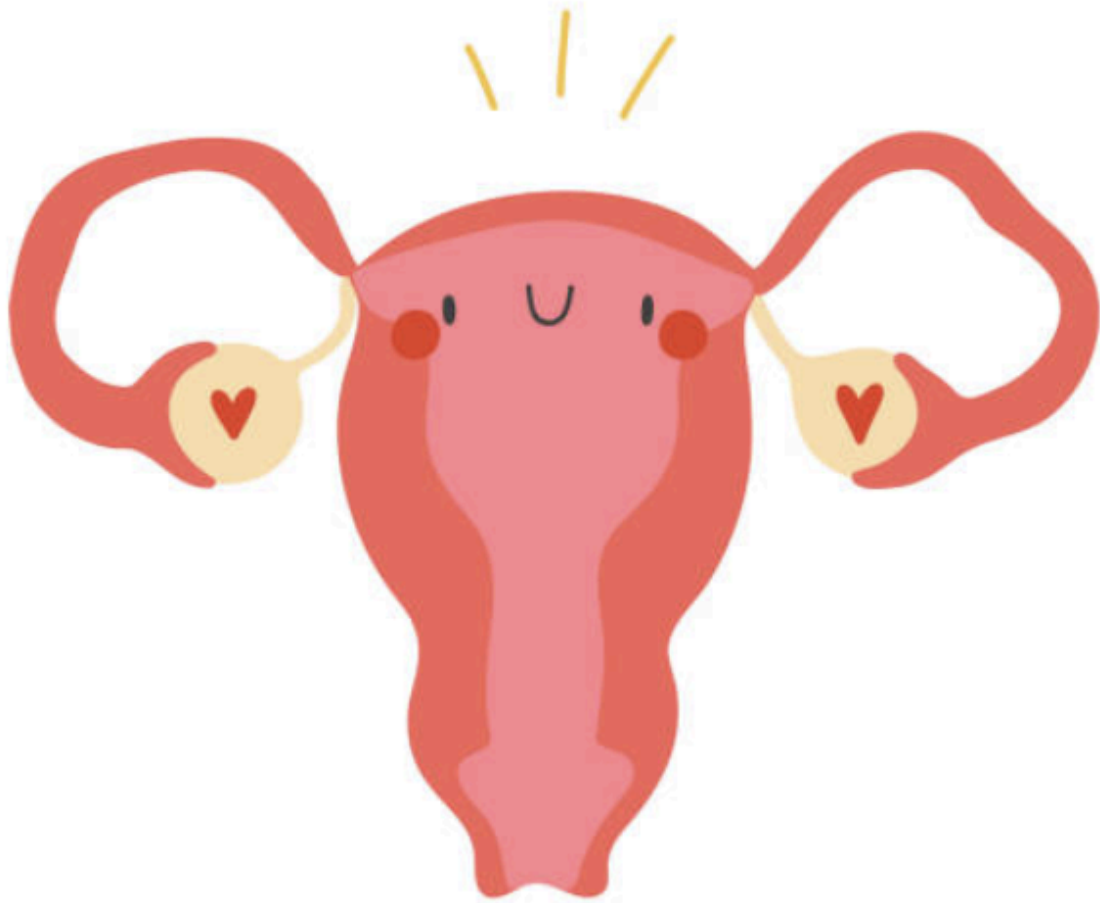
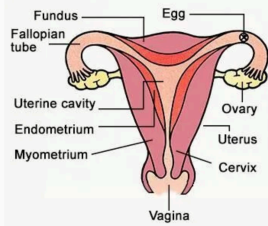


# Guide to Menstrual Health & Problems Workshop



By Elizabeth LaCroix, [Thomas J. Watson Fellow](#)

