As We Grow Up: A Tactile Book on Menstrual Hygiene Management

Facilitator’s Manual
v1.0
About WSSCC

The Water Supply and Sanitation Collaborative Council (WSSCC) is a global, multi-stakeholder membership and partnership organisation that works with poor people, organisations, governments and local entrepreneurs to improve sanitation and hygiene at scale. Founded in 1990, WSSCC’s mission is to ensure sustainable sanitation, better hygiene and safe drinking water for all, with a focus on the poorest and most marginalized members of society.

About Centre of Excellence in Tactile Graphics (CoETG), Indian Institute of Technology, Delhi

AssisTech is an inter-disciplinary group of faculty, research staff and students at Indian Institute of Technology Delhi, which is engaged in using modern technology for finding affordable solutions for the visually impaired. Set up as part of the AssisTech group, the Centre of Excellence in Tactile Graphics aims at empowering persons with visual impairment by providing access to figures and diagrams in a comprehensible tactile form. As part of a project sponsored by the Ministry of Electronics and Information Technology, Government of India, the centre has developed technology for producing high-quality, yet affordable tactile diagrams using 3-D printing for mould making and thermoforming for the production of tactile diagrams.

Learn more at http://coetg.iitd.ac.in

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Menstruation is a key indicator of health and vitality of women. Often women try to manage their menstrual cycles in an environment where menstruation is shrouded in secrecy and shame. Visually impaired girls and women face even greater problems as they struggle for information and basic services for managing their menstrual health.

The Ministry of Drinking Water and Sanitation has taken several important steps to promote menstrual hygiene. The Ministry has issued the National Guidelines for MHM programming in schools (December 2015), as well as, comprehensive guidelines on Gender and Sanitation (April 2017), which give detailed guidance on Menstrual Hygiene Management.

I hope the manual, developed by WSSCC and IIT Delhi, in braille along with tactile illustrations that are accessible to visually impaired persons, will inspire the production of similar tools and approaches to ensure that every Indian, everywhere, regardless of age, gender, caste or class is able to use safe sanitation and hygiene at all times.

Parameswaran Iyer
Secretary to the Government of India
Ministry of Drinking Water & Sanitation
In a world of 7.3 billion people, 2.3 billion lack access to adequate sanitation, of which 892 million people have no choice but to defecate in the open. Majority of the people without adequate sanitation live in Sub-Saharan Africa and South Asia, who are also deprived of basic hygiene and lack even vital hand washing facilities. This situation is critical when it comes to Persons with Disabilities, especially women and girls as millions of them lack menstrual hygiene. In case of women and girls with visual impairment this situation becomes grim due to lack of awareness and sensitization.

As per Census 2011, India is home to around 50,32,463 persons with visual disabilities, which include 23,93,947 women with visual disabilities. These visually impaired men and women, girls and boys are rarely included in awareness programmes or other development processes. Inadequate facilities also affect education and economic productivity and impact the dignity and personal safety of women and girls.

The onset of the menstrual cycle is a vital stage of every woman’s life. Managing the menstrual cycle of a woman hygienically is an essential element but at the same time quite challenging given the fact that menstrual cycle is shrouded in secrecy and shame. This biological phenomenon has been surrounded by silence and stigma and is even more challenging in rural/tribal areas as compared to urban areas, given the lack of awareness, education and also the conservative mindsets of people bearing the age-old myths relating to the subject, which is still considered a taboo. The challenge is quite tough in case of women and girls with visual impairment when they reach puberty as they face even greater trauma and isolation due to lack of simple information and facilities to manage their
menstruation with dignity and pride to lead a healthy life. This culture of silence and stigma associated with menstruation make women vulnerable to urinary and reproductive tract infections, stress and anxiety, and even gender-based violence.

