashemite Kingdom of Jordan. If this right is recognized, women can pursue healthcare or professional consultancy rather than pursue false treatment following the social myths. However, the right of public health is not limited to health care only. Furthermore, it will solve the roots of period poverty as the right to public health, according to OHCHR, will provide the care to ensure the health of public; mentally or physically, the right to access safe and drinkable water and its adequate facilities, the right to access safe goods and products including MHM products, the right to access health-related education and information which will also terminate the social taboos and myths associated with periods, and lastly gender equality (OHCHR, 2008).

Provide Menstrual Hygiene Products

Another major issue that causes period poverty is the limited access to menstrual products. Many solutions can address the limited access to these products. One of them can be convenient to poverty pockets because of its sustainability, which is providing low-cost sanitary pad producing machines in local markets to provide affordable pads and at the same time, utilize labor force, who will be most likely women, in order to break the social taboo of buying sanitary products from men.

Another solution to solve the limited access to sanitary products due to financial difficulties can be through providing menstrual hygiene products subsidies similar to the bread subsidies provided in Jordan, in which families with low income can apply to online in order to benefit from this and to be aided with an amount of money monthly so women and girls in the family can afford buying feminine hygiene products.

Distributed coupons is also a recommended solution to aid women to access sanitary products. This can be done by providing women in need menstrual coupons based on their income which they can exchange in local markets for pads.

On the other hand, many countries consider reusable pads instead of disposable pads for many reasons, including phasing out the financial burden of disposable pads. However, reusable pads may not be a favorable option in Jordan because of water scarcity. Nevertheless, an alternative option is to use reusable pads with natural topper fabric rather than synthetic. These reusable pads with natural fabric consume less water when washing than the ones with synthetic fabric, which was confirmed by Dr. Sawsan Majali.



Education, Awareness and Advocacy

The study results show a huge need for evidence-based MHM educational materials to cover key topics to lead MHM. Hence, the research team seeks a collaboration with the Royal Health Awareness Society (RHAS), which develops and implements public health and safety awareness programs in partnership with the public and private sectors as well as civil society organizations, and the Ministry Of Awqaf And Islamic Affairs to provide capacity-building training for community educators and religious leaders, who are considered credible figures based on this sample, on MHM. These figures can lead credible awareness programs directed to the community by promoting MHM and break the social taboo.

A gap has been found in engaging males in receiving MHM education, which is vastly associated with social taboos and discrimination a female might face on menstruation. Hence, a dedicated educational program in partnership with the Ministry of Education should be directed to males to aid females to lead MHM safely and in dignity.

Nevertheless, the study finds the default in school curricula in providing the necessary formal education a female might receive in school, consequently affecting correct knowledge a female might benefit from for her lifetime. Hence, a complete restructure of school curricula that consider an inclusive and equitable process for all is needed.

An innovative solution for the lack of education and the need for credible information on MHM is to conduct a collaborative project with the MoH to create an online platform in which all reliable and correct information can be found there. Furthermore, a free consultancy service can be part of this platform where females can receive beneficial information they need based on their condition. This also can be a convenient solution due to the unexpected lockdown the world witnessed due to COVID-19 where females were not able to seek medical treatment or consultancy related to menstruation.

References and Databases

The research team has depended primarily on the data collected from the surveys with almost no reference to any other existing data on MHM in Jordan. Hence, this shows the gap MHM faces in Jordan with no tracking system to stress period poverty. Therefore, a systematic database should be build in collaboration with MoH and its institutions and the Royal Health Awareness Society (RHAS) covering the numbers of women who menstruate in Jordan, the prices of menstrual hygiene products in comparison to households income, the adequacy of toilets to lead MHM, and the educational system and how does it address menstruation.

10. References

- Torondel, B., Sinha, S., Mohanty, J.R. et al. Association between unhygienic menstrual management practices and prevalence of lower reproductive tract infections: a hospital-based cross-sectional study in Odisha, India. BMC Infect Dis 18, 473 (2018). 2, https://doi.org/10.1186/s12879-018-3384-2
- UT Health Austin. (2020). *Period Products: The Good, the Bad, and the Ugly*. https://uthealthaustin.org/blog/period-products.
- UN News. (2017). *Jordan presents the voluntary national review and roadmap for achieving the sustainable development goals*. United Nations. https://news.un.org/ar/story/2017/07/279652
- United Nations Population Fund (UNFPA). (2020). Menstrual Hygiene Management in Emergencies: Perspectives and Practices from the Arab Region.