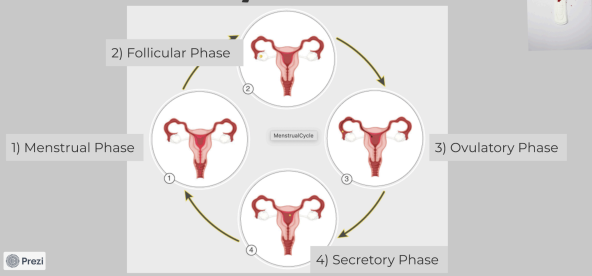
## Understanding Normal Menstruation



Explain the anatomy of the female reproductive organs, making special note of where the vagina, cervix, uterus, ovary, fallopian tubes, uterine cavity, endometrium, and myometrium is.

Point to the endometrium as the regenerative layer shed each month in the form of period blood.

## Menstrual Cycle Phases



**Menstrual Phase:** On day 1, the uterus lining which is prepared for implantation starts to shed. (Day 1-5)

**Follicular Phase:** the primary follicle (where the select egg matures) starts developing into a mature “Graffian follicle.” The endometrium begins proliferation to prepare for egg implantation. (Day 6-12)

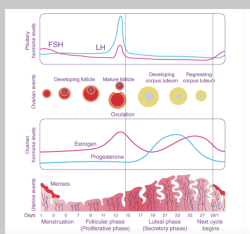
**Ovulatory Phase:** Mid-cycle phase where the egg is released from the follicle and into the fallopian tube. This is the fertile window. (Day 13-17)

**Luteal Phase:** During the luteal phase, the follicle that contains the egg bursts and forms a cyst-like structure called the corpus-luteum, which is responsible for secreting estrogen and progesterone. Two hormones are responsible for thickening the endometrium and nourishing the egg if it has been fertilized. (Day 18-28)

\*This is how birth control works!\*

Estrogen and progesterone levels will drop dramatically if no fertilized egg is present and the uterine lining is shed in menstruation.

## Hormonal Changes



Hormones like estrogen and progesterone regulate the menstrual cycle, impacting mood, energy levels, and physical symptoms. Fluctuations in these hormones can lead to varying menstrual patterns and symptoms.

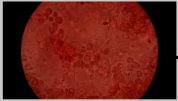
This chart details the hormonal and physical changes that occur throughout the menstrual cycle.

Follicle-stimulating hormone (FSH) and luteinizing hormone (LH) are two hormones secreted by the pituitary gland and spikes during ovulation. They help stimulate the growth of the follicle and the release of the egg.

Estrogen plays a role in ovulation (when your ovaries release an egg) and thickens the lining of your uterus (endometrium) to prepare it for pregnancy

Progesterone creates a healthy uterine lining to support a fertilized egg, embryo, and fetus.

## The Chemistry of Period Blood

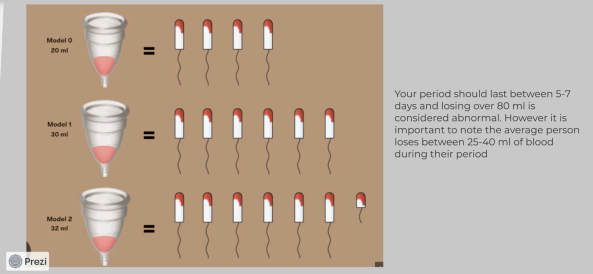


- Blood/Endometrial Lining
- A "watered down" version of the real stuff with the endometrial cells
  - Deep reds and brown blood coloring means it has taken longer to leave the uterus
- Secretions from vagina and cervix
- a mixture of water and electrolytes (sodium and potassium)
- Bacteria
- Just like our skin and digestive system, our vagina contains "good" bacteria

Menstrual blood is just the "watered down" of the real thing. It is important to mention what its contents are and that it is not "dirtier" than the rest of our body's contents.

