



Guide for Menstrual Hygiene Management activities

Every day, millions of women and girls have to manage their menstruation, an entirely natural physiological process, yet one that often remains considered too 'private' to discuss, let alone manage confidently. Menstrual stigma remains entrenched in societies the world over, but the lack of adequate hygiene facilities and safe menstrual products is particularly acute in many countries. Cultural and social attitudes towards females' place in society – as well as, quite simply, poverty – often stand in the way of women and girls being able to manage their menstrual cycle safely and in dignity. This has profound and wide-reaching implications not only for women's and girls' health and well-being, but also for their participation in education, economic activities, and social life.

Thus, Sanitation for Millions developed this guidebook that contains all relevant information trainings and awareness activities should entail.

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PRECISE INFORMATION ON PUBERTY

What is puberty?

Puberty is the time when children grow from being a girl to a woman / from being a boy to a man. Therefore, puberty is the process of physical and emotional changes through which a child's body matures into an adult.

When does puberty occur?

Puberty for girls starts between 8 to 15 years and for boys between 10 to 18 years. Some girls and boys start puberty a bit earlier or later because every person is different and that is okay. As young adults go through this stage, they will experience major growth body changes physically, psychologically, and emotionally.

Changes during puberty

Puberty or adolescence marks a time of great changes in physical development. It is a time when growing up girls and boys question what is happening to their bodies and what is normal or abnormal. They often compare themselves to their friends – noticing differences which might let them feel uncomfortable. Sometimes these changes in development can trigger the teenagers to have concerns. Those issues can range from concerns about puberty, physical development, self-esteem, and body image. It is helpful to understand common concerns, issues and challenges related to physical development and puberty. Being familiar with them will help these girls and boys prepare to be more comfortable discussing questions and concerns.

Girls: As being a girl, puberty includes different physical and mental changes, like first pubic hair, breast development, a growth spurt, and the onset of menstruation which is called menarche. The natural process begins in the brain. Many nerve centres are in the pituitary gland. They are stimulated by the adrenal gland and give the command to produce sex hormones which are responsible for several physical changes:

- Growth spurt: At the age of about 10 to 15, many young people grow enormously. It is quite normal for young people to grow up to eight metres a year.
- Changes in the figure: The female sex hormone oestrogen also affects fat metabolism. It thus ensures the distribution of fat cells in the subcutaneous fatty tissue. The hips become rounder and the pelvis wider.
- Breast growth
- Pubic hair
- Acne and extra oil on hair and skin develops
- Menarche (next chapter)

Besides the physical changes, many girls also notice psychological and mental changes. These can include reduced self-esteem, a higher sense of shame, increased sensitivity and altered behaviour towards fellow men.

Boys: As being a boy, puberty includes different physical and mental changes too. These include:

- Growth spurt
- Breaking of the voice: A boys' voice will develop from a higher local range to a lower and deeper one.
- Growth of breast and pubic hair
- First emission of semen
- Acne and extra oil on hair and skin develops
- Shoulders and chest grow wider and reproductive organs grow larger

Like girls, boys can experience some mental changes and challenges like a reduced self-esteem, a higher sense of shame, mental disorders and altered behaviour.

Physical and mental changes during puberty are normal and nothing to worry about. Everyone experiences puberty differently. For some it might be adventurous and fun, for others challenging and fearful. Growing up girls and boys should be aware that puberty is just a short time in life and even if they struggle with some issues, they are not alone in this.

Myths and misconceptions about puberty (depending on country context)

There are some false myths and misconceptions about puberty. Some of them are presented and falsified in the following section.

Myths/misconceptions	Rectifications
If you have not started puberty by the time, you are 10 years, it means you are not normal.	Puberty starts at different times for different people. You will go through lots of changes during puberty, some you will notice and some you might not.
Constant mood swings during puberty means there is something wrong.	Mood swings are a normal part of puberty. You may feel on top of the world one minute and irritated the next minute. This is normal and it is something you will outgrow. However, try to be kind to other people.
Breasts stop growing after puberty.	A girl's breasts can keep growing until they are in their late teens or even when they are adults. Girls' breasts grow at different speed, so it is important not to compare yourself to others.

How to manage puberty

Some tips and recommendations for young adults, but also for parents, teachers, religious leaders, etc. (both female and male) to support children and young adults in puberty:

Children and young adults:

- Be aware that these changes are normal and that everyone undergoes them. You are not alone.
- Talk to friends, family members, teachers, or other people of trust about feelings and fears.

- Appreciate your own body and its imperfections.
- Hygiene: Take a shower/bath and change your cloth on a regular basis.

Parents, teachers, etc.:

- Put yourself in the child's shoes and think back to your time as a young adult. You can also talk about your own experiences as a teenager.
- Try to stay calm and tolerate and talk about problems and challenges.
- Stay interested and involved in the child's life, and always let him/her know you are available if he/she wants to talk.
- Praise the child for its efforts, achievements, and positive behaviour.
- Respect the child's private space and give him/her scope for development.
- Give the child responsibility: Young people are in the process of taking responsibility for themselves. Let the child make his/her own decisions and offer advice when it is needed.
- Be understanding but still show the child boundaries.

PRECISE INFORMATION ON MENSTRUATION

What is menstruation?

Menstruation or period is a woman's or girl's monthly bleeding. The female body discards the monthly build-up of the lining of the uterus. Menstrual blood flows from the uterus through the cervix and passes out of the vagina. The first menstrual period usually begins between 8 and 15 years of age, a point in time known as menarche. Most girls get signs before menstruation. The most common signs and symptoms include acne, tender breasts, bloating, feeling tired, irritability, and mood changes. Menstruation is an important and totally normal part of the female reproductive cycle.