 https://arabstates.unfpa.org/sites/default/files/pub-pdf/mhm_web_ver_31-12-2020.pdf
- Your Period. (2017.). *Your First Period*. https://www.yourperiod.ca/normal-periods/your-first-period/
- Tull, K. (2019). *Period poverty impact on the economic empowerment of women*. K4D Helpdesk Report 536. Brighton, UK: Institute of Development Studies. p.1.
- United Nations Economic and Social Commission for Western Asia (ESCWA). (2017). *Arab Multidimensional Poverty Report*.

 https://archive.unescwa.org/sites/www.unescwa.org/files/publications/files/multidimensional-arab-poverty-report-english.pdf
- World Bank. (2020). *Poverty & Equity Brief*. World Bank Group.

 https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_JOR.pdf

Department of Statistics (DoS). (2020). *Illiteracy Rate for Jordanian Aged 15+ Years by*(Females/Head of Household), Governorate and Time.

http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS_Database/START_14_1405/WOM_T21/

Ministry of Planning and International Cooperation (MoPIC). (2017). *Mafraq Governorate Development Program*, 2017-2019.

United Nations International Children's Emergency Fund (UNICEF). (2017). Water, sanitation and hygiene:Access to safe water and sanitation for every child.

https://www.unicef.org/jordan/water-sanitation-and-hygiene

Food and Agriculture Organization (FAO). (2012). *Coping with water scarcity: An action framework for agriculture and food security*. http://www.fao.org/3/i3015e/i3015e.pdf

Ministry of Water and Irrigation (MWI). (2016). *Water Reallocation Policy*. p.1. http://extwprlegs1.fao.org/docs/pdf/jor159136.pdf

International Rescue Committee (IRC). (2020). *Key Components of a Female-Friendly Toilet* [Infographic]. *Menstrual Hygiene Management (MHM) Compendium of Solutions*. https://rescue.app.box.com/s/jd49gvfbuloeb63uoj98m5s9ps8zmloc

Ministry of Health and Medical Services, Solomon Islands. (2021, May). *Healthy Village Facilitator's Guide: Water Supply, Sanitation and Hygiene (WASH)*. Japan International Cooperation Agency.

- https://www.jica.go.jp/project/solomon/002/materials/ku57pq00003um0e9-att/Water_Sanitation_and_Hygiene.pdf
- Ministry of Water & Irrigation (MWI). (2016). *National Water Strategy* 2016 2025. http://extwprlegs1.fao.org/docs/pdf/jor156264E.pdf
- AL-Mefleh, Naji & Alayyash, Saad & Khaled, Fatima. (2019). Water management problems and solutions in a residential community of Al-Mafraq city, Jordan. Water Science & Technology Water Supply. 19. 1371-1380. 10.2166/ws.2019.003.
- Department of Statistics (DoS). (2010, July). Report of Poverty Status in Jordan "Based on the Household Expenditures & Income Survey data 2008."

 <a href="http://www.dos.gov.jo/dos_home_a/main/Analasis_Reports/poverty_rep/Jordan_%20Poverty_%20Jordan_eng_2008#:~:text=The%20highest%20percentage%20of%20poverty,%25%20and%20Aqaba%3A%2011.8%25
- Snel, M., & da Salva Wells, C. (2014, May). Why focus on menstrual hygiene management? IRC WASH. https://www.ircwash.org/blog/why-focus-menstrual-hygiene-management
- Centers for Disease Control and Prevention (CDC). (2017, June 22). *Global Water, Sanitation, & Hygiene (WASH): Sanitation & Hygiene*.

 https://www.cdc.gov/healthywater/global/sanitation/index.html
- United Nations Children's Fund (UNICEF). (2018, May). FAST FACTS: Nine things you didn't know about menstruation. https://www.unicef.org/press-releases/fast-facts-nine-things-you-didnt-know-about-menstruation
- United Nations Population Fund (UNFPA). (2018, May). *Menstrual Health Management in East and Southern Africa: a Review Paper*. UNFPA ESARO.

 https://esaro.unfpa.org/sites/default/files/pub-



pdf/UNFPA%20Review%20Menstrual%20Health%20Management%20Final%2004%20 June%202018.pdf

Franciscan Health. (2019, March 05). *First Signs of Perimenopause*. https://www.franciscanhealth.org/community/blog/first-signs-of-perimenopause

United Nations Population Fund (UNFPA). (2021, June). Women and girls share their first experiences with menstruation. https://arabstates.unfpa.org/en/news/women-and-girls-share-their-first-experiences-menstruation

United Nations High Commissioner for Refugees (UNHCR). (2021, July 21). Total Registered Syrian Refugees: Mafraq Governorate.

 $\underline{https://data2.unhcr.org/en/situations/syria/location/36}$