Mention odor comes from the copper in all blood, and if it does have an odor, that is usually our body's sign that we need to change menstrual products

## Normal Menstrual Flow

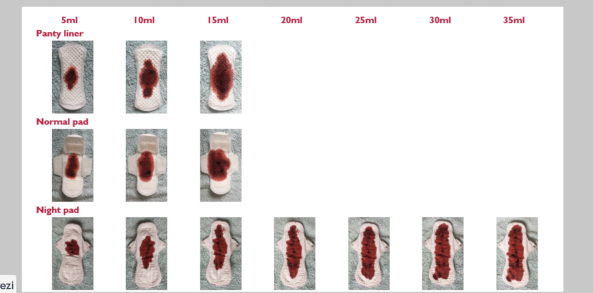


Conceptualize the normal amount of menstrual blood.

Explain that although anything under 80 ml is considered normal, 80 ml is quite a lot and can lead to anemia and low iron levels. The average is between 25-40ml and that should be considered normal.

Somewhere between 5 and 8 tampons per period.

## Normal Menstrual Flow



## Menstrual Health Issues

Menstrual health issues encompass a range of conditions such as menstrual pain (dysmenorrhea), heavy bleeding (menorrhagia), loss/lack of period (amenorrhea), irregular periods, premenstrual dysphoric disorder (PMDD), and other physical and emotional symptoms.



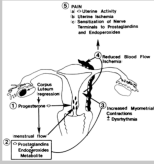
## Menstrual Pain (Dysmenorrhea)

### Primary Dysmenorrhea

"Painful menstruation in the absence of pelvic pathology."  
- The American College of Obstetricians and Gynecologists, 2021

### Secondary Dysmenorrhea

"Secondary dysmenorrhea refers to painful menses due to pelvic pathology or a recognized medical condition."  
- The American College of Obstetricians and Gynecologists, 2021



In Western medicine, there are two types of menstrual pain: primary and secondary. Primary dysmenorrhea is defined as menstrual pain in the absence of pelvic pathology and secondary dysmenorrhea is when pelvic pathology can be found.

Pelvic pathology is seen in the image to the right, where cells that do not belong in the anatomical region are growing, and/or there is inflammation in particular areas of the female reproductive organs.

Primary dysmenorrhea is largely believed to be caused by an inflammatory molecule made of fatty acids (remember this detail) which are released after the drop in progesterone at the onset of menstruation. They cause the myometrium to contract and expel blood. They are also involved during contractions in childbirth.

It is important to note that not all primary dysmenorrhea is linked to elevated prostaglandins, and those with secondary dysmenorrhea often also have elevated levels of prostaglandins.

## Menstrual Pain Management



### Natural Methods

- Heating Pad
- Ginger and brown sugar tea (Chinese Medicine) and/or ginger and black pepper tea (Ayurveda)
- Chamomile, lavender, mint, and/or oregano tea
- Ginseng
- Foods/supplements high in omega-3s: cod liver oil, fish, flaxseed, chia seed, walnuts, soybeans, leafy greens
- Acid inflammation inducing foods
- Acupuncture
- Light Exercise & Movement
- Transcutaneous Electrical Nerve Stimulation (TENS)

### Pharmaceutical Methods

- NSAIDs (i.e. ibuprofen, paracetamol)
  - begin taking 300-400 mg 1-2 days before your period every 4-6 hours and continue once your period begins
- hormonal birth control (pills, IUD, arm implant/hexplanon)
  - progesterone only pill ("mini pill")
  - continuous oral contraceptive COC

Foods high in omega-3 fatty acids intercept the pathway in the production of prostaglandins.

## Heavy Bleeding (Menorrhagia)



Heavy menstrual bleeding believed to be linked to disordered prostaglandin production within the endometrium

- Soaking through on or more sanitary pads or tampons every hour for several hours in a row
- Needing double menstrual product protection
- Passing blood clots larger than a quarter
- Limiting daily activities due to heavy menstrual flow
- Bleeding for more than a week

### Natural Remedies:

- vitamins A, B, and C
- Iron
- Ginger
- Foods high in Omega-3s

### Pharmaceutical Remedies:

- NSAIDs (i.e. ibuprofen, paracetamol)
- hormonal birth control (pills, IUD, arm implant/hexplanon)

There is a reason why often your most painful periods are your heaviest! Menorrhagia is also associated with disordered prostaglandin production and many of the same diseases as secondary dysmenorrhea.