During the monthly menstrual cycle, the uterus lining builds up to prepare for pregnancy. If a girl/woman does not get pregnant, oestrogen and progesterone hormone levels begin falling. Very low levels of oestrogen and progesterone tell the body to begin menstruation.

Female body (can be adapted to the institutional context)

To understand menstruation, girls and women must understand their female body. This includes the internal and external structures of the reproductive and urinary systems and an understanding of those.

- The vulva: This is made up of the structures outside the vaginal opening:
 - Mons pubis: Rounded, fleshy area on the front of the pelvic bone.
 - Labia majora and labia minora: Fleshy outer folds of protective skin located on each side of the vagina. They cover and protect the more sensible external genital organs.
 - Urethral opening: The urethra is the tube that carries urine from the bladder out of the body. Its opening is located above the vaginal opening, below the clitoris.
- Vagina: It is a muscular canal that connects the cervix and the uterus. It is the canal where menstrual blood comes out of your body. The vaginal opening is located between the urethra and the anus.
- Ovaries: Those are the organs where eggs are developed and stored. All women and girls have two ovaries, one on either side of the uterus. Each ovary holds hundreds of thousands of tiny eggs. Girls are born with all the eggs they will ever need. Each month an egg becomes mature and is released from the ovary.
- Fallopian tubes: These carry the egg from the ovaries to the uterus.
- Uterus: This is inside the lower stomach of a girl or woman. When a woman is pregnant, this is where the foetus grows and develops.
- Uterus wall: This is the lining of the uterus. It becomes thicker until it comes out through the vagina as menstrual blood.
- Cervix: This is at the bottom of the uterus that separates the lower uterus and the vagina. It has a small opening that menstrual blood comes out through and through which the sperm enters to fertilize the egg. During childbirth, the cervix dilates so that the baby can move out of the uterus, into the vagina, and out of the body.
- Hymen: This is a thin tissue at the vaginal opening. It becomes from elastic with age and breaks and ruptures at some point in a girl's life. This can happen during sexual activity, while doing sports or because of special movements. A broken hymen is no evidence of sexual activity and an intact one no evidence of virginity.

Vaginal discharge

When not menstruating, you may have vaginal discharge, which is normal. It may be clear, cloudy white or yellowish.

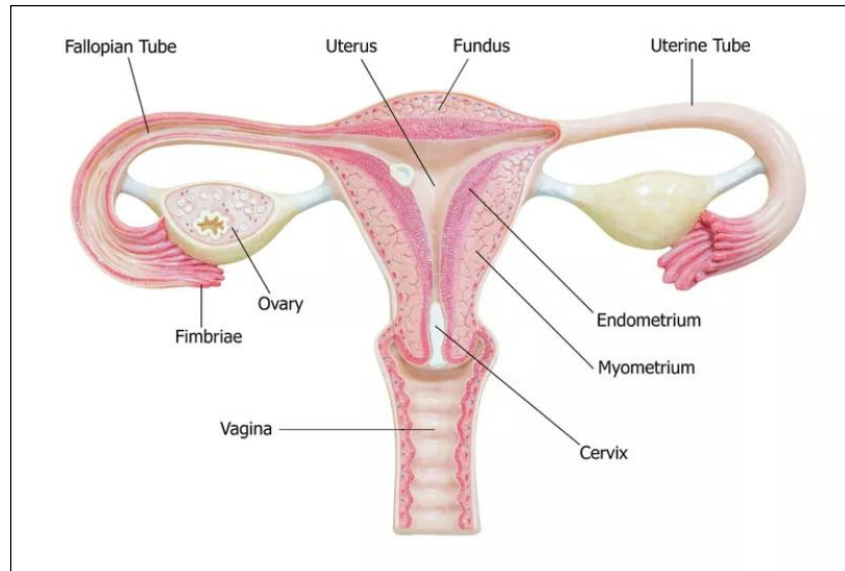


Figure 1: Internal female anatomy (Jones, 2023: [Female Anatomy: Labeled Diagrams \(Inside and Outside\)](#) ([verywellhealth.com](#)))

Menstrual cycle

The menstrual cycle is a process through which the female body releases mature eggs and prepares for fertilization. This cycle begins at puberty. The average menstrual cycle is usually around 28 days, but some girls and women have a cycle of 21 and others up to 38 days. The first day of your period is the first day of your cycle. Hormone levels change throughout the menstrual cycle and can cause menstrual symptoms.

A period lasts from three to seven days, but some women have shorter or longer periods, and the duration can be different from one period to the next. The menstrual cycle for girls during their first year or two is often irregular, which means that the number of days between periods or the numbers of days of bleeding is not the same or that

some girls are losing more or less blood than usual. Irregular periods are common and normal. A missed period does not always mean there is a problem, but if a woman or girl has three or more missed periods in a row, she should see a doctor. The most common reason for a missed period is pregnancy. But there are other reasons for having irregular periods too. Those can be high levels of stress, changes in body weight and malnutrition, and underlying illnesses such as fibroids.

It is normal for a girl to start her periods between the ages of 8 and 15, although some start earlier. If a girl is 16 and still has not started her periods, she should see a doctor.

When the blood stops flowing, the lining of the womb thickens in preparation for a new egg. This is about 8th – 11th day. Then ovulation takes place between day 12 - 17. This is when the egg is released from the ovaries, and this is usually around the 14th – 15th day. If fertilization has not taken place, the egg fades away between the 18th – 25th day and then the lining of the uterus which had thickened loosens and detaches itself. This occurs between the 26th – 28th day leading to discharge of blood through the vagina, and this is called Menstruation.