The Tactile Book on Menstrual Hygiene developed by WSSCC in partnership with the Centre of Excellence in Tactile Graphics – IIT Delhi and in consultation with visually impaired women and girls provides a detailed guide for the trainers and the advocacy groups to make their training and awareness programmes more inclusive in propagating the message of managing menstrual cycle among girls and women with disabilities. The Book has been developed in Braille along with tactile illustrations that are accessible to visually impaired persons to ensure that visually impaired girls and women know their bodies, understand why they menstruate and how to manage their period safely and with pride and dignity.

The Department of Empowerment of Persons with Disabilities encourages trainers and facilitators to utilize this innovative resource to ensure that this hitherto excluded community – visually impaired girls, women, boys and men – are not left behind. I hope this Manual will serve as a referral book for the trainers, the advocacy groups and the users to promote better menstrual hygiene among women with disabilities. I wish this manual will serve as an inspiration for others to develop similar tools and approaches to cater to the needs of other categories of disabilities such as persons with intellectual disabilities, deaf-blindness, etc. to promote a culture of safe sanitation and hygiene at all times, including during the time of important biological phenomenon such as menstruation.

Shakuntala D. Gamlin
Secretary
Department of Empowerment of Persons with Disabilities
Ministry of Social Justice and Empowerment
Half the human race menstruates every month from puberty through to menopause. Instead of being a barometer of health and vitality for women and girls, menstruation is surrounded by a veil of silence and shame. Menstrual blood is considered unclean and impure and menstruating women are segregated, their movements restricted and their touch prohibited during this time of the month.

Women struggle to be clean, wash their menstrual materials and dispose them off safely – all without anyone knowing that they are menstruating. This culture of silence and the stigma associated with menstruation make women vulnerable to urinary and reproductive tract infections, stress and anxiety, and even gender-based violence.

Water, sanitation and hygiene facilities often ignore the very real and practical needs of women and girls, thereby compounding the deep psychosocial stress they experience as they try and manage their monthly periods with dignity.

How much more challenging this reality is for a young blind girl in a remote village confronting her first periods at home, at school or in a marketplace. Women and girls are not a homogenous group. Nor are women and girls with specific impairments or age-related illnesses. They reflect the full diversity of the human race with changing needs as they journey across the human life course.

At the Sanitation Action Summit (Mumbai, 2016), visually impaired women and girls tabled the challenges they face during their periods. Here is what they said:

“Our families often pressurize us to get our uterus removed to avoid menstruation and an unwanted pregnancy.”
The needs and aspirations of visually impaired women are the same as women everywhere: to talk about their bodies and understand them better; to know the menstrual cycle, its purpose and management and to replace shame and silence with confidence, pride and dignity.

This manual is for facilitators using *As We Grow Up: A Tactile Book on Menstrual Hygiene Management*. The tactile book has been designed in consultation with visually impaired women and girls to break the silence on menstruation, provide spaces for dialogue and discussion, increased understanding and information. It was developed by the Water Supply and Sanitation Collaborative Council (WSSCC) in collaboration with the Centre for Excellence in Tactile Graphics (CoETG) – Indian Institute of Technology, Delhi. A digital and an audio version of this manual are also available.

We would especially like to acknowledge guidance provided by Mr. Dipendra Manocha (President, National Association for the Blind (NAB) – R.K. Puram, Delhi and Founder, The Saksham Trust), Ms. Shalini Khanna (Honorary Secretary, NAB

“**The lack of privacy in the absence of toilets poses a risk for all women, but more so for us, since we cannot see stray animals and other hazards, when we go out to change our sanitary pad or cloth.**”

“**In the absence of dustbins, we are dependent on relatives to dispose used sanitary pads or cloth for us.**”

“**We are often blamed if the school or hostel toilet gets dirty, even if we are not at fault.**”
PREFACE

Centre for Blind Women and Disability Studies) and Ms. Nidhi Arora (Esha for Braille). We would also like to thank visually impaired students and teachers, Shimpy, Ayush, Ajanta, Sentina, Neetu and Lakshmi for helping us to test and improve the materials. A special thanks to Mr. Asoka Bandula and Ms. Shalika for giving us an opportunity to test these materials with visually impaired participants associated with the Sri Lanka Council for the Blind in Sri Lanka.

