(स्थापना/ Established in 1956)
बेहतर भविष्य के लिए क्षमता निर्माण
Capacity Building for a Better Future

Menstrual Health Management (MHM) of Adolescents in Mumbai Slums

Identifying Gender Norms and Gaps

(2024)

FACT SHEET

Centre of Demography of Gender
International Institute for Population Sciences (IIPS)
(Deemed to be University)
Ministry of Health and Family Welfare,
Govt. of India

(स्थापना/ Established in 1956)
बेहतर भविष्य के लिए क्षमता निर्माण
Capacity Building for a Better Future

Menstrual Health Management (MHM) of Adolescents in Mumbai Slums

Identifying Gender Norms and Gaps

(2024)

FACT SHEET

Centre of Demography of Gender

International Institute for Population Sciences (IIPS)

Ministry of Health and Family Welfare

Government of India

Contributors

Aparajita Chattopadhyay

Shireen Jejeebhoy

Shinjini Ray

Gursimran Singh Rana

Debashree Sinha

Suggested citation: International Institute for Population Sciences (IIPS) and Centre of Demography of Gender (CDG).
Menstrual Health Management (MHM) of Adolescents in Mumbai Slums, 2024 Fact sheet
International Institute for Population Sciences, Mumbai.

For additional information about the Menstrual Health Management (MHM) of Adolescents in Mumbai Slums

Please contact:

Director/ Principal Investigators (MHM Project)
International Institute for Population Sciences (IIPS)
BSD Marg, Station Road, Mumbai- 400 088
Email: aparajita@iipsindia.ac.in
shireen@iipsindia.ac.in
sjejeebhoy@gmail.com

Website: https://www.iipsindia.ac.in

Importance of the research:

Menstrual health was not on the agenda of the International Conference on the Population and Development or the Millennium Declaration. Nor is it clearly reflected in any of the Sustainable Development Goal targets. Nevertheless, concerns about menstrual health are increasingly articulated among researchers and policymakers. Concerns are wide-ranging and encompass the experiences of women and girls of shame and awkwardness, the barriers or health issues they face in managing their periods, and the consequences they face, in terms of reproductive health and rights, and overall wellbeing. In 2022, the WHO recognized the urgent need to reverse this neglect. It called for action to recognize menstrual health as a health and human rights issue, not just a hygiene issue; and highlighted the need to ensure that women and girls have access to information and education about it, affordable menstrual products and an environment that enables safe menstrual health practices (WHO, 2022). Nine domains of menstrual health are considered key: awareness and understanding; stigma, norms, and socio-cultural practices; availability and accessibility of menstrual products; water and sanitation; disposal; empathy and support; clinical care; integration with other programmes; and financing (Plesons et al., 2021).

Period poverty persists in many Low and Middle Income Countries (LMIC), including India, in the form of adverse norms, stigma and taboos, limited access to period products, menstrual education, inadequate water, sanitation and hygiene facilities (Babbar et al., 2022). Evidence from India is particularly sparse with regard to the intersection of menstrual health and hygiene management and facets of existing systems in household, community, and broader programme implementation processes in resource-poor areas. Literature shows that premenstrual symptoms are the most common menstrual health disorders. Other issues include menorrhagia (heavy bleeding per cycle, lasting longer than 7 days, passing blood clots the size of a quarter or larger during period), dysmenorrhea (painful menstruation), irregular period, polymenorrhoea (periods occurring more frequently than usual, in which menstrual cycles are shorter than 21 days in length). oligomenorrhoea (periods occurring less frequently than usual, in which menstrual cycles are longer than 32 days), or hypermonorrhoea (duration of period > 7 days with heavy blood loss). Existing large-scale sample surveys, including the National Family Health Surveys, do not necessarily provide insight into MHM issues in urban slums. However, qualitative research has highlighted that unmarried young women's awareness remains limited and misconceptions about menstruation remain wide-ranging (Muralidharan, 2019)**.** Commercial products may be unaffordable or not consistently accessible for women and girls in low-income communities (Dasra, 2015). Gaps, however remain, including with regard to menstrual product usage, the extent of knowledge, norms and attitudes, menstruation-related practices and problems, and health-seeking behaviour, as obtained from representative samples.

There is a significant need to fill these gaps and build evidence on girls' and women's lived experiences of menstrual issues in resource-poor urban slums. The project *Menstrual Health Management (MHM) of Adolescents in Mumbai Slums: Identifying gender norms and gaps* aimed to answer the following questions: Are girls well-informed about and prepared for menstruation? How do they react at the time of their first menstrual experience? What norms does the household follow with regard to menstruation? How do girls obtain hygienic menstrual products, and do they use these regularly? How do they address WaSH issues during menstruation? With whom do they share menstruation-related questions and difficulties? To what extent does the social and physical environment influence menstrual health and related practices? What is the role of boys and young men in supporting girls and women during menstruation, in terms of knowledge, attitudes, supportive behaviours, and so on? What role do the community health workers, school teachers and parents play in informing and supporting girls and young women with regard to MHM? What do girls, young women, boys, and young men recommend in order to improve MHM?

Coverage:

The project *Menstrual Health Management (MHM) of Adolescents in Mumbai Slums: Identifying gender norms and gaps* is funded by the Bill and Melinda Gates Foundation that supports the Centre of Demography of Gender (CDG) at the International Institute for Population Sciences (IIPS), Mumbai, a Deemed to be University under the aegis of the Ministry of Health and Family Welfare, Government of India. The study includes three components: a survey of 1275 girls and young women (ages 12-24), a parallel survey of 584 boys and young men (ages 15-24), and a qualitative phase comprising key informant interviews with those engaged in providing MHM related information and services (17), and

in-depth interviews with 20 parents (10 mothers and 10 fathers). Fieldwork began in June and was completed in September 2024.