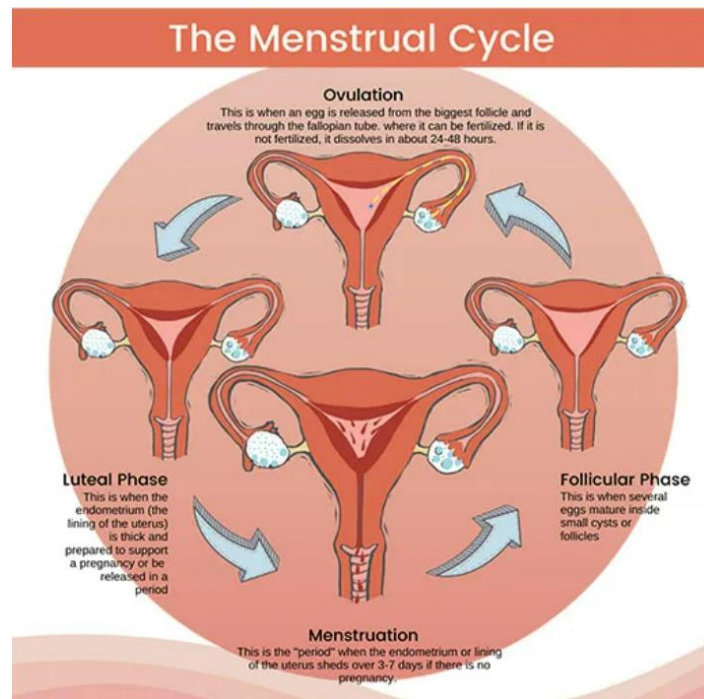


Figure 2: The Menstrual Cycle (Menstrupedia, 2023: <https://menstrupedia.com/articles/girls/cycle-phases>)

The natural cycle can be divided into four phases, which are presented in more detail below.

- Phase 1:
 - Menstruation/Bleeding Phase
 - Days 1 – 7
 - It is also referred to as a period, experienced by women and girls when their egg has not been fertilized. It normally takes three to seven days. The period may be light or heavy. About two to six tablespoon of blood pass out of the body during a period. Uterine and abdominal muscles contract to push the blood and tissue out. It is this contracting which sometimes causes women and girls to feel pain and cramping in their abdomen and lower back during menstruation. During this time, women or girls may experience period symptoms such as cramps, sore/tender breasts, bloating, mood swings, irritability, headaches, tiredness, and lower back pain.
 - Typical emotions: down-to-earth, calm, affectionate

- Phase 2:
 - Follicular Phase
 - Days 8 – 13
 - This is time when the body sends out oestrogen, signalling the ovaries to prepare an egg to be released. The same hormones also cause the walls of the uterus to thicken, building up a soft lining of blood and tissue.
 - During this phase, many women and girls are happy, adventurous, active, optimistic, and self-confident.

- Phase 3:
 - Ovulation phase
 - Days 14 – 20
 - Ovulation is when the ovary releases a mature egg. The egg travels down the fallopian tube towards the uterus to be fertilized by the sperm. It is difficult to estimate exactly when ovulation will happen, but the seven days around ovulation is when a woman or girl is most likely to get pregnant. The egg is only alive for 24 hours after ovulation, but a sperm can live for three to five days. Usually, ovulation happens approximately 14 days before the start of the next period, for the 28-day cycle. You can tell that you are ovulating by symptoms such as a slight rise in body temperature and thicker discharge that has the texture of egg white. After a day, the egg will die or dissolve if it is not fertilized.
 - Note: Because a sperm can live up to five days, pregnancy can occur if a woman or girl has unsafe sex as much as five days prior to ovulation.
 - Typical emotions: self-confident, focused, structured, optimistic, passionate, euphoric, curious

- Phase 4:
 - Pre-menstrual/Luteal Phase
 - Days 20 – 28
 - If a woman or girl does not get pregnant, the oestrogen and progesterone levels decrease, which causes the onset of the next period. This normally happens if the egg which ends in the uterus is not fertilized, so the body prepares for the next period. At this stage the progesterone hormone is released into the blood system and causes body changes, like mood swings.
 - During this phase, it is normal to feel sore and more sad or emotional. This is called Premenstrual Syndrome (PMS). Some females need more rest and are introverted.

How to track menstrual cycle

You will tell the time of the next period by counting the number of days on a calendar. It is for you to keep track of the days of your menstrual cycle by counting the first day of monthly bleeding as day one and encircles it. Then count the number of days your menstruation lasts. That marks the beginning of your next period. During the days of your period, please write down in a dairy or note book the signs and symptoms you experience. When you experience severe abdominal pains, heavy bleeding with clots dizziness or body weakness and severe headache, tell your parent, guardian, senior women teacher, or another trusted person or go to the nearest health centre.

How to keep track of the menstrual cycle:

When tracking the menstrual cycle, you can mark the days you are having your period on a calendar. During the menstruation you can note if the flow is heavy by putting three stars (***) . If the flow is moderate put two stars (**),

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		period day 1 - light cramps - normal bleeding - tired	period day 2 - normal bleeding - heavier cramps	period day 3 - heavy bleeding - really bad cramps - emotional	1 period day 4 - lighter bleeding - no cramps	2 period day 5 - almost no bleeding
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26 period starts	27	28	29	30
31						

Figure 3: Example of how to track the menstrual cycle (Spitz, 2022)

and for light flow one star (*). On the same dairy using different colours of pens write whether the pain is severe by putting 3 stars (***) , moderate pain, two stars (**) and mild pain one star (*). There are plenty possibilities of how to use a menstruation calendar. Try a few and see which suits you best.

Another method which might be helpful is the use of a menstrual bracelet. This is a bracelet with pearls in different colours to track an average menstrual cycle of 28 days. For example, red pearls represent the period, pink pearls the time of ovulation and white pearls the time in between. Especially for younger girls, the bracelet can be helpful to understand possible emotional fluctuations and to be prepared for their next period.

