Country of origin disparities in menstrual hygiene management
and intersecting reproductive health concerns:
a pilot study from the Dominican Republic

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Introduction

Period poverty in rural Dominican Republic (DR):

- 40% of women lack access to menstrual products, leading to use of unsafe alternatives and health risks.
- 45% receive inadequate menstrual education, and further stigma causes 1 in 5 girls to miss school every month [1–6].

Challenges for Haitian migrants:

- Stateless Haitian migrants face systemic exclusion and lack basic infrastructure, healthcare, and reproductive services.
- Haitian women endure suboptimal menstrual and contraceptive care [7–9].

Study focus:

- Evaluated menstrual hygiene and reproductive health challenges in a low-income, migrant-dense community in rural DR to tailor future interventions.

Methods

- **Survey:** Anonymous cross-sectional survey evaluated reproductive health-related factors among women in a low-income community near Santo Domingo.

- **Participants:** Females ≥14 years old and who had menstruated in the past 12 months.

- **Analysis:** Modified Poisson regression identified factors associated with suboptimal menstrual hygiene management (MHM)—defined as lack of water and/or soap, privacy, or safe menstrual products.
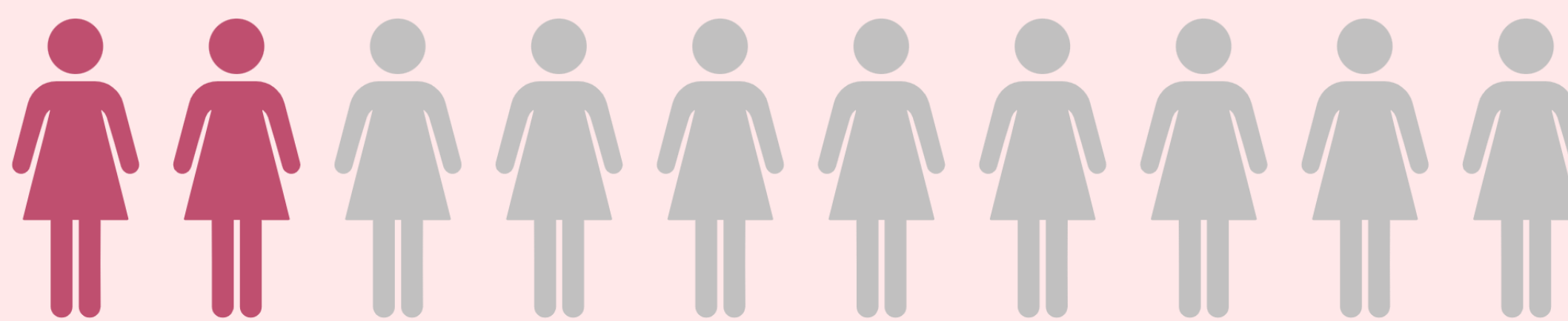
Results