We stratified the 24 wards of Mumbai into three zones, each having one-third of the total slum population. Thereafter, we selected six wards (two from each zone) randomly. Finally, based on the slum cluster list of 2015 and cross-validating it through Google maps, three slum areas were identified purposively from each selected ward, making for a total of 18 slum areas.

Survey Instruments:

The survey instruments include:

1. Questionnaires: Household, adolescent girls and young women and adolescent boys and young men
2. Key Informant Interview guidelines (KII)
3. In-Depth Interview guidelines (IDI)

Survey instruments comprised the following:

Household questionnaire includes family/ household details; information on basic amenities (drinking water, toilet, cooking fuel), assets and entitlements, as well as facilities for garbage disposal, drainage, and so on.

Individual questionnaire for girls: incorporates personal details, knowledge and attitudes, experiences (at first period, current menstrual experience, problems and care seeking and so on) as well as WaSH and disposal, support system and agency, experience of violence and recommendations regarding programme action to improve MHM in slums.

Individual questionnaire for boys: includes personal details, knowledge and attitude, support to girls and women in the family, agency, and recommendations regarding programme action to improve MHM in slums.

All interviews were conducted in Hindi.

Qualitative interviews:

In-Depth Interviews (IDI) included open-ended questions about parents' (fathers and mothers) knowledge and attitudes on menstruation, their communication and interaction with their children, and their roles during their daughters' first and subsequent menstrual cycles. In addition, to explore the perspectives of those likely to interact with girls, boys and parents with regard to menstrual matters, Key Informant Interviews (KII) were conducted with one or more of a variety of individuals - doctors, teachers, anganwadi or social workers, and medical shop sales people. All interviews were conducted in Hindi and translated into English.

Fact Sheet Key Indicators:

Key survey findings are reported in this fact sheet. Indicators are shown separately for households, adolescent girls and young women, and adolescent boys and young men. After excluding invalid cases, our sample comprises a total of 1859 household interviews, 1275 girls and young women, and 584 boys and young men.

Household-Level Key Indicators

Indicators	
Household population profile	
Mean household size	4.8
Population below age 18 years (%)	31.1
Household characteristics	
Type of family	
Nuclear (%)	79.9
Duration of residence in this community	
Household has resided in this community for 15 years or more (%)	71.1
Type of house[1]	
Households with only one room (%)[2]	54.9
Households residing in structures with no windows (%)	12.2
Pucca house (%)	88.8
Housing and amenities	
Main source of drinking water and regularity of water supply	
Own piped water (%)	52.3
Public tap (%)	47.7
Drinking water not available for at least one full day in previous month (%)	62.7
Toilet facility	
Households with own flush toilet (%)	27.8
Households with own pit toilet (%)	3.6
Households using community toilet (%)	68.7
Average waiting period for community toilet use in the morning (mins)[3]	8.9
Community toilet unsafe at night (%)[3]	23.1
Water supply irregular at community toilet (%)[3]	41.0
Daily cleaning not conducted (%)	30.2
Garbage disposal	
Disposal in drain, sewer, open dumping areas, nala, river/ sea, jungle (%)	68.8
Drainage facility	
Households living in areas with open drainage (%)	13.4
Drains not cleaned regularly (at least once a week) (%)	89.4
Cooking	
Households using LPG (%)	99.8

[1] Pucca refers to houses made with high quality materials throughout, including the floor, roof, and exterior walls; semi-pucca to those in which high quality materials are only partially used; kuccha in which low quality materials are used throughout.

[2] Excluding bathroom if any.

[3] Among those using community toilet.

Household-Level Key Indicators

Indicators	
Assets and entitlements	
Household assets	
Ownership of current residence (%)	68.2
Ownership of mobile phone (%)	99.4
Ownership of television (%)	69.4
Ownership of refrigerator (%)	64.0
Ownership of mixer (%)	95.6
Ownership of motorcycle, scooter, autorickshaw (%)	23.3
Ownership of car (%)	3.6
Ownership of land (anywhere) (%)	65.6
Household income	
Mean annual household income (Rs.)	2,56,301
Household entitlements	
Households having address proof (%)[4]	98.0
Households covered by any government health insurance (%)[5]	23.1

[4]Address proof includes electricity bill, telephone bill, Aadhaar card, PAN card, ration card, mobile number

[5]It includes different types of government health insurance/ benefits such as Ayushman Bharat or Mahatma Jyotirao Phule Jan Arogya Yojana or any other health scheme.

Individual-Level Key Indicators: Adolescent girls and young women

Indicators	Ages			Total
	12-14	15-19	20-24	
No. of girls interviewed	356	478	441	1275
Background characteristics				
Education				
Mean years of education	6.5	10.0	11.5	9.5
Girls currently attending school/ college (%)	93.0	76.6	22.2	62.4
Girls whose mothers have completed 10 or more years of education (%)	27.0	28.5	14.5	23.2
Girls whose fathers have completed 10 or more years of education (%)	47.2	47.7	33.6	42.7
Work				
Girls who are working and earning cash (%)[1]	0.6	5.2	17.7	8.2
Marital status				
Married (%)	0.0	2.3	37.4	13.8
Menstruation status				
Menarche not yet attained (%)	55.9	2.3	0.7	16.7
Mean age at first period	12.2	13.0	13.4	13.0
Knowledge				
Had heard about Menstruation (%)	72.8	99.0	100.0	92.0
Had heard about menstruation before menarche (among those who have started menstruating) (%)	68.2	72.2	68.7	70.2
Aware that the usual gap between two menstrual cycles is 28 days/ 1 month (%)[2]	42.4	81.6	89.3	73.3
Aware that pregnancy is most likely to occur midway during a woman's menstrual cycle (%)[2]	0.3	3.8	19.5	8.2
Heard of a government scheme distributing sanitary napkins to girls and women (%) [2]	30.6	35.8	26.5	31.1
Misconceptions about menstruation				
Reject the misconception that it is quite common for women to menstruate over 10 days or more (%)	66.4	86.9	89.3	83.3
Reject the misconception that period blood is different from body blood (%)	59.9	72.3	80.5	72.6
Reject the misconception that period blood is dirty (%)	20.9	22.4	25.9	23.4
Sources of information about menstruation				
Mother/ female guardian (%)	66.8	68.3	63.5	66.2
Other female family members (%)[3]	29.7	34.5	34.9	33.6
Male family members (father and other male family members) (%)[4]	3.1	1.9	0.7	1.7
Female friend/ neighbour (%)	25.5	30.4	28.1	28.5
Male friend (%)	0.4	0.0	0.0	0.1
Teacher/ school (%)	74.1	74.8	66.2	71.4
Health care provider (%)[5]	6.2	7.6	5.2	6.4
Books/ magazine, print media, radio/ television, internet (%)	4.6	5.5	5.7	5.4
No one/ overheard (%)	8.1	5.5	9.5	7.6