We hope these tools will be used widely to break the silence around periods and to replace shame and silence with information, confidence and pride so that all women and girls adopt safe and hygienic practices when they menstruate and walk tall every day of the month.

Archana Patkar

Head of Policy
Water Supply and Sanitation Collaborative Council (WSSCC)
## Table of contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Guidelines for Facilitators</td>
</tr>
<tr>
<td>5</td>
<td>Our Bodies</td>
</tr>
<tr>
<td>6</td>
<td>A Girl’s Body Parts</td>
</tr>
<tr>
<td>7</td>
<td>A Boy’s Body Parts</td>
</tr>
<tr>
<td>8</td>
<td>A Girl’s Reproductive Organs</td>
</tr>
<tr>
<td>9</td>
<td>A Boy’s Reproductive Organs</td>
</tr>
<tr>
<td>10</td>
<td>What is Adolescence?</td>
</tr>
<tr>
<td>11</td>
<td>Physical Changes in Boys during Adolescence</td>
</tr>
<tr>
<td>13</td>
<td>Physical Changes in Girls during Adolescence</td>
</tr>
<tr>
<td>15</td>
<td>What is Menstruation?</td>
</tr>
<tr>
<td>16</td>
<td>The Menstrual Cycle 1</td>
</tr>
<tr>
<td>17</td>
<td>The Menstrual Cycle 2</td>
</tr>
<tr>
<td>18</td>
<td>The Menstrual Cycle 3</td>
</tr>
<tr>
<td>19</td>
<td>The Menstrual Cycle 4</td>
</tr>
<tr>
<td>20</td>
<td>Menstrual Hygiene Management</td>
</tr>
<tr>
<td>24</td>
<td>The Pledge</td>
</tr>
<tr>
<td>25</td>
<td>Frequently Asked Questions (FAQs)</td>
</tr>
</tbody>
</table>
Guidelines for facilitators

Knowing your audience:

- Trainers need to be sensitized to different ways in which visually impaired participants can communicate.
- Avoid assumptions and instead listen to the participants since they have a wealth of experiences and coping mechanisms that we can learn from.
- Do not assume that all visually impaired participants cannot see. There are low vision cases too that need different learning strategies. So, first ensure the degree or severity of the impairment before making any plans for the visually impaired participant.
- Do not assume that the participants are incapable of understanding new or difficult concepts. The cognitive development of the visually impaired is at par with that of the sighted. It is just a different way of communicating.

Degrees of Visual Impairment

According to WHO, the classification of visual impairment on the Snellen chart is as follows:

- **20/39 – 20/60**: Mild vision loss or near normal vision
- **20/70 – 20/160**: Moderate visual impairment or low vision
- **20/200 – 20/400**: Severe visual impairment or severe low vision (visual field of 20 degrees or less)
- **20/500 – 20/1000**: Profound visual impairment (visual field of 10 degrees or less)
- **No light perception**: Total blindness
Creating an enabling environment

- The venue, infrastructure, curriculum and facilitation must take into consideration the specific needs of visually impaired participants.
- Ensure that all participants know that the person is blind and respect her for being differently-abled. This means making sure she is given a chance to participate in discussions and group activities, and listening and responding to her views.
- Reduce clutter and ensure chairs are pushed under tables.
- There should be one person dedicated to the blind participant so she can help her to participate in the group exercises, games, role plays and explain any visual materials, such as diagrams, videos, PPTs, tools and charts.
- Orient visually impaired participants to the training venue (especially water points and toilets) so that they are familiar with the surroundings.
- Extra time should be given to the visually impaired participant to read braille material and to explore tactile diagrams.