Among 148 participants:
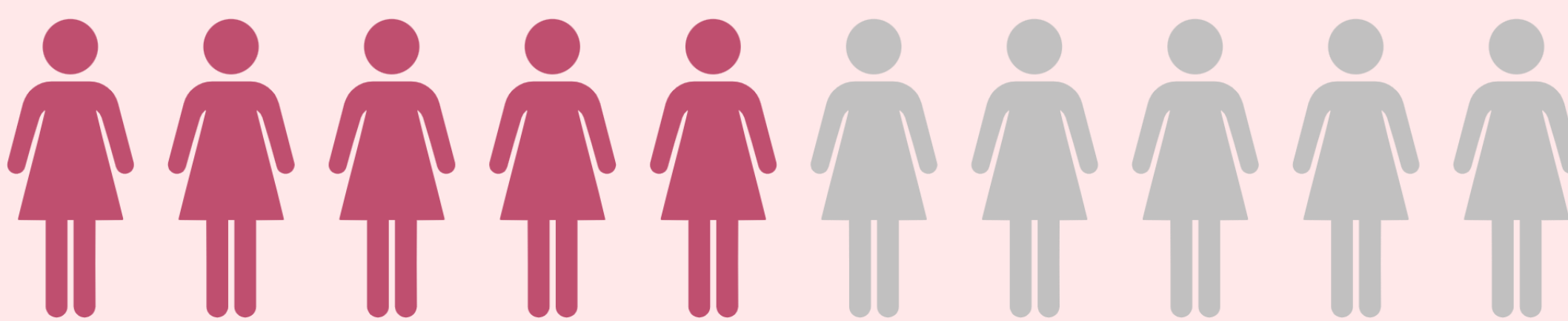
Over 50% said menstrual materials were unaffordable sometimes (43.5%) or always (9.5%).
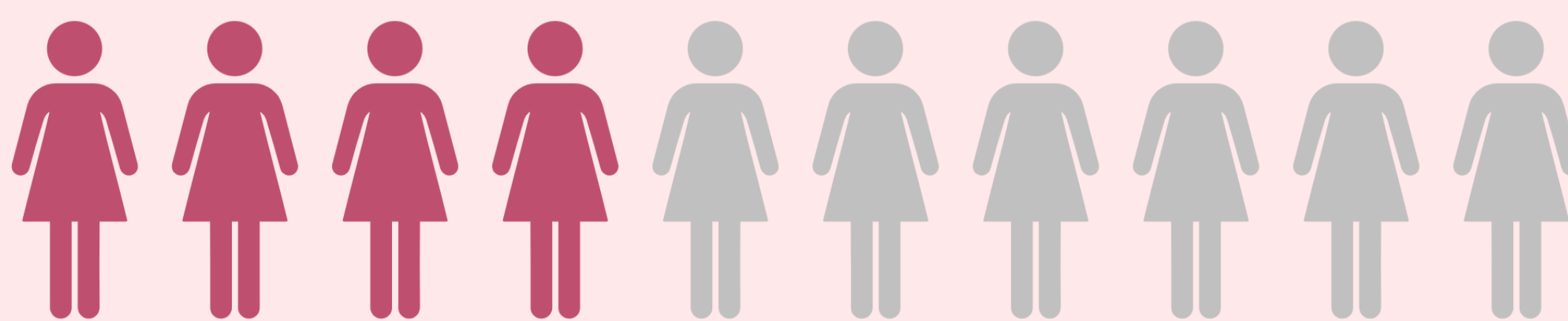
Nearly 40% said menses interfered with their regular duties including school or work.

Over 20% had suboptimal MHM defined by lack of privacy (4.1%), lack of soap (8.7%), or use of unsafe materials such as cloth or underwear/diapers (14.2%).

Haitian-born women were more likely to have suboptimal MHM even after adjusting for age, educational attainment, employment status, and menstrual product affordability.

Table 1. Crude and multivariable regression: Factors associated with suboptimal menstrual hygiene management.

	Crude Prevalence Ratio (95% CI), p-value	Adjusted, N=144 Prevalence Ratio (95% CI), p-value
Haitian born (vs. Dominican Republic)	9.13 (3.72 – 22.4), <0.001	**7.25 (2.85 – 18.4), <0.001**
Median Age in Years	1.01 (0.98 – 1.05), 0.384	1.01 (0.98 – 1.05), 0.437
Primary or less educational attainment (vs. some secondary or more)	1.90 (1.04 – 3.47), 0.037	1.13 (0.63 – 2.03), 0.688
Unemployed (vs. employed)	1.81 (0.90 – 3.65), 0.096	1.25 (0.68 – 2.31), 0.478
Past 6 months: Menstrual products unaffordable sometimes or always (vs. never)	2.69 (1.29 – 5.61), 0.008	1.81 (0.92 – 3.56), 0.084

Sub-optimal MHM intersected with other reproductive concerns including poorer health status, scarcer use of reliable contraception, lower rates of prenatal care, and more prevalent contraceptive gap.

Table 2. Distribution of health and reproductive health factors by sub-optimal MHM and country of birth.