Note: NA denotes Not Applicable/Not Asked and "-" indicates that a figure is based on fewer than 25 cases and has been suppressed.

[1] Working and earning cash includes girls/ women currently engaged in work but excluding unpaid own housework.

[2] Those who had not heard of menstruation are assumed to be unaware.

[3] Other female family members include sister, sister-in-law, grandmother, others.

[4] Other male family members include brother, brother-in-law, others.

[5] Health care provider includes Non-Governmental Organisation (NGO); Accredited Social Health Activist (ASHA); Anganwadi Worker (AWW).

Indicators	Adolescent girls and young women			
	Ages			
	12-14	15-19	20-24	Total
Attitudes				
Acceptable to visit a religious place or attend auspicious ceremonies during periods (%)	12.7	20.9	22.0	19.5
Acceptable to cook, enter kitchen, or touch/ eat pickle/ papad during periods (%)	63.7	72.1	78.9	72.8
Girls are **not** impure during periods (%)	32.8	45.7	41.5	41.3
Acceptable for a girl to play or exercise during periods (%)	65.6	74.2	71.7	71.4
First menstrual experience				
Used hygienic menstrual products during first period (%)	95.5	83.9	70.8	80.2
Feelings related to first period				
Afraid when experienced first period (%)	66.9	70.0	73.3	70.9
Felt shy when experienced first period (%)	58.0	55.3	58.5	57.0
Happy/ excited when experienced first period (%)	19.8	16.9	13.7	16.0
First person to whom respondent confided about menstrual initiation				
Mother (%)	75.8	80.5	75.6	77.8
Other female family members (%)[6]	17.2	12.6	15.5	14.5
Friend (%)	2.6	3.4	4.1	3.6
Teacher (%)	3.2	2.1	3.0	2.6
No one/ can't remember (%)	1.3	1.3	1.8	1.5
Current menstrual experience				
Menstrual product use				
Used hygienic products anytime in the last 12 months (%)[7]	100.0	98.5	97.3	98.2
Used exclusively hygienic products in the last 12 months (%)[7]	95.5	95.1	91.3	93.6
Used exclusively hygienic products in the last month (%)[7]	95.5	94.2	90.4	92.8
Experienced difficulty in obtaining hygienic menstrual materials during Covid-19 lockdown (%)[8]	-	9.6	16.3	13.4
Source of menstrual products				
Medical shop (private) (%)	97.5	98.3	96.8	97.6
Any government facility or scheme (%)[9]	1.9	2.6	0.9	1.8
School (%)	15.9	6.4	0.0	5.2
Expenditure on menstrual products				
Expenditure on sanitary napkins or other hygienic products during last period more than Rs. 100/-	26.1	35.1	31.3	32.2
Usual activities during menstruation				
Performs usual household chores during menstruation, even during days of heavy flow or pain in the last year (%)[10]	59.1	64.2	78.9	70.3
Has missed school, college or work because of menstruation-related pain or heavy flow in the last year (%)[11]	41.6	49.4	55.7	50.1

[6] Other female family members refer to sister, grandmother, aunt, cousin, others.

[7] Hygienic menstrual products include disposable pads, reusable pads, tampons, menstrual cup.

[8] Among those who were menstruating during the Covid-19 lockdown, those who switched to cloth from pads and those who faced difficulty to find any hygienic menstrual product.

[9] Any government facility or scheme includes Auxiliary Nurse Midwife (ANM); Accredited Social Health Activist (ASHA); Anganwadi Worker (AWW).

[10] Among those who ever perform household chores.

[11] Among those studying or working.