After a few months, you can see if your period is regular or if it is different each month. You can also track your PMS syndromes, like cramps, breast tenderness or headaches.



Figure 4: Menstruation Bracelet (Social Change Makers and Innovators, <https://sochai.org/product/redcycle-bracelets/>)

Symptoms/challenges before and during menstruation

Some girls and women experience pre-menstrual signs. It is estimated that as many as three of every four menstruating women have experienced some form of premenstrual syndrome (PMS). Some girls and women experience challenges even during their menstruation.

Pre-menstrual signs and symptoms during bleeding phase	Conditions experienced by girls and women during menstruation
Depression and anxiety	Abdominal bloating
Fatigue	Abdominal and/or back pain
Nausea and vomiting	Diarrhoea
Tenderness, tingling and painful breasts	Headaches
Acne/pimples	Melalgia
Craving for food, especially for sweets	Craving for food
Mood swings and emotional outbursts, e.g., irritability and sadness	Mood swings and emotional outbursts
Constipation	Irritability
Changes in sleep patterns	Vomiting

Myths and misconceptions about menstruation (depending on country context)

Myth/misconception	Rectification
Big girls are the only ones who menstruate.	Girls can start menstruation at any age in puberty, therefore, size does not matter.
You cannot get pregnant if you have sex during menstruation.	You can get pregnant during ovulation when there is blood spotting which can be mistaken for menstruation. Therefore, it is important for you to abstain from sex or use protection.
Men with HIV/AIDS are cured when they have sexual intercourse with girls before having their first menstrual period.	You can get HIV/AIDS and sex cannot cure HIV/AIDS.
When you get your first period it means you are ready for marriage.	You are not ready for marriage, you should continue with your education and marry when you feel that you are ready.
Menstruation is a curse.	Menstruation is not a curse. It is a normal body change, healthy and a natural blessing.
Menstruation is some kind of disease.	This is absolutely wrong. It is rather a normal process of a human being and not an illness.
Menstruation is dirty and unclean.	Menstruation is not dirty or unclean, but girls should ensure they maintain good personal hygiene such as changing sanitary pads, washing hands with soap and bathing regularly depending on the flow.
Girls are unclean or impure during their menstruation.	The blood that is shed during menstruation is not impure blood. This is the shedding of the lining of the endometrium of the uterus which is thickened during the cycle in anticipation of a fertilized egg. That is why menstruation is also referred to as “tears of the womb”. Menstrual blood only starts to smell when it gets into contact with air outside the girl or woman’s body.
If you delay having menstruation by the age of 16 years, it means you are barren.	It is not true that when you reach 16 years before you menstruate it means you are barren. However, if you reach 16 years and you have not started menstruation, please seek medical advice from a qualified health worker.
Girls should not bathe or do physical exercise during their menstruation periods.	Menstruation is a very normal part of every girl’s life. During your menstruation, you can do everything you normally do, including daily bath or shower, exercising, dancing, and playing sports are all fine. However, some girls feel tired or get cramps which may restrict such activities. Do only what you feel comfortable with.
Eating certain foods like liver, beans, porridge, chicken, eggs, tea increases blood flow.	You need to eat very well during menstruation as one loses a lot of blood which may lead to dizziness, dehydration, and anaemia.
If you carry a new-born baby during menstruation, it will get a rash and the cord will not dry.	If they feel well, girls in their menstruation can do all kinds of work including carrying new-born babies. To carry the baby, you should maintain good personal hygiene.

<p>Girls in periods should not attend any religious ceremonies like church or Moslem's prayers including touching of the Koran.</p>	<p>There is no impurity in the blood associated with menstruation. Good hygiene practices like bathing, washing of genital areas with clean water and periodic change of pads help maintain cleanliness and keep away infections.</p>
<p>Passing through a ground nuts garden or picking some fruit from a tree during menstruation dries up the tree or groundnuts.</p>	<p>There is no relationship between the yields of ground nuts and menstruation.</p>
<p>When you step on menstrual blood you get cracks on your feet.</p>	<p>This is not true but calls for proper disposal of menstrual blood/pads.</p>
<p>If you burn the menstrual pads, you are burning your eggs and you will become barren.</p>	<p>Incinerating or burning used menstrual pads does not affect a woman's fertility in any way. Instead, burning is a good method of disposal.</p>

PRECISE INFORMATION ON MENSTRUAL HYGIENE MANAGEMENT

How to manage menstruation

Menstruation is often a taboo subject in many cultures and societies, silenced and ignored. It is not surprising, therefore, that many girls and women do not know what their period is when they first get it, and often they lack the support from their parents and the community to talk openly about menstruation. Feel free to talk to your parents, teachers (especially the senior woman teacher), person of trust, etc. to help you out in case it is the first time you are getting your period and you are not sure of what to do.

The following table lists possible challenges and appropriate solutions which can help girls and women to feel more comfortable.

Challenge	Possible Solutions
Pain and cramps: painful periods, headache, stomach-ache, bloating, back ache, painful breasts, joint pain	<ul style="list-style-type: none"> • Using heat: Roll a warm water bottle or place a warm towel on the lower stomach and lower back to help with the cramps. • Relax: It is normal to have less energy during your periods. Rest and think about positive things that make you happy or distract you. • Stay active if you like: Stretch and do exercises to reduce menstrual cramps and bloating and to improve your mental health. But be careful, just do what feels good to you. If you are not in the mood to do anything, just take a rest. • Drink plenty of water: It is important to drink water during your periods. This will keep you hydrated and avoid headaches and bloating. • If the pain or bleeding is too much/prolonged, please see a doctor.
Feeling tired/general body weakness; heavy or prolonged or repeated menstrual flow/bleeding	<ul style="list-style-type: none"> • Drink plenty of water, especially warm water. • Eat a balanced diet to improve your overall health and energy level, which means eating plenty of fruits and vegetables and reducing your intake of sugar, salt, caffeine, and alcohol. • Get enough rest.
Anaemia	<ul style="list-style-type: none"> • Take a warm bath. • Food: Eat plenty of fruits and vegetables and foods high in thiamine and riboflavin, iron supplements can be useful too.
Mood swings: Irritability, anger, crying spells, depression, and anxiety may come and go in the days leading up to your period. Some women even have trouble	<ul style="list-style-type: none"> • Exercise can help boost your mood and fight fatigue. • <i>Optional: Take supplements, such as folic acid, vitamin B-6, calcium, and magnesium to reduce cramps and mood swings.</i> • Sleep at least eight hours per night or take a rest when needed.