Communicating with the visually impaired:

- Always introduce yourself first. Do not assume a person will recognise your voice.
- In a group situation or activity, introduce the visually impaired participant to each member of the group by their names.
- Address participants by their names, if known. Provide physical assistance only when it is required by the visually impaired participant.
- Always speak in your normal voice with proper gestures and voice modulation and continue to use body language. This will affect the tone of your voice and give extra information to the participant who is visually impaired.
- Let the visually impaired participant know when you or anyone else has entered or left the room.
Do not take away or change the position of the visually impaired participant’s belongings, such as a cane or a bag, without informing her.

Instructions should be clear. Use language that the participant can easily understand.

Concepts can be divided into small sessions for better comprehension or convey only one concept at a time.

Always use a real or familiar object to convey a concept.

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**Instructions to be shared with visually impaired participants**

The tactile book is a combination of tactile diagrams and text in Grade 1 (uncontracted) English Braille.

The Braille text corresponding to each tactile diagram can be found before it. Participants are expected to read the text before exploring the corresponding diagram for better understanding.

The tactile diagrams can be found on the pages on the right-hand side of the open book. The participant must locate a tiny, solid embossed circle near the top left corner of each tactile diagram. The heading for each diagram follows after the circle. Participants can locate the heading easily by moving their finger horizontally from left to right after this tiny, embossed circle.

For diagrams with multiple labels, keys have been placed between the headings and the tactile diagrams for the ease of understanding.
Our Bodies

Adolescence is the transition from childhood to adulthood. During this time girls and boys experience emotional and physical changes. To understand these changes, let’s first understand our bodies better.

Boys and girls both have the same body parts and organs.

Only their reproductive organs are different.
A Girl’s Body Parts

- Head
- Breast
- Arm
- Navel
- Vagina
- Hand
- Leg
- Knee
- Foot
A Boy’s Body Parts

- Head
- Breast
- Arm
- Navel
- Hand
- Penis
- Leg
- Knee
- Foot
Eggs are produced in the ovaries – one on each side of the uterus. The ovaries are connected to the uterus through the fallopian tubes. The uterus opens into the vagina through the cervix.

![A Girl’s Reproductive Organs](image-url)
A Boy’s Reproductive Organs

Sperm is the male reproductive cell needed to fertilize the egg for reproduction. It is produced in the testis which is situated in a sac called the scrotum. The sperm passes through a tube called the vas deferens and then into the urethra which forms a common passage for both sperm and urine. The seminal vesicle and the prostate gland provide fluid that allows the sperm and to pass through the urethra before it comes out through the penis.
What is Adolescence?

As girls and boys grow up, their bodies develop and changes occur due to secretions in their bodies called hormones. These physical and emotional changes occur between the ages of 9 – 19 years. This stage of life is called “adolescence”. On completion of adolescence, girls and boys become adult women and men.

Emotions experienced by adolescent girls and boys

- Curiosity
- Shyness
- Desires
- Rebelliousness
- Indecision
- Stress
- Moodiness
- Ambition
- Sexual attraction
- Self-consciousness

What else occurs during adolescence?

- Peer pressure
- Strong opinions
- Seeking independence and testing boundaries
- Trying to express one’s own identity
- Increased feeling of responsibility
Physical changes in boys during adolescence

**Puberty** is the process of physical changes by which a child’s body grows into an adult body capable of sexual reproduction. These physical changes include:

- Height gain
- Weight gain
- Pimples
- Growth of hair on the body including a beard and a moustache
- Development of the penis
- Development of an Adam’s apple (a bulge in the neck)
- Changes to the voice
- Semenarche

**What is semenarche?**
At the onset of puberty, thick white fluid called semen comes out of the penis. This process is called ejaculation. The first time a boy ejaculates, normally between the ages of 11 – 15 years, is called semenarche. Lots of semen is formed inside the body and when there is too much, some semen is released. This is commonly known as wet dreams. Wet dreams are a normal part of the growing up process and nothing to worry about.
Physical changes in boys during adolescence

6 Years  13 Years  20 Years
Physical changes in girls during adolescence

**Puberty** is the process of physical changes by which a child’s body grows into an adult body capable of sexual reproduction. These physical changes include:

- Height gain
- Weight gain
- Pimples
- Growth of hair on the armpits and genitalia
- Development of the vagina and breasts
- Changes to the voice
- Menstruation

The major sign of puberty for females is menarche, or the first menstruation, which can occur anytime between the ages of 8 – 19 years.
Physical changes in girls during adolescence

- **6 Years**
- **13 Years**
- **20 Years**
What is Menstruation?