Indicators	Adolescent girls and young women			
	Ages			
	12-14	15-19	20-24	Total
Practices during menstruation				
Participates in religious activities during menstruation (%)	1.9	8.1	10.7	8.3
Attends family celebrations/ weddings during menstruation (%)	56.1	73.2	75.1	71.5
Cooks or eats or touches curd, tamarind, pickles, papad during menstruation (%)[12]	61.7	78.8	82.5	78.4
Bathes daily during menstruation (%)	82.2	81.6	80.8	81.4
Serves food to others during menstruation (%)[13]	70.0	82.7	84.7	82.2
Sleeps in usual place, not away from others during menstruation (%)	89.2	90.2	87.9	89.1
Exercises or plays outdoors during menstruation (%)[14]	50.0	57.0	37.1	48.5
WaSH				
Always washes hands before changing menstrual materials (%)	52.2	55.0	54.6	54.4
Always washes hands after changing menstrual materials (%)	96.2	98.1	96.1	97.0
Changes sanitary napkins at least twice on heaviest days (%)	66.2	67.6	67.1	67.2
Disposes of used menstrual products in household bins or in community dumping areas (%)	95.4	94.2	93.1	93.9
Self-reported menstrual or related health problems				
Menstrual health problems				
Any menstrual problem (%)	68.2	69.2	68.0	68.6
Heavy bleeding (symptom of Menorrhagia) (%)	15.3	10.5	10.1	11.0
Periods lasting more than 7 days (symptom of Menorrhagia) (%)	7.6	2.4	1.8	2.9
Bleeding with grape sized clots (symptom of Menorrhagia) (%)	10.2	11.8	17.4	13.8
Painful menstruation (symptom of Dysmenorrhoea) (%)	21.7	25.1	24.2	24.2
Interval between two menstrual cycles is less than four weeks (%)	10.8	11.4	9.6	10.6
Interval between two menstrual cycles is more than four weeks (%)	21.0	25.9	24.4	24.6
Cycle irregular, no pattern (%)	26.8	19.9	17.8	20.1
Scanty bleeding (symptom of Hypomenorrhoea) (%)	8.9	7.1	8.7	8.0
Premenstrual syndrome				
Any symptom of premenstrual syndrome (%)	80.3	88.0	87.7	86.7
Bloating (%)	19.8	32.3	34.7	31.5
Irritability, anxiety (%)	72.0	77.3	77.9	76.7
Acne (%)	45.2	55.9	55.7	54.2
Insomnia (%)	24.8	28.1	35.6	30.7
Other related health problems				
Genital rash, redness (%)	7.6	9.2	16.4	12.0
Vaginal irritation/ unusual discharge (%)	22.3	25.9	32.2	28.0
Pain/burning while urinating (%)	10.8	11.1	15.8	13.0
Polycystic Ovarian Syndrome / Disease (PCOS/PCOD) (%)	0.0	1.7	4.1	2.5
Anaemia (%)	9.6	16.7	22.4	18.0
Symptoms of depression or anxiety experienced				
Has felt depressed, sad, irritable, lost interest in activities for most of the day, nearly every day continuously over 15 days (%)[15]	3.9	11.1	14.3	10.2

[12] Among those who ever cooked.

[13] Among those who usually serve food.

[14] Among those who usually play/exercise.

[15] Since age 10.

Indicators	Adolescent girls and young women			
	Ages			
	12-14	15-19	20-24	Total
Health care utilization for menstrual problems[16]				
Source of care/ treatment for menstrual problems				
Used home remedies/ traditional medicine (%)	33.9	39.8	32.6	35.7
Sought treatment from government facility (%)	8.9	9.4	10.2	9.7
Sought treatment from private facility (%)	25.0	27.8	34.4	30.5
Sought treatment from a pharmacy (%)	3.6	4.2	4.7	4.3
Expenditure for menstrual problems[17]				
Expenditure for outpatient services (Rs. 1500/- or more)	-	28.8	30.3	29.0
Use of pain killers or antibiotics or any other medication for any health problem				
Pain killers (%)	7.6	14.4	18.7	15.2
Antibiotics (%)	7.0	9.2	8.2	8.5
Medication taken for full number of days prescribed (%)[18]	-	89.2	81.6	86.0
Any medication without a doctor's prescription (%)	36.3	47.8	47.0	45.8
Communication and support				
In case of problems in private parts, most likely to discuss with				
Mother/ female guardian (%)	93.8	91.0	73.2	85.7
Other female family members (%)[19]	22.5	27.6	27.0	26.0
Father/ male guardian/ other male family members (%)	5.9	3.8	1.6	3.6
Husband (%)[20]	NA	-	70.9	70.5
Female friend (%)	4.8	5.9	3.9	4.9
Health care provider/ teacher (%)	1.4	1.1	5.4	2.6
Agency				
***Decision making* (among those who had ever discussed the matter)**				
Respondent makes/ will make decision independently or jointly with someone else about				
Education (how much/ what to study) (%)	52.7	74.8	75.8	69.0
Marriage (when and to whom) (%)	43.7	60.7	64.2	58.0
Menstrual product to use (among those who have started menstruating) (%)	80.7	92.9	96.3	91.8
Mobility				
Respondent is permitted to visit unescorted to:				
A shop/ market, visit friend/ relative in locality (%)	42.4	68.0	81.9	65.7
A local programme (%)	22.2	41.8	66.9	45.0
A health care centre (%)	5.1	21.1	53.1	27.7

[16] The reference period for health care utilization is last year among those who experienced any menstrual or related health problem.

[17] Among those who sought treatment.

[18] Among those given a specific number of days.

[19] Other family members refer to sister, sister-in-law, mother-in-law, grandmother, others.

[20] Among currently married women.

Indicators	Adolescent girls and young women			
	Ages			
	12-14	15-19	20-24	Total
Control over resources				
Owns a smartphone (%)	7.0	44.6	82.3	47.1
Has money to spend independently (%)	16.9	31.2	61.5	37.7
Owns and operates a bank account (%)	5.9	21.8	68.5	33.5
Self-efficacy				
Believes that family members listen to or respect the respondent's views (%)	87.9	91.4	90.7	90.2
Not shy/ embarrassed to obtain menstrual products from a shop (%)	56.7	81.5	86.0	79.7
Not shy to approach teacher/ older women about menstruation (%)	52.9	72.1	83.7	72.2
Witnessing and experiencing violence				
Has ever witnessed violence or verbal abuse among family members (%)	43.5	44.8	47.9	45.5
Has ever experienced verbal abuse, bullying, ridiculing, humiliation (%)[21]	13.5	14.4	14.3	14.1
Has ever experienced physical violence (hitting, slapping, kicking) (%)[21]	13.2	11.9	11.6	12.2
Among those aged 18 or older, has ever experienced forced sex (%)	NA	3.8	3.2	3.4
Suggestions for improving menstrual health				
Make products cheaper/ free (%)	49.4	78.7	77.8	70.2
Make products easier to access (%)	5.1	14.0	19.5	13.4
Place vending machines in accessible places (%)	6.7	12.1	12.2	10.7
Get rid of taboos/ change attitudes (%)	15.7	26.2	32.9	25.6
Make toilets or other amenities available (%)	15.7	28.7	30.4	25.7
Raise awareness (%)	30.1	42.5	49.0	41.3

[21] Since age 10.