## Light Bleeding (Hypomenorrhea)

Light menstrual bleeding

- duration of menstrual flow is 2 days or less
- menstrual blood flow is less than the average of 25-40 ml per period

### Causes:

Poly-cystic ovarian syndrome (PCOS), obesity, exercise, hormonal imbalance, stress, combined oral contraceptive pill, nutritional anemia, premature ovarian failure, pelvic inflammatory disease, and stress.

### Natural Treatments:

- Higher fat diet
- Nutritional supplements (iron, folate, vitamin B12)
- Diet incorporating phytoestrogens: legumes (lentils, chickpeas, beans, soybeans/tofu), peanuts, berries, red grapes
- Reducing stress through exercise, meditation, and other relaxation techniques

### Pharmaceutical Treatments:

- birth control pills / hormone therapy
- antibiotics (if PID)



Prezi

Mention that we will discuss PCOS, and pelvic inflammatory disease later.

Premature ovarian failure is when the body stops releasing eggs prior to menopause.

Those with female reproductive organs need a diet higher in healthy fats to be healthy. If our body fat percentage is low, our reproductive organs will not function properly because we cannot provide the necessary sustenance to a fetus.

Phytoestrogens are molecules in plants that model the female hormone estrogen. Since estrogen induces ovulation, phytoestrogen-containing foods can be helpful in inducing and regulating menstruation.

## Missing Period (Amenorrhea)

### Primary Amenorrhea

When the first period hasn't arrived by age 15.

Causes: anatomic and sexual development abnormalities; ovarian insufficiency, hypothalamic or pituitary disorders, other endocrine disorders

### Secondary Amenorrhea

When someone who already menstruates does not get their period for 3 months or more.

Causes: nutrition issues, pregnancy, lactation, thyroid dysfunction, hyperprolactinemia, hyperandrogenism (PCOS), hypothalamus/pituitary disorders

### Natural Remedies:

- higher fat diets rich in omega-3s
- hormonal contraception (combined oral contraceptives)



Prezi

## Irregular Periods

### Oligomenorrhea

When menstrual periods are infrequent. You may regularly go for longer than 35 days between periods.

### Metrorrhagia

Bleeding at irregular intervals, particularly between expected menstrual periods

Causes: hormonal imbalance, PCOS, thyroid disorders, hormonal birth control, PID, endometriosis, adenomyosis

### Natural Treatments:

- Higher fat diet
- Nutritional supplements (iron, folate, vitamin B12)
- Diet incorporating phytoestrogens: legumes (lentils, chickpeas, beans, soybeans/tofu), peanuts, berries, red grapes
- Reducing stress through exercise, meditation, and other relaxation techniques

### Pharmaceutical Treatments:

- birth control pills / hormone therapy
- antibiotics (if PID)



Prezi

\*We can start to think of the female reproductive system as the body's alarm system!\*

## What was your earliest memory of menstrual pain?

*If you learned about menstrual pain through experience:*

- How old were you?
- Was this your first menstrual period?
- Can you describe the pain you felt (i.e. cramping in the lower abdomen, back pain, headache, body aches, etc.)
- Did you tell anyone (i.e. friend, family member, medical practitioner)?
- How did you cope with the pain?
- Did you view this pain experience as normal or abnormal? Why was this your view?

*If you learned about menstrual pain through someone or something else:*

- Who taught you about menstrual pain?
- What did you learn?
- After learning about menstrual pain, did you ever experience menstrual pain firsthand? If so, how was your experience different and/or similar to how you learned?
- Did you learn about menstrual pain in a way that suggested it was normal or abnormal?