with memory and concentration during this time.	
Blood leaks through clothing.	<ul style="list-style-type: none"> • If you are not at home, you might feel uncomfortable with this situation. But do not worry, it is nothing you must be ashamed of, and it happens to every girl and woman at some point in life. Change your pad and if you have a jacket or pullover with you, you can tie it around your waist to cover bloody plains.

Other support requires

- Access to emergency/menstrual clothing: There are times when women and girls in menstrual age are ambushed with menstruation due to changes in the menstrual calendar and other factors. In this case, they need some emergency clothing like wrapping cloth, new knickers, drying cloths and emergency uniforms for the case of schoolgirls. This helps the girls and women to prepare themselves well and to avoid embarrassment in public because of staining their clothing.
- Access to soap and basin: Soap is a cross cutting requirement that is needed not only during menstrual periods alone, but even off the menstrual periods. It is therefore important that soap is available at all times for girls and women.
- Access to psycho-social support: Menstruation affects people differently and is sometimes associated with psychological challenges. For instance, for girls that are not prepared for this physiological change, find it shocking, while even those that are prepared and are experiencing it for the first time are psychologically affected in a way. The situation becomes even worse if the girls and women are unable to manage their menstruation well due to leakages of menstrual blood in their clothing which might attract embarrassment. Not attending to the psycho-socio needs of the girls may lead to withdrawal, feelings of worthlessness, isolation and may eventually contribute to their dropping out of school.
- Social support networks: Networks and clubs are a good platform for sharing MHM information and experiences if revived.
- Nutrition support and advice: Menstruation is clearly associated with loss of blood and water, and this partly explains why the health experts often encourage women and girls in their menstrual periods to drink a lot of water and fluids. They are also required to eat the right kinds of food to replace the lost blood. It is upon this background that nutritional support and advice is particularly important for women and girls of menstruation age.
- Disabilities: Special focus on girls and women with disabilities, including physical, visual, auditory, and intellectual impairments, which can create additional MHM challenges, e.g., a need to sit down to change menstrual materials or having difficulties to communicate pain and discomfort.
- Access to knowledge and skills: Essential information must be spread at an early age before a girl has her first period to avoid stress and fear. Girls need an understanding of the biology of the menstrual cycle and the opportunities and information to handle a safe and hygienic menstruation.
- Inclusion of family members: Parents and other family members need to be sensitized about menstruation and the need for support to their girl children in terms of regular purchase of pads.

Male engagement in menstrual health

Ensure that boys and men are sensitized and a part of the discussions on MHM in schools so that they are supportive of the girls in their menstruation period instead of laughing or shaming them. The inclusion of boys in menstrual discussions especially in school settings strengthens a positive mentality towards menstruation, generates knowledge and prevents abuses, intimidation, and embarrassment.

Tips on how girls can have a healthy menstrual period

- Keeping healthy – Nutrition and exercise: Feeling healthy and comfortable during menstruation is important for you. You need to take care of yourself by listening to your body.
 - Eat a healthy and balanced diet. If it is possible include food which contains iron, vitamins, and magnesium. Green tea can help reduce cramps.
 - Exercise, if it is good for you and your body. Sometimes light activities, like doing yoga or go for a walk might be a helpful solution.
 - Avoid drinking alcohol or smoking.
- Be prepared: Knowing when your period will start can help you make sure you have your menstrual cup or reusable pad with you. Always carry a spare pad(s) for changing while at school.
- Safe and clean menstrual management method: Make sure you change your menstrual management method or materials frequently and that you follow the guidelines to keep it safe and clean.
- Keep your vaginal area clean: Wash the vaginal area at least once daily during periods. Wash the outside with clean water but avoid using soap! Do not wash or insert any liquids inside the vagina and avoid spraying perfumes around your private parts. It is not necessary and can increase the risk of infections. It is better to wash yourself on a regular basis.
- Washing of your re-usable pads: Wash all your re-usable pads after each menstrual cycle and keep them in a clean dry polythene bag or suitcase to ensure they are safe for the next period. When washing, remove and wash inside materials separately from the outer material of the sanitary pad using soap and water to ensure cleanliness.
- Clean and dry pants/knickers: If you wear pants, make sure that they are clean and dry to prevent the growth of bacteria.
- Care for your knickers: Never hide dirty knickers in or under the mattress. Always wash and dry them out in the hot sun. Menstrual flow is a natural body fluid that can be washed out with soap and water. You can add a little salt in the water to avoid staining. Always dispose of the old and loose pair of knickers by burning to avoid discomfort and infections.
- Safe keeping before washing re-usable pads: Always carry a plastic bag/polythene bag or a newspaper to wrap your soiled re-usable pad for washing at home.
- Never share your menstrual management material: It is yours and yours alone. Sharing a method/menstrual material increases the risk of passing on infection and diseases to others.