Individual-Level Key Indicators: Adolescent boys and young men

Indicators	Ages		Total
	15-19	20-24	
No. of boys interviewed	410	174	584
Background characteristics			
Education			
Mean years of education	10.3	12.4	11.0
Boys currently attending school/ college (%)	72.2	20.1	56.7
Boys whose mothers have completed 10 or more years of education (%)	31.5	23.6	29.1
Boys whose fathers have completed 10 or more years of education (%)	48.5	44.3	47.3
Work			
Boys who are working and earning cash (%)[1]	18.3	69.0	33.4
Marital status			
Married (%)	0.0	7.5	2.2
Knowledge			
Had heard about menstruation (%)	72.4	93.7	78.8
Aware that the usual gap between two menstrual cycles is 28 days/ 1 month (%)[2]	65.4	87.9	72.1
Aware that pregnancy is most likely to occur midway during a woman's menstrual cycle (%)[2]	4.4	12.1	6.7
Heard of a government scheme distributing sanitary napkins to girls and women (%)[2]	22.9	42.5	28.8
Misconceptions about menstruation			
Reject the misconception that it is quite common for women to menstruate over 10 days or more (%)	60.3	71.8	64.4
Reject the misconception that period blood is different from body blood (%)	53.5	52.8	53.3
Reject the misconception that period blood is dirty (%)	8.1	11.0	9.1
Sources of information about menstruation			
Mother/ female guardian (%)	5.4	3.1	4.6
Other female family members (%)[3]	5.7	2.5	4.6
Male family members (father, or other male family members) (%)[4]	3.0	3.1	3.0
Female friend/ neighbour (%)	25.6	48.5	33.7
Male friend (%)	57.2	65.6	60.2
Teacher/school (%)	72.4	59.5	67.8
Health care provider (%)[5]	3.0	2.5	2.8
Books/ magazine, print media, radio/ television, internet (%)	31.0	52.8	38.7
No one/ overheard (%)	2.4	0.6	1.7
Attitudes			
Acceptable to visit a religious place **or** attend auspicious ceremonies during periods (%)	20.9	21.5	21.1
Acceptable to cook, enter kitchen, or touch/ eat pickle/ papad during periods (%)	54.6	54.6	54.6
Girls are **not** impure during periods (%)	31.7	41.1	35.0

Note: NA denotes Not Applicable/Not Asked and "-" indicates that a figure is based on fewer than 25 cases and has been suppressed.

[1] Working and earning cash includes boys/men currently engaged in work but excluding unpaid own housework.

[2] Those who had not heard of menstruation are assumed to be unaware.

[3] Other female family members include sister, sister-in-law, grandmother, others.

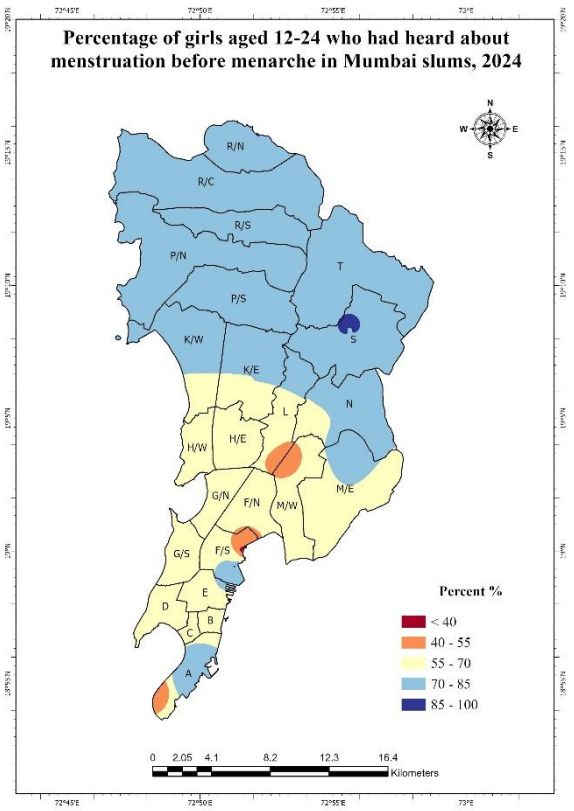
[4] Other male family members include brother, brother-in-law, others.

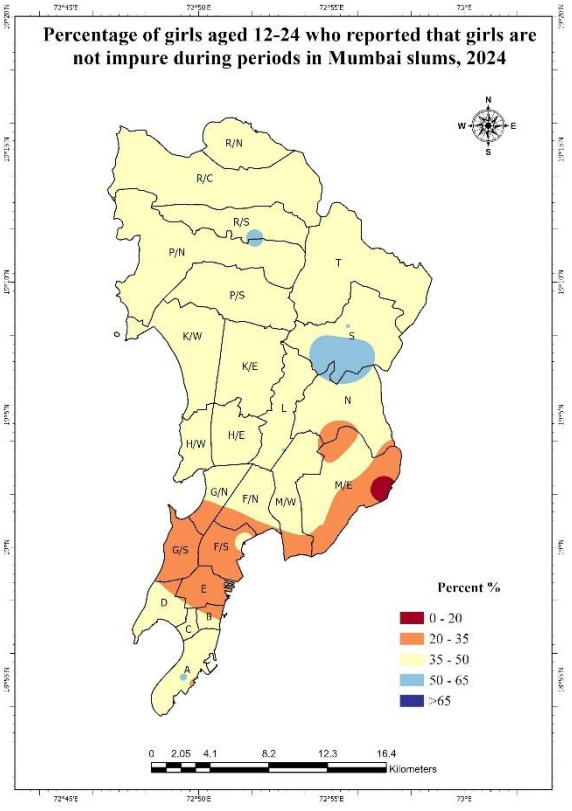
[5] Health care provider includes Non-Governmental Organisation (NGO); Accredited Social Health Activist (ASHA); Anganwadi Worker (AWW).