Menstruation is a natural process for women and girls. It usually begins in women between the ages of 9-16 years and stops around 45-55 years. Each month, hormones inside the female body release an egg from one of the two egg sacks, called ovaries. Each month about 10 to 20 tiny eggs start to ripen but only one or two eggs are released. The egg then travels to the uterus via the fallopian tubes.

The uterus prepares for the egg with extra tissue and blood vessels ready to feed the growing foetus. Only if the egg meets sperm will it be fertilised and slowly develop over 9 months into a baby.

If the egg is not fertilised, it dissolves. The blood vessels and thickened lining of the uterus are no longer needed and come out through the vagina as menstrual blood. This process is called the menstrual period and lasts from anything between 2 and 7 days. Periods occur on average every 28 days but anything between 21 to 35 days is normal. This is called the menstrual cycle.

Sometimes the menstrual cycle may become irregular as a woman’s periods may be delayed or occur earlier than expected because of illness or stress. This is quite common amongst young girls who have just begun to menstruate or women who are approaching menopause.
The Menstrual Cycle – Stage 1

Girls get their first period when an egg in one of the ovaries matures. This can happen between the ages of 8 and 19 years.
The Menstrual Cycle – Stage 2

Once mature, the egg is released from the ovary and passes to the uterus through the fallopian tube. As the egg passes through the tube, the lining of the uterus thickens.
If the egg is fertilized, this lining of the uterus provides a home to a growing baby.
The Menstrual Cycle – Stage 4

If there is no fertilization, the body sheds the uterus lining in the form of blood or blood clots.
Menstrual Hygiene Management

Menstruation is not a disease or an infection. It is not dirty, shameful or impure. It is a natural process that takes place every month and shows that the female body is healthy.

**Menstrual hygiene is the process by which women and girls clean their genitals, wash and change used menstrual materials. It is important because, it:**

- Prevents body odour
- Prevents infections
- Enables women and girls to remain clean, healthy and feel comfortable and confident all day.
What should we use during our period to absorb menstrual blood?

Different materials or products can be used to absorb menstrual blood. These include cloth, sanitary pads, tampons or a menstrual cup. Cloth and menstrual cups can be washed, cleaned and reused, but sanitary pads and tampons must be disposed after one use.

**Cloth:**
- Always use clean cloth to absorb menstrual blood.
- Remove all hooks and other metal pieces from the cloth before use.
- Do not use synthetic cloth as it is not absorbent. Use cotton cloth instead.
- After use, wash the menstrual cloth thoroughly in cold water with soap and disinfect it by drying it in the sun.
- After the cloth is dry, store it in a clean box or a bag away from dirt, insects and moisture.

**Sanitary pads:**
- Place the sanitary pad in your underwear so that the plastic shield is below and the absorbent material is on top.
- Change sanitary pads at least every 4 – 6 hours, or more often, if the flow is heavy to prevent bad smells and infections.
Tampons
- Place the tampon inside the vaginal passage to use.
- Dispose the tampon after one use.
- Change the used tampon as frequently as sanitary pads, depending on the flow.

Menstrual cups:
- Menstrual cups are reusable.
- They are placed inside the vaginal passage and collect menstrual blood.
- A menstrual cup can be used for up to 8 hours a day without changing.
- Wash the menstrual cup thoroughly with clean water and dry before reuse.
- Each month, after the menstrual cycle is over, boil the cup for 20 minutes in water and keep it in the pouch away from dirt.