- Drying menstrual materials/reusable pads: Never dry your reusable pads and knickers under your bed. Always dry your re-usable pads and pairs of knickers/underwear in direct sun light, covered under a piece of cloth in case you would not like other people to see them. Avoid drying underwear's on the grass.
- Hand washing: It is especially important to have clean hands, it will stop you from passing germs onto other people or yourself. Remember to wash your hand before and after changing your menstrual management method/material.
- Disposal of the old reusable pads: Disposal off the old reusable pads when worn out by burning.
- Disposal of the old pair of knickers: Always dispose of the old and loose pair of knickers by burning to avoid discomfort and infections.




Most important: Do what you think is good for you. If you want to go out and have fun with your friends, feel free to do so. If you need a rest and lying on the couch with a cup of tea sounds more comfortable to you, please do so.


Menstrual hygiene materials

Menstrual hygiene materials are those used to catch menstrual flow. There is a range of menstrual products available on the market and it is important for girls and women to make informed decisions on what to use. Materials should be affordable, acceptable, and accessible to people who menstruate. They should absorb, collect, and dispose menstrual blood and can be disposable or reusable. Menstrual material includes the following: disposable sanitary pads, ReUsable Menstrual Pads (RUMPs), menstrual cups and tampons. Cloth can also be a hygienic option to manage bleeding, when washed and stored properly. No single material will be preferred by all girls or all women, all the time, and all materials have aspects that girls and women may like and dislike for several reasons, so it is up to the girls and women themselves to decide which material they will use.

The table below describes the most common examples of menstrual materials and products used by women and girls:

Type of sanitary material	Description and how to use it.
Disposable pads 	<ul style="list-style-type: none"> • Disposable pads are worn externally to the body in the underwear to absorb menstrual flow. They are disposed of after a maximum of eight hours. They are therefore consumables which require regular assessment of supply, availability, and affordability. • Are worn in the girls' pants or knickers. • Most disposable pads have 'wings' and a sticky backing those sticks to underwear and stops them bunching up or moving out of place. • There are diverse sizes, absorbencies, and materials • Advantages: clean; easy to use; easy to get; require no access to water and soap; comfortable • Disadvantages: expensive; provision of underwear; standards only in some countries; large amount of waste

<p>Reusable pads</p> 	<ul style="list-style-type: none"> • Reusable pads are worn externally to the body in the underwear, to absorb menstrual flow and held in place usually by snaps. After use, they are washed, dried and re-used. • These are either homemade or factory-made washable fabric worn by girls and women during menstruation and not thrown away after use. • They are made with absorbent material and some of them are lined with plastic to minimize leaking. • The pad consists of the pad itself, liners for absorbing the flow, and wings with buttons to secure the pads around the knockers. • A range of soft pads/cloth material is inserted into the pad holders to accommodate a heavy or light flow. • The pad can be washed and reused up to a period of one year. • Advantages: clean; environmentally friendly; comfortable; easy to use; cost-effective; easy to get/can be made by yourself • Disadvantages: no standards; provision of underwear
<p>Clean pieces of cloth</p> 	<ul style="list-style-type: none"> • Cloth can be used, either tied to a small rope around the waste or in the underwear. They can be cut to fit in the panty area. • Alternatively, clean pieces of cloth can be used by sewing several layers on top of each other. • Pieces of cloth must be clean, washed and hung in a sunny place to dry. They should not be shared and not in use for longer than one year. • They are made from either new purchased piece of fabric or old fabric repurposed from clothing or another use. • Advantages: cost-effective; available in most countries; naturally friendly as they can be reused and are made of cotton; easy to use; comfortable • Disadvantages: higher risk of infections compared to other materials; no production standards; need of water and soap
<p>Menstrual cup</p> 	<ul style="list-style-type: none"> • The menstrual cup is a non-absorbent bell-shaped device that is inserted into the vagina to collect menstrual flow. It creates a seal and is held in place by the walls of the vagina. • Is a sustainable cup made from medical silicone rubber. • It collects three times more blood than pads or tampons and needs to be emptied every six to twelve hours • It can be washed and reused for up to ten years. After each menstrual cycle the cup must be boiled for five to ten minutes. Most manufactures offer at least two sizes, and different shapes are becoming more common. • Advantages: clean; cost-effective; environmentally friendly; safe; no underwear is needed; incredibly minimal risk of infections

	<ul style="list-style-type: none"> • Disadvantages: not easy to use, some training and patience needed; water, soap, and a possibility to boil and store the cup are needed; lack of standards
<p>Tampons</p> 	<ul style="list-style-type: none"> • Tampons are a mass of absorbent material/compressed fine cotton formed into small, tube-like shapes, primary used as a feminine hygiene product. • Made from cotton and/or rayon that are inserted into the vagina to absorb menstrual flow. They expand with moisture and thereby avoid leakage. • They can be worn for up to eight hours. • Just like menstrual cups, tampons are inserted as well inside the vagina during menstruation to absorb menstrual fluid before it comes out of the body. They are disposable in nature. • The thin tube of cotton expands with moisture, forming an effective plug to catch the blood. • Tampons have a cotton thread attached to them, which remains outside of the body and is used for removal. • Advantages: leak proof; no underwear is required for use • Disadvantages: limited access; expensive; not easy to use, some training and patience needed; water and soap needed; risk of toxic shock syndrome; enormous amounts of waste; no regulations and standards in low-income countries

Bad materials, which should not be used.

- Toilet Paper: Tears easily/loses strength when wet; pieces of toilet paper tissue can easily enter the girl's reproductive system.
- Natural materials: Difficult and uncountable to use; it stigmatizes and shames girls and women; it is not safe hygienically; had high risk of contamination.
- Use of newspapers: Tears easily; pieces of toilet paper tissue can easily enter the girl's or women's reproductive system.
- Sponge or mattress: Pieces of sponge can easily enter a girl's or woman's reproductive system; if not well handled, can lead to infections of the genital area.
- Use of dirty pieces of cloth/rugs: Dirty pieces of cloth can be a source of infection for women and girls.