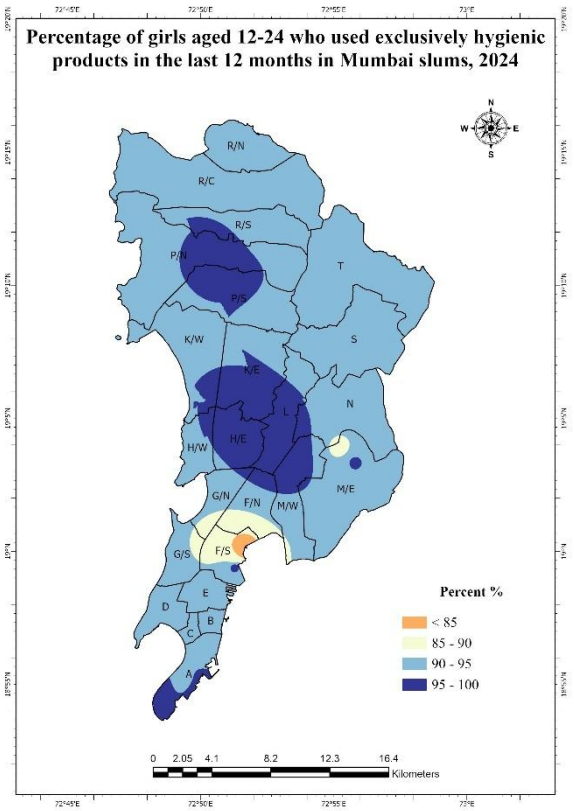
Indicators	Adolescent boys and young men		
	Ages		
	15-19	20-24	Total
Communication and support			
In case of problems in private parts, most likely to discuss with			
Mother/ female guardian (%)	73.2	54.0	67.5
Other female family members (%)[6]	4.9	3.5	4.5
Father/ male guardian/ other male family members (%)	65.1	54.6	62.0
Wife (%)	NA	-	-
Male friend (%)	23.4	43.1	29.3
Health care provider/ teacher (%)	19.5	36.2	24.5
Agency			
***Decision making* (among those who had ever discussed the matter)**			
Respondent makes/ will make decision independently or jointly with someone else about			
Education (how much/ what to study) (%)	80.0	91.4	83.4
Marriage (when and to whom) (%)	60.5	68.0	62.8
Mobility			
Respondent is permitted to visit unescorted to:			
A shop/ market, visit friend/ relative (%)	96.4	NA	96.4
A local programme (%)	68.7	NA	68.7
A health care centre (%)	60.2	NA	60.2
Control over resources			
Owns a smartphone (%)	73.4	97.1	80.5
Has money to spend independently (%)	24.6	71.3	38.5
Owns and operate a bank account (%)	20.7	77.6	37.7
Self-efficacy			
Not shy/ embarrassed to obtain menstrual products from a shop (%)	74.1	71.2	73.0
Not shy to talk to mother/ father about menstruation related issues (%)	26.6	22.1	25.0
Not shy to talk to sister/ wife about menstruation related issues (%)	28.0	34.4	30.2
Suggestions for improving menstrual health			
Make products cheaper/free (%)	6.6	17.2	9.8
Make products easier to access (%)	11.0	12.6	11.5
Place vending machines in accessible places (%)	3.4	6.9	4.5
Get rid of taboos/ change attitudes (%)	13.2	27.0	17.3
Make toilets or other amenities available (%)	10.0	18.4	12.5
Raise awareness (%)	25.6	43.7	31.0

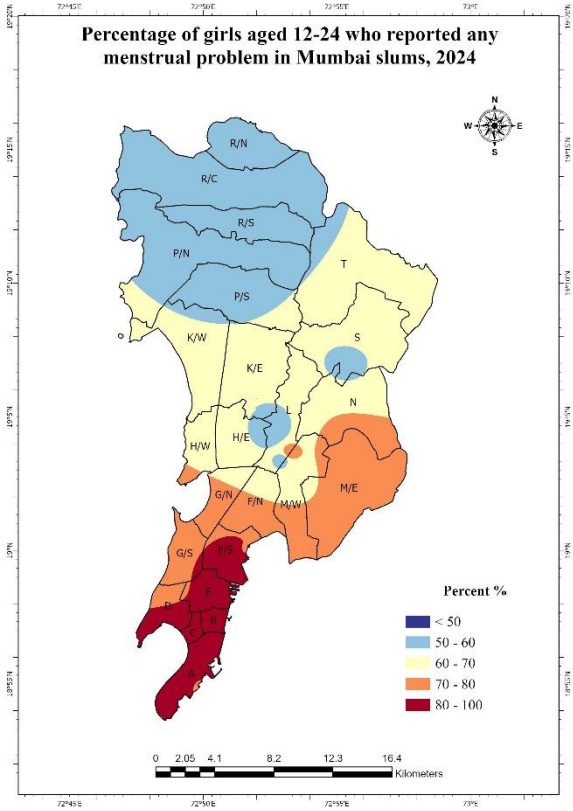
[6] Sister, sister-in-law, mother-in-law, grandmother, others.