	Sufficient MHM, N=116 n (%)	Sub-Optimal MHM, N=32 n (%)	p-value	Dominican, N=93 n (%)	Haitian, N=55 n (%)	p-value
Health status						
Poor	23 (19.8)	15 (46.9)	0.004	10 (10.1)	28 (50.9)	<0.001
Average	80 (69.0)	17 (53.2)		71 (76.3)	26 (47.3)	
Excellent	13 (11.2)	0 (0)		12 (12.9)	1 (1.8)	
Reliable contraception: Injectable, implant, sterilization, IUD, or pill						
No	34 (31.5)	17 (56.7)	0.011	29 (33.0)	22 (44.0)	0.196
Yes	74 (68.5)	13 (43.3)		59 (67.0)	28 (56.0)	
Prenatal care at last pregnancy[1]						
No	5 (4.7)	6 (20.7)	0.005	3 (3.6)	8 (15.4)	0.021
Yes	102 (95.3)	23 (79.3)		81 (96.4)	44 (84.6)	
Contraceptive gap: Not pregnant, does not want to get pregnant, not using reliable contraceptive						
No	72 (75.0)	13 (50.0)	0.014	57 (74.0)	28 (62.2)	0.171
Yes	24 (25.0)	13 (50.0)		20 (26.0)	17 (37.8)	

[1] Excludes participants who report being not currently pregnant and never having been pregnant.

Conclusions

- **Menstrual hygiene management challenges are prevalent** in this low-income, migrant-dense community.

- **Haitian-born women are more vulnerable to having suboptimal MHM** compared to Dominican-born women.

- **Suboptimal MHM intersects with other reproductive health concerns** including lack of prenatal care and lack of reliable contraception, especially among women who do not want to get pregnant.

- Our study underscores the pressing need to **improve menstrual hygiene and reproductive care resources for migrant populations in the DR.**

References

1. Sadhu M. Menstrual attitudes and practices in the rural Dominican Republic. Published 2022. Accessed October 8, 2024. http://hdl.handle.net/10150/669859.
2. Elledge MF, Muralidharan A, Parker A, Ravndal KT, Siddiqui M, Toolaram AP, Woodward KP. Menstrual Hygiene Management and Waste Disposal in Low and Middle Income Countries–A Review of the Literature. Int J Environ Res Public Health. 2018 Nov 15;15(11):2562. doi: 10.3390/ijerph15112562.
3. Sebert Kuhlmann A, Peters Bergquist E, Danjoint D, Wall LL. Unmet Menstrual Hygiene Needs Among Low-Income Women. Obstet Gynecol. 2019;133(2):238–244. doi:10.1097/AOG.0000000000003060.
4. Crichton J, Okal J, Kabiru CW, Zulu EM. Emotional and psychosocial aspects of menstrual poverty in resource-poor settings: a qualitative study of the experiences of adolescent girls in an informal settlement in Nairobi. Health Care Women Int. 2013;34(10):891–916. doi:10.1080/07399332.2012.740112
5. Rheinlander T, Gyapong M, Akpakli DE, Konradsen F. Secrets, shame and discipline: School girls' experiences of sanitation and menstrual hygiene management in a peri-urban community in Ghana. Health Care Women Int. 2018:1–20. doi: 10.1080/07399332.2018.1444041.
6. Batey Relief Alliance. Always joined Batey Relief Alliance to fight menstrual poverty in Dominican Republic. Published April 19, 2022. Accessed October 8, 2024. https://bateyrelief.org/category/stories/
7. UN DESA (2015), International Migration Stock: The 2015 Revision, (database), United Nations. Department of Economic and Social Affairs, New York, www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml.
8. Tull P, Salusky I. Help-Seeking Among Women of Haitian Descent in the Dominican Bateyes. J Interpers Violence. 2022;37(17–18):NP15312–NP15335. doi:10.1177/08862605211016334.
9. Pelletier P. Reporting basics about migration and statelessness in the Dominican Republic from a human rights perspective. In: Foblets MC, Carlier JY, eds. Law and Migration in a Changing World. Springer; 2022. doi:10.1007/978-3-319-99508-3_7.