Prezi

The first set of questions is meant for those who learned about menstrual pain by experiencing the pain.

The second set of questions is meant for those who learned about menstrual pain through another source, such as another person, media, and/or education.

\*Note: you only need to answer one set of questions\*

## What was your earliest memory of menstrual pain?

### Write (5 min):

- Answer the questions on the previous slide on your own.

### Share with your group (5-7 min):

- Give each person 1-2 minutes to share what they have written.
- No comments on each other's experiences right now.

### Group Share Out:

- Those who choose, are given the option to share what they wrote with the whole group.

Divide into groups of 2-4 people.

Make sure each person is provided with a pen and paper.

Clearly state that they must be listening (not commenting) on others' stories at this portion of the workshop.

## Do you think menstrual pain is normal or abnormal?

### Discuss in a group (5 min):

- After hearing each other's stories, do you believe menstrual pain is normal?
- Are there types that are normal and others that are abnormal?
- How do you differentiate?
- Is menstrual pain different from other types of pain (i.e. headache, muscle pain). Why or why not?

### Group Share Out:

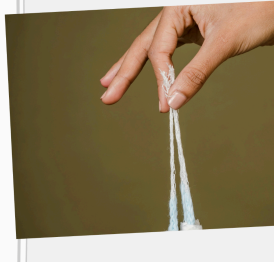
- Elect a group spokesperson to share your findings with the room.

The goal is for everyone to recognize the differential experiences of everyone in the room as well as speak of a subject openly that is often taboo.

Menstrual pain isn't normal. Although not everyone will come to the same conclusion, they should be thinking more of menstrual problems as the body's alarm system.

## Diseases & Disorders Related to Menstrual Issues

Promoting menstrual wellness involves advocating for healthy lifestyle choices, seeking timely medical advice, and prioritizing psychological well-being for overall menstrual health.



## Endometriosis

Occurs in 10% of people with female reproductive organs!

When a tissue similar to the uterus lining grows on the outside of the uterine cavity, the condition is termed endometriosis.

**Symptoms:** menstrual pain, heavy menstrual bleeding, pain during sex, difficulty or pain during defecation, non-cyclical pelvic pain

**Diagnosis:** only diagnosable through laparoscopic surgery, and in some cases through intravaginal ultrasound

**Treatment:** the same as menstrual pain except in some cases where surgery is also necessary.



“How many of you have heard of endometriosis?”

Based on the number of attendees, name the number of people in the room who likely have the disease due to the 10% prevalence.

We are not certain of the exact cause of the disease, but we do not it is linked to increased inflammation and elevated estrogen. Therefore therapies targeting inflammation and increasing progesterone levels are considered helpful in treating the symptoms and stalling disease progression.

Not everyone with menstrual pain has endometriosis, but if you consistently have painful periods, some preventing you from going

about your daily activities you may want to consult a doctor.

## Adenomyosis

Is common with those already diagnosed with endometriosis.



When the tissue that is similar to the uterus lining grows inside the muscular wall of the uterus.

**Symptoms:** menstrual pain, heavy menstrual bleeding, pain during sex, difficulty or pain during defecation, non-cyclical pelvic pain, infertility

**Diagnosis:** only diagnosable through laparoscopic surgery, and in some cases through intravaginal ultrasound

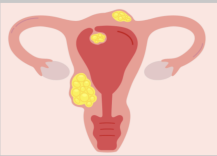
**Treatment:** the same as menstrual pain except in some cases where surgery is also necessary.

It is essentially endometriosis growing inside the uterine wall.

It is mostly found in women past the age of thirty or after having children and often coupled with endometriosis and fibroids. However, it is not unheard of in adolescents.

## Uterine fibroids

It is common to have both endometriosis and uterine fibroids.



Non-cancerous growths in the muscle layer of your uterus.