Disposal of MHM materials

Menstrual waste is composed of used menstrual absorbents, including cloth, disposable sanitary napkins, tampons and other substances or materials. Commercially marketed disposable pads are the most commonly menstrual product disposed of. The vast variety of sanitary pads leads to a challenge of how to collect, treat and dispose menstrual waste. Classification of menstrual waste can differ between products used and country specific policies. In most countries it is classified as municipal solid waste and defined as sanitary waste. Menstrual waste is not classified as medical waste or as toxic and hazardous substances though implying certain health risks.

Menstrual wastes are mostly commercial disposable products such as pads and tampons. Disposable products consist of a mixture of materials, including polythene, cotton, rayon, polyester, cellulose, and super absorbent polymers (SAPs). Biodegradable materials are estimated to take a minimum of six months to degrade; plastics take several hundred years. Most commercial products are bleached and scented, thus containing chlorine and other chemicals which have a detrimental ecological impact if not disposed safely. Reusable products such as cups, cloths, reusable pads, or period panties, create significantly less waste since their lifespan ranges between one and ten years.

Women and girls face different constraints during menstruation depending on region, age, socio-economic situation, and access to waste disposal systems that determine how and where they dispose of menstrual absorbents. The most common disposal habits are the disposing of menstrual waste in the open, in latrines, through routine waste disposal systems and through burning and burying. These habits are often influenced by deeply embedded socio-cultural norms and taboos regarding menstruation and menstrual blood. This leads girls and women to hide or remove all traces of blood, through washing absorbents, smearing them with mud, wrapping them in paper or plastic and keeping them until they can be discarded discreetly. Menstruators habitually choose discrete disposal options over open disposal, e.g., discarding menstrual waste in latrines rather than open bins or incinerators, resulting in additional challenges. Furthermore, used menstrual products are frequently being wrapped in plastic or paper before disposal, due to shame or promotion on the packaging. Especially in areas, where waste collection systems are deficient or non-existent, menstrual waste is mostly disposed of in the open or in latrines, creating exposure risks and environmental pollution, particularly in dense urban areas.

A specific problem caused by menstrual waste is the disposal of menstrual hygiene products in sewerage systems which can lead to blocked sewage pipes and significant costs for the responsible entities. In non-sewered sanitation facilities, such as pit latrines, the non-biodegradable material of sanitary napkins compromises the aerobic and anaerobic digestion process of the organic material. Menstrual waste not only accelerates the filling up of a pit latrine, but fundamentally prolongs the process of pit emptying and cleaning, making it inefficient and expensive.