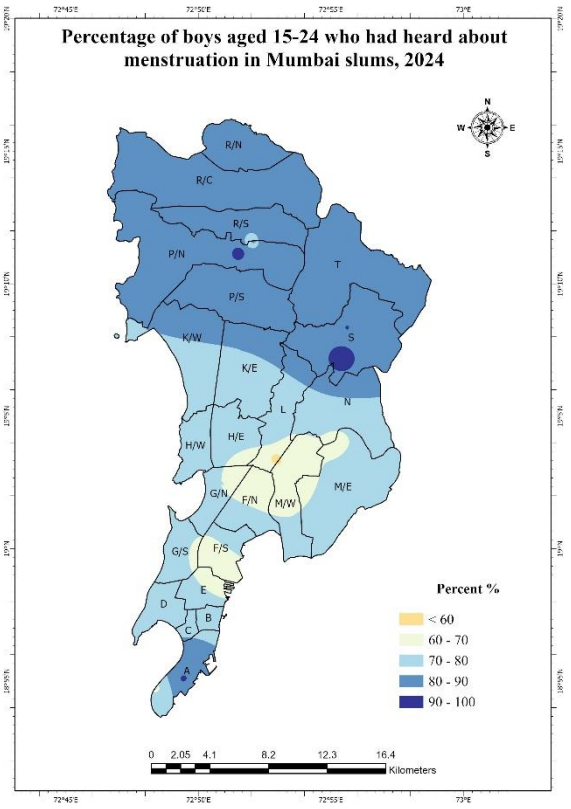
Maps

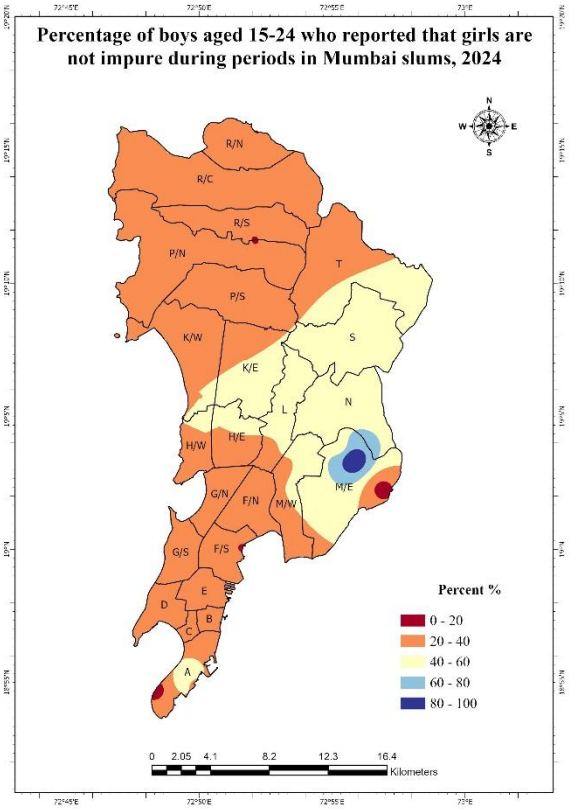

Percentage of girls aged 12-24 who had heard about menstruation before menarche in Mumbai slums, 2024
R/N
R/C
R/S
P/N
P/S
K/W
K/E
H/W
H/E
G/N
F/N
M/W
M/E
G/S
F/S
T
S
N
L
E
D
B
C
A
Percent %
< 40
40 - 55
55 - 70
70 - 85
85 - 100
0 2.05 4.1 8.2 12.3 16.4
Kilometers


Percentage of girls aged 12-24 who reported that girls are not impure during periods in Mumbai slums, 2024
R/N
R/C
R/S
P/N
P/S
K/W
K/E
H/W
H/E
G/N
F/N
M/W
M/E
G/S
F/S
T
S
N
L
E
D
B
C
A
Percent %
0 - 20
20 - 35
35 - 50
50 - 65
>65
0 2.05 4.1 8.2 12.3 16.4
Kilometers


Percentage of girls aged 12-24 who used exclusively hygienic products in the last 12 months in Mumbai slums, 2024
R/N
R/C
R/S
P/N
P/S
K/W
K/E
H/W
H/E
G/N
F/N
M/W
M/E
G/S
F/S
T
S
N
L
E
D
B
C
A
Percent %
< 85
85 - 90
90 - 95
95 - 100
0 2.05 4.1 8.2 12.3 16.4
Kilometers


Percentage of girls aged 12-24 who reported any menstrual problem in Mumbai slums, 2024
R/N
R/C
R/S
P/N
P/S
K/W
K/E
H/W
H/E
G/N
F/N
M/W
M/E
G/S
F/S
T
S
N
L
E
D
B
C
A
Percent %
< 50
50 - 60
60 - 70
70 - 80
80 - 100
0 2.05 4.1 8.2 12.3 16.4
Kilometers





Reference

Babbar, K., Martin, J., Ruiz, J., Parray, A. A., & Sommer, M. (2022). Menstrual health is a public health and human rights issue. *The Lancet Public Health*, *7*(1), e10-e11. https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(21)00212-7/fulltext

Dasra. (2014). *Spot on! Improving menstrual health and hygiene in India*. https://www.dasra.org/resource/improving-menstrual-health-and-hygiene

Muralidharan, A. (2019). Constrained choices? Menstrual health and hygiene needs among adolescents in Mumbai slums. *Indian Journal of Gender Studies*, *26*(1-2), 12-39. https://doi.org/10.1177/0971521518808104

Plesons, M., Patkar, A., Babb, J., Balapitiya, A., Carson, F., Caruso, B. A., ... & Chandra-Mouli, V. (2021). The state of adolescent menstrual health in low-and middle-income countries and suggestions for future action and research. *Reproductive health*, *18*, 1-13. https://doi.org/10.1186/s12978-021-01082-2

World Health Organization. (2022). WHO statement on menstrual health and rights. World Health Organization. Available from: WHO statement on menstrual health and rights

Acknowledgement

We would like to express our heartfelt gratitude to the Bill and Melinda Gates Foundation that supports the Centre of Demography of Gender (CDG) at the International Institute for Population Sciences (IIPS), Mumbai, India, for their generous financial support of this project (Grant number: BMGF INV-047356). Their contribution not only provided the essential resources but also played a vital role in bringing this research to life, enabling us to make significant strides in our work. The project received the IRB clearance (IRB number: IIPS/PSC-54/IRB/532/2024) on 6th March 2024.