**Symptoms:** menstrual pain, heavy menstrual bleeding, pain during sex, non-cyclical pelvic pain, irregular bleeding

**Diagnosis:** ultrasound

**Treatment:** the same as menstrual pain except in some cases where surgery is also necessary.

Adenomyosis is most common in women between ages 30 and 40 and is often coupled with endometriosis.

They consist of muscle tissue and fibrous connective tissue (the cells that hold our organs and tissues in place).

## Ovarian Cysts

It is common to have both endometriosis and ovarian cysts.



A sac filled with fluid that forms on or inside the ovary. Usually they are harmless and go away on their own, but sometimes they can become twisted or rupture, causing serious symptoms

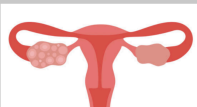
**Symptoms:** pelvic pain, pain during sex, heavy periods, irregular periods, lighter periods, bloating, difficulty defecating/constipation, menstrual pain

**Diagnosis:** ultrasound

**Treatment:** the same as menstrual pain except in some cases where surgery is also necessary.

You can treat the menstrual and pelvic pain symptoms with pharmaceutical or natural treatments. However, usually the cyst itself is left untreated and will go away on its own, but should be closely monitored in case of rupture.

## Polycystic Ovary Syndrome (PCOS)



A condition where you have few, unusual, or very long periods. It is often associated with having too much of a male hormone called androgen, which causes many small sacs of fluid to develop on the ovaries, failing to regularly release eggs.

**Symptoms:** irregular menstrual periods, excess hair growth, acne, infertility, and weight gain

**Diagnosis:** ultrasound, blood test confirming increased androgen levels

**Treatment:** hormonal contraception and/or diet and natural remedies for irregular periods

PCOS is a genetic disease and up to 70% of daughters of women with the disease will develop it.

Most common treatment is hormonal contraception and changes to diet.

## Premenstrual Dysphoric Disorder (PMDD)

Occurring during the luteal phase (1-2 weeks before your period) of your menstrual cycle, it causes severe feelings of worthlessness, depressed mood, self-deprecating thoughts, sleep problems, and interpersonal conflict.

**Cause:** Thought to be caused by a "sensitivity" to normal changes in hormone levels.

**Treatment:**

- Changes in diet to increase protein and carbohydrates and decrease sugar, salt, caffeine, and alcohol
- Regular exercise and stress management techniques
- selective serotonin reuptake inhibitors (SSRIs)

It is often referred to as the more severe form of premenstrual syndrome.

Although it is thought to be caused by a "sensitivity" to normal changes in hormone levels, there is not extensive research on this.

This is one of the only menstrual disorders that is not commonly treated with birth control. Birth control has been prescribed to women with PMDD, but some find it makes their symptoms worse.

## Pelvic Inflammatory Disease

An infection in the upper part of the female reproductive system, namely the uterus, fallopian tubes, ovaries, and inside the pelvis.

**Cause:** Many types of bacteria can cause PID, but mostly gonorrhea and chlamydia infections (two STIs). The bacteria are usually acquired during unprotected sex, but alternatively, bacteria can enter the reproductive tract with the cervix is breached.

**Symptoms:** pain around pelvis/lower stomach, menstrual pain, heavy menstrual bleeding, pain when peeing, pain during sex, infertility

**Treatment:**

- Changes in diet to increase protein and carbohydrates and decrease sugar, salt, caffeine, and alcohol
- Regular exercise and stress management techniques
- selective serotonin reuptake inhibitors (SSRIs)

In rare cases poor menstrual hygiene can induce PID (usually if a tampon is left in for too long).

## Seeking Medical Attention

Promoting menstrual wellness involves advocating for healthy lifestyle choices, seeking timely medical advice, and prioritizing psychological well-being for overall menstrual health.



It is important to learn and practice advocating for ourselves in medical settings as female reproductive issues are historically normalized, underdiagnosed, and disregarded as "real" problems.