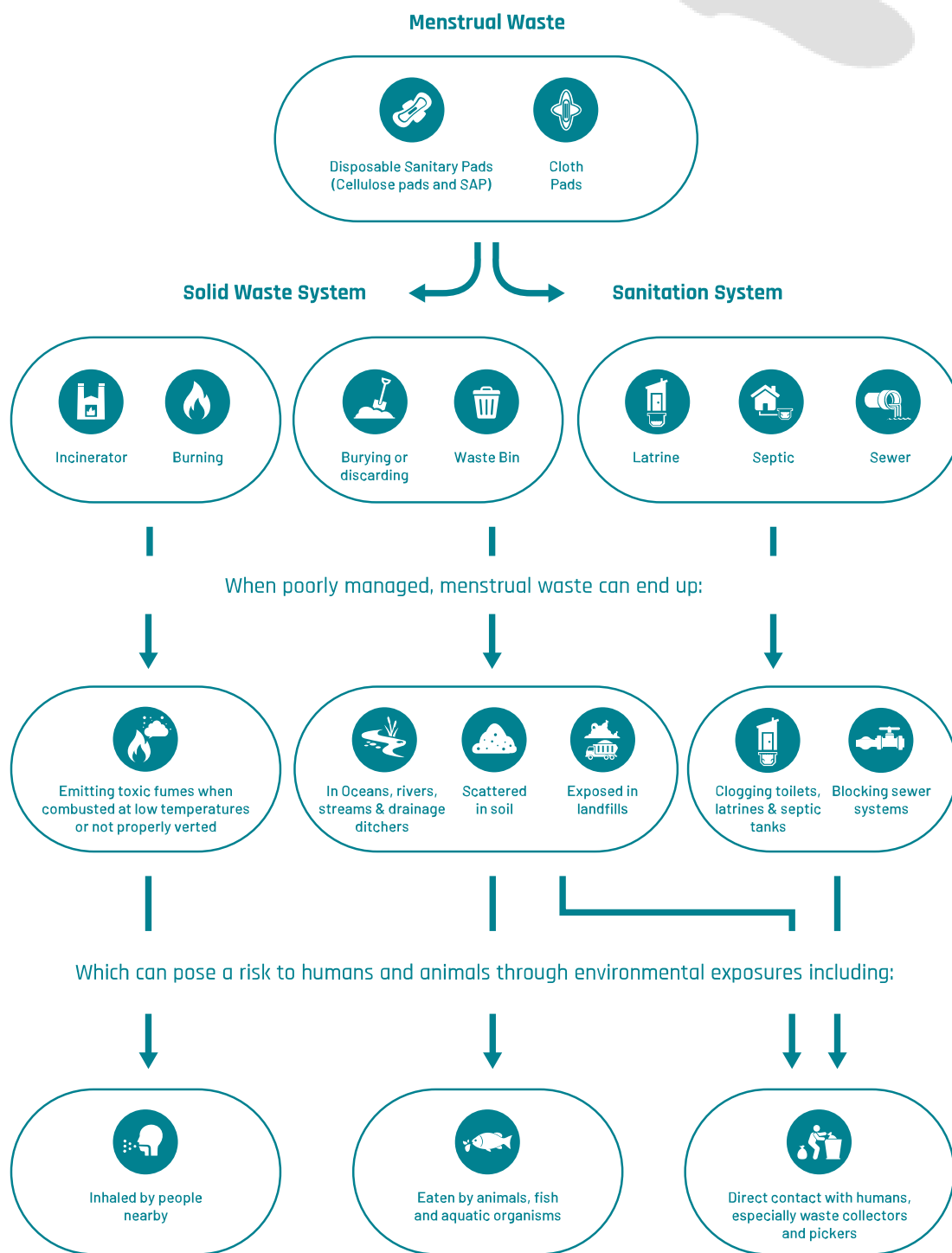


Figure 3: Waste disposal pathways, potential environmental and health measures included (Based on: Elledge et al. 2018: 14)

Incineration of Menstrual Waste

Properly maintained and located incinerators may provide a discrete way of disposing of menstrual absorbents if they fulfil certain criteria. In areas where there is no municipal solid waste management system, wastes need to be treated safely at the site by burying or incineration. When connected directly to the toilet cubicle, menstrual waste does not need to be handled (e.g., collected, transported) and girls and women can dispose of their absorbents discreetly. The chute needs to be designed in such away, that clogging is impossible, and cleaning is easy. When built detached from the sanitary facility, the incinerator should be best placed outside the view of people and covered bins should be installed within the cubicles for privacy. Regular emptying and cleaning of the bins needs to be ensured to maintain a hygienic and convenient situation. Due to the composition of menstrual absorbents, in particular commercial disposable pads, the incineration of menstrual waste emits toxic fumes, smoke, and bad smell. Many sanitary napkins contain chlorine bleach, which emits dioxins (a human carcinogen with developmental and reproductive effects) when burned improperly. Hence before installing an incinerator, following criteria are to be assessed and fulfilled:

- The incinerator needs to best fulfil the WHO standard to burn in a temperature of at least 850 °C - 1.000 °C for a minimum of two seconds though locally manufactured incinerators allowing temperatures up to 500 °C (WSSCC recommendation) might be alternatives due to costs and availability of such technologies.
- Incinerators always need a chimney which is at least 4 meters tall.
- The smoke and odour should not reach classrooms or premises where people are staying.
- A trained operator must be appointed and be responsible for the safe operation of the incinerator, e.g., appropriate start-up and cool-down procedures, achievement and maintenance of a minimum temperature, use of appropriate loading/charging rates (fuel as well as waste) and proper disposal of ash.
- The operator must be equipped with the necessary safety gear.
- Sufficient budget needs to be allocated for implementation as well as operation (e.g., fuel) and maintenance of the incinerator.

MENSTRUATION IN RELIGIOUS CONTEXTS (DEPENDING ON KIND OF INSTITUTION)

Taboos, silence, and shame around menstruation is still the status quo in some countries. Traditions, culture, religion, and education have a significant impact on how societies deal with menstrual health and hygiene practices. Thereby, faith-based institutions and religious leaders play a significant role on how a society and its members, especially women and girls deal with their menstruation.

Religion is a central authority and moral compass in many countries of the world. Making the issue of menstrual hygiene a normality in society instead of something exceptional and impure requires the support of faith-based institutions and its members. For this reason, it is important to include faith-based institutions and faith leaders in the discussion, advocacy and, education on menstruation.

Faith leaders can have a greater outreach than other entities, such as government organisations and moreover, they are highly trusted in their communities. As members of the communities, they understand the specific needs and are uniquely placed to respond to those. Thus, raising awareness and spreading knowledge on MHM via faith leaders can serve as a channel to social transformation and they can be seen as multipliers in this process.

Faith leaders can inspire action, engage in advocacy, mobilize, and influence attitude and behaviours. They can deliver MHM education and trainings, focus group discussions, awareness, and sensitization in communities and schools. Moreover, faith-based institutions are strategically positioned to initiate dialogue around menstruation in communities and politics.

Examples for different kinds of cooperation with faith-based institutions:

Religious beliefs play a significant role in the individual life's of many people. A strong faith can provide support and comfort in difficult situations. Religious beliefs and practices have a great impact on how individuals deal with certain situations and challenges in life and therefore, can be seen as a spiritual pathway. As a result, an interpersonal spiritual viewpoint can influence and contribute to shattering taboos, improve a female-friendly environment and consequently positively impact MHM situations.

Focus group discussions/ Capacity building trainings: Faith leaders and community members are trained on MHM in order to provide precise information on menstruation and to provide support for girls and young women to grow in the context that menstruation is a healthy and normal biological process and not a taboo or harmful.

Youth conference and meetings: Awareness and menstrual hygiene education can be integrated into events that take place on a regularly basis, such as youth meetings and conferences. This approach leads to increased knowledge and understanding about menstruation and puberty, and it supports active participation to face psycho-social and emotional challenges during menstruation. The older adolescent girls would set the role model of breaking their silence especially sharing their own experience during menarche and methods of menstrual hygiene management.

Older women meetings: Awareness and MHM information can also be disseminated at women meetings to increase support by families and other community members. The older women can share their experiences on menstruation and the challenges they faced as teenage girls. The meetings can improve knowledge and generate support for increased focus group discussion on menstruation matters and encourage an exchange across generational boundaries

Examples for misconceptions about menstruation related to religious contexts.

Religious Context	Misconception
Islam	Quran 2:222 portrays menstruation as a harm and a woman under menstruation is unclean.
Christian denominations	Leviticus 11:1-15,33 perceives that a woman under menstruation is unclean for seven days, and anyone who touches her also becomes unclean until evening. This is not preached, but it exists in the bible.

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