How do we safely dispose used sanitary materials?
- Wrap the used sanitary material (pads and tampons) in an old newspaper and place in a covered bin.
- You can also compost or bury it in a pit or burn it in an incinerator (a drum for burning waste).
- Do not throw used sanitary material in the toilet as it will clog the drain.
- Do not throw used sanitary material outside in the open, in a playground or in a water body.
- Most sanitary pads are made of plastic and other non-biodegradable materials that take hundreds of years to decompose.
- Using reusable cloth pads, menstrual cups or compostable sanitary pads can help to reduce waste and pollution.
How can we stay clean and look after ourselves during our period?

It is important to stay clean, smell good and feel confident and avoid infection. Here are some ways to do this:

- Wash hands with soap before and after changing a sanitary pad, cloth, tampon or cup.
- Wear clean undergarments or panties and change these frequently, especially when stained.
- Bathe at least once a day and wash the genital area with clean water.
- It is also fine to wash your hair during your period.
- After defecation, wash or wipe the genital area in a motion away from the vagina (i.e. from front to back) to avoid infection.
- Avoid waxing or using razors, bleach, hair removers or other chemicals near the genitals because the skin here is very sensitive. If at all you need to, you can carefully trim the pubic hair with a clean pair of scissors.
- When you go out, carry spare pads or cloth in a clean bag, and newspaper to wrap the used pads or cloth.
- Some women may experience mood changes and pain, and feel more tired before and during their period. This is normal.
- For pain relief, apply a hot water bottle on your lower abdomen.
- In case of a rash, use an anti-bacterial cream and keep the area dry.
- See a gynaecologist if your periods are irregular or very painful, if they occur more often than every 21 days or if they continue for longer than 7 days.
- Eat healthy, iron rich food and drink lots of water.
The Pledge

It is important to talk about menstruation and break the silence. Learn and teach this pledge to your family and friends - both male and female.

I will break the silence on menstruation.
I will not feel shy. I will take pride.
I will spread the word outside and inside the home.
Some Frequently Asked Questions

Q: At what age does a girl start menstruating?
A: Some girls begin to menstruate as early as age eight or nine, while others may not get their first period until a few years later.

Q: How much flow is there normally?
A: Menstrual flow can vary from person to person. Usually, a monthly period consists of a few spoons of blood.

Q: How long should a girl’s period last?
A: The duration of a menstrual period can vary from girl to girl. Bleeding usually lasts for four to five days but anything between two and seven is normal. One girl might have three-day periods while another might have six-day periods. In some cases, the length of the period can vary from month to month. For example, in the first month, a girl’s period might last four days, and then the next month it could be six days.

Q: How does the body feel during menstruation?
A: Sometimes a girl may experience physical or emotional changes around the time of her period, while others may not feel any change in moods or body. Physical changes include: cramps, pain, bloating, weight gain, longing for certain foods, painful breasts, headache and dizziness. Emotional changes include: irritability, short temper, anxiety or panic, confusion, lack of concentration, tension, fatigue or depression.
**Q: What kinds of foods should be avoided during periods?**
A: Eat regular foods such as vegetables, roti, rice, pulses and lots of fibre, and drink plenty of water to avoid constipation, as it can lead to increased pain from menstrual cramps. Cutting down on salty foods will prevent water retention in the body.

**Q: Is it risky or dangerous to engage in sports and games during menstruation?**
A: No, but if you feel tired or weak, then you must rest.

**Q: Are girls unclean and impure during periods?**
A: There is no impurity in menstrual blood. If girls manage their menstruation hygienically they will not feel unclean. Cleanliness and hygiene are important to keep away any bad smell or infection.

**Q: Should girls use only sanitary napkins?**
A: No. Clean and dry cotton cloth can be made into a pad for absorbing menstrual blood. Tampons and menstrual cups can also be used.

**Q: What can be done to relieve menstrual cramps?**
A: Place a hot water bottle on the stomach or on the back, depending on where the pain is located. Take a warm bath. Sip a hot drink, such as tea. Take a walk. Rub or massage the abdomen. Get down your elbows and knees so that the uterus is hanging down, which helps it to relax. Lie on your back with knees up and move them in small circles.