## When to Consult a Medical Practitioner

Ask yourself the following questions:

- 1) Do I get my period consistently every 28-31 days for 5-7 days?
- 2) Do I bleed less than the average 5-7 days or 25-30 mL of blood?
- 3) Is my normal, daily routine affected by how much I bleed? (i.e. not going to school or work, worrying that you may bleed through menstrual products in 1-2 hours)
- 4) Do I have pain or emotional symptoms? (a yes to this questions if enough)  
If so, do I have ways to manage them that allow me to go about my activities as usual?



## How to Consult a Medical Practitioner

\*Reminder: Your menstrual problem is NOT normal!\*



Clearly list all of your symptoms.

Make note of how often your symptoms occur. It is helpful to keep a notebook or notes page on your phone making note every time you experience the symptom(s) to present to the medical provider.

Decide before the appointment whether you are open to natural and/or pharmaceutical treatments.

Explain in detail your symptoms at their most extreme:

- What does it feel like?
- How does it affect your daily activities?
- Have you tried any treatment methods? If so, what worked and what didn't work?

Explicitly ask, "Why do you think this is happening to me? And what can I do to fix it?"

- You may need to explain what you think is the problem is based on your own research and prior knowledge.

If given a treatment, "Is this fixing my symptoms or the underlying condition?"

If you still do not receive the answers and treatment you are seeking, remind yourself, that your menstrual problems are NOT normal. You are worthy of treatment.

## Interactive Exercise:

**Scenario:** Pretend (or don't pretend) you have one of the menstrual problems we discussed today and you have decided to present them to a medical provider.



**Write (5 min):**

- What is your menstrual problem?
- How often do you experience your menstrual problem?
- Have you tried any treatment methods? If so, what worked and what didn't work?
- How does it affect your daily activities?
- What are the potential causes of this disorder?

**Discuss with a partner (5 min):**

- Alternate playing medical provider and patient with your provider.
- Use your written, organized thoughts to practice sharing your symptoms.
- Practice advocating for a diagnosis and/or treatment.

**Partner's Interpretation (5 min):**

- Have your partner describe back to you your menstrual problem?

**Reflection with partner (3 min):**

- What helped you explain or share your menstrual problem?
- What did you have difficulty explaining or sharing?
- Did your partner interpret the extent of your problem correctly?
- How could you explain your menstrual problem better next time?

**Group Share Out**

The menstrual problems they can choose from are dysmenorrhea, amenorrhea, oligomenorrhea, menorrhagia, hypomenorrhea, and metrorrhagia. Not the other diseases or disorders. Although, they should mention the diseases or disorders their menstrual problem could be a sign of.

This is a practice of using the knowledge they gained today in the workshop to advocate for themselves.

Participants can either pretend they have a certain menstrual problem or use their current or past real menstrual problems.

## The Importance of Menstrual Hygiene



Poor menstrual hygiene induces infection and inflammation, which can put you at increased risk of menstrual issues like menstrual pain, heavy bleeding, and irregular periods because of their link to Pelvic Inflammatory Disease. You are also at increased risk of UTIs, infertility, Hepatitis B, birth complications, and cervical cancer.

**MH Techniques:**

- 1) Wash your hands before and after changing menstrual products
- 2) Change tampons every 4-8 hours. If the tampon can be left in over 8 hours without leaking it is too absorbent.
- 3) Change pads every few hours no matter how light the flow.
- 4) Clean cups every day with filtered water. Sanitize menstrual cups after each period by rinsing thoroughly and placing them in boiling water.
- 5) Wash reusable cloth products with soap and water and leave to dry in a clean area with either an air vent, fan, and/or window with access to sunlight.

Remember, prostaglandins are involved in the inflammatory networks. So, if you are exposing your body to an increased risk of infection, you are also risking increased inflammation that comes with infection.

Poor menstrual hygiene can make your menstrual pain and problems worse!