We are deeply indebted to Prof. T. K. Roy, former Director of IIPS, whose guidance and unwavering support in the sampling process were truly invaluable. His expertise, dedication, and attention to detail were pivotal in helping us identify appropriate samples, ensuring the success of this study.

We also extend our deepest appreciation to our teams of field investigators. Alfiya Korlekar, Ragini Arun Balugade, Sakshi Patil, Sashi Rajaram Gupta, and Nashrah Manikpethe were responsible for interviews with adolescent girls and young women. Sunil Kumar and Amir Ali were responsible for interviews with adolescent boys and young men. In addition, the project was fortunate to have interns - Vishal Das and Faisal Hassan – who supported the project by translating in-depth interviews and supporting data entry. Together, these teams worked tirelessly and dedicatedly in gathering and recording accurate field data; their contributions were critical to the successful completion of this study. Despite the challenges posed by the Mumbai monsoons, they worked relentlessly through difficult weather conditions to ensure the success of this research. Without their passion, resilience, and effort, we would not have been able to gather the insights that make this research so meaningful. We greatly appreciate Shifa Sattar Korlekar, who was responsible for the bulk of data entry, for her hard work and dedication to completing good quality data entry in a timely way.

A special thank you to PhD scholars Paramita Majumdar, Lobsang Tshering Bhutia, Madhurima Sharma, and Aditi B. Prasad for their exceptional contributions. Madhurima's development of the Kobo tool streamlined data collection, ensuring accuracy and efficiency. Paramita's insightful analysis of the qualitative data provided depth to our qualitative findings. Lobsang's expertise in formatting questionnaires, map creation, field training and cover design enriched the study. Aditi's timely support in various aspects of the project further strengthened our research efforts. Their collective dedication and hard work went above and beyond the call of duty, and we are truly grateful for their contributions.

We are also thankful to Mr. Sunny, Mr. Shakeel (Multitasking Staff), Mr. Nazrul (Accounts) and the administration and accounts section of IIPS for their steadfast support throughout the duration of the project. Their assistance and dedication played a vital role in keeping everything on track, and we appreciate their hard work.

Our sincerest thanks go to Dr. Archana (CDG, IIPS) and Ms. Nivedita Mishra (Hindi Officer, IIPS) for their huge contributions in translating the questionnaires and consent forms from English to Hindi. We would like to express our gratitude to Ms. Arya Rachel Thomas, Maria Zehra, Afrin Shaikh, Rukhsar Shaikh, and Vishal Atole for their contributions in the early stages of the project. Our sincere gratitude to all faculty members of CDG for their heartfelt support in the entire journey of the project.

Finally, we would like to express our deepest appreciation to the respondents, parents, and community key persons who participated and facilitated the completion of this study. Their cooperation, trust, and involvement were essential to the success of this research. Without their willingness to share their experiences, this study would not have been possible.

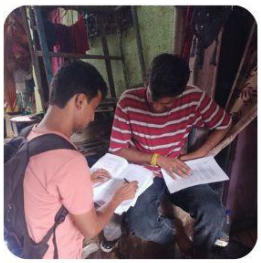
Together, these contributions have helped bring our project to fruition, and we are profoundly grateful to each and every person involved.

Team MHM

Field Photographs









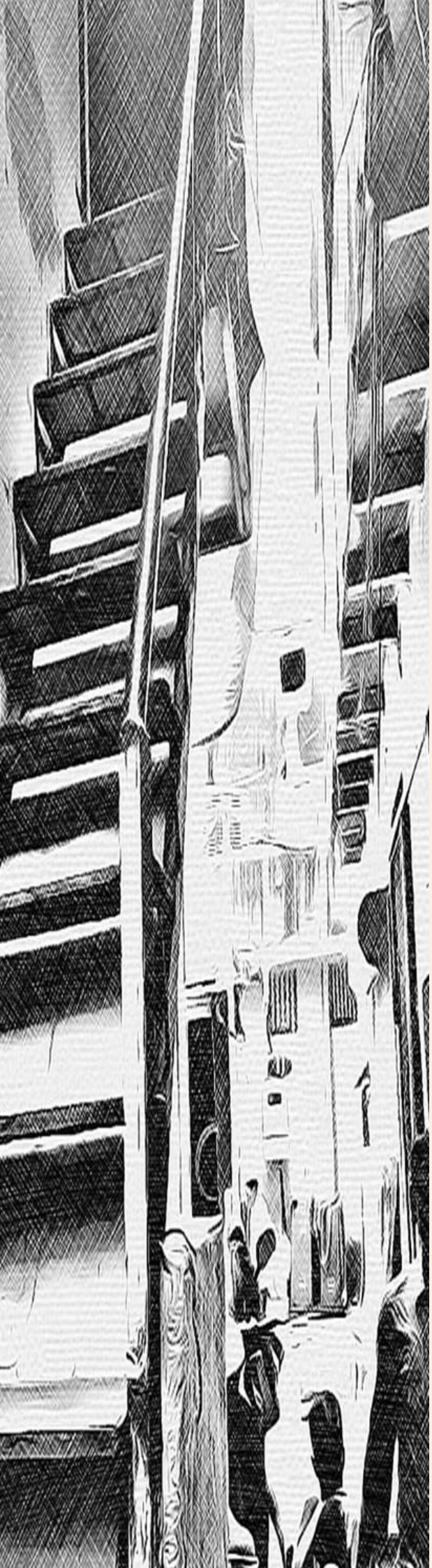



Menstrual Health Management (MHM) of Adolescents in Mumbai Slums

Centre of Demography of Gender

International Institute for Population Sciences (IIPS)

BSD Marg, Station Road, Mumbai- 400 088



(स्थापना / Established in 1956)
बेहतर भविष्य के लिए क्षमता निर्माण
Capacity Building for a Better Future

Centre of Demography of Gender
International Institute for Population Sciences (IIPS)

(Deemed to be University)

BSD Marg, Station Road, Mumbai- 400 088