WOMENA FAQs: WHAT ARE MENSTRUAL IRREGULARITIES?

WOMENA SUMMARY AND RECOMMENDATIONS[1]

In the communities where WoMena works, girls and women frequently ask about menstrual irregularities. Clearly, they are concerned, both about their general health, and their fertility.

Irregularities take many forms - age at onset of menarche or menopause, length of cycle, amount of bleeding, menstrual pain and discomfort, as well as bleeding outside the cycle.

Menstrual patterns vary greatly among girls and women. There is a wide range of 'normal' variations, and it is important to emphasize this, in order to reduce feelings of shame and concern. Indeed, much educational material emphasises the normality of varying patterns.

However, some of the irregularities may be cause for concern. Yet, studies indicate that girls and women may be reluctant to seek advice from health providers, from feelings of shame. Instead, they may resort to self-medication.

Therefore, WoMena recommends that girls and women are provided with education on both what is 'normal' and what might be a concern. National guidelines should be consulted, as should local health providers, to ensure that information provided is consistent. Health providers should actively encourage girls and women to raise concerns.

This is the best evidence we could find. Comments are very welcome! http://womena.dk/faqs/

Sources of information: Information varies somewhat by source. Therefore, in order to get a consistent set of information, we have particularly used the UK National Health Service (NHS) and National Institute for Health and Care Excellence (NICE). Where possible, this should then be checked against national guidelines.

[1] WoMena gets many questions, from the girls and women we serve, as well as from our trainers and partners. Therefore, we have created a series titled "WoMena FAQs" where we attempt to answer these questions, based on the best available scientific literature, consultation with experts, recommendations from health authorities and manufacturer advice. We update as new information becomes available.

Question: what is the menstrual cycle? menarche? menopause?

We refer to the menstrual cycle, or 'menses', as the cyclical discharge of blood and mucosal tissue from the inner lining of the uterus. Every cycle the lining (endometrium) of a woman's womb builds up thickness, in order to be ready for a pregnancy (the implantation of a fertilised ovum). If no ovum is implanted, the lining is shed, through the cervix and vagina. The muscles of the womb contract and relax in an irregular rhythm to achieve this (NHSa, 2017).

Menarche is the first menses, menopause is the last (NHSa, 2017).

Question: What are 'normal' variations of the menstrual cycle and what might be considered 'irregularity'?

Menstrual cycles vary significantly among girls and women.

- **The cycle length and frequency:** the cycle length refers to the number of days from the first day of menstrual flow of one menses to the day before the first day of the next menses. On average, this happens every 28 days or so. However, it is common (and considered 'normal') for cycles to be anywhere from 21 to 40 days (NHSa, 2017). It is common for the cycle length to be irregular just after menarche, and then develop into a more regular pattern. Cycles may also be irregular as women approach menopause (usually ages 45-49) (NHSb, 2017).

  Menstrual periods occurring less than 21 days (polymenorrhea) or more than 40 days apart (oligomenorrhea), and particularly menstrual periods with a variation of more than 20 days between longest and shortest cycle, may be considered 'irregular' (NHSb, 2017). So may intermenstrual bleeding, where episodes of bleeding (spotting) occur between periods.

  Amenorrhea (absent menstrual periods) is considered irregular if a girl does not have her first menses by age 16, or if menses stops for at least 3 months for someone who is not pregnant or breastfeeding (NIH, n.d).

- **The duration of menstrual flow:** Menses commonly lasts about 5 days, but anything between 3 and 8 days can be considered 'normal' (Menstrual Matters, n.d).

  Shortened menstrual bleeding (2 or less days) or prolonged menstrual bleeding (exceeding 8 days in duration on a regular basis) may be considered irregular (NHS b, 2017; NHS c, 2018)

- **The volume of menstrual blood:** Bleeding tends to be heaviest in the first 2 days of menses. Most women lose 30-50 ml (2-3 tablespoons) during menses, although some lose up to 80 ml (5 tablespoons) (NHSa, 2017).

  Menorrhagia (heavy menstrual periods) is generally defined as menstrual blood loss (MBL) of more than 80 ml, although some suggest 100 ml as a cut off point using the PBAC[2] diagnostic tool (Magnay, J.L et al., 2018).

- **The appearance of the menstrual blood:** The blood is bright or light red, but may be brown in some women. Usually it does not contain clots, but some women experience light clotting intermittently or even regularly (Healthline. n.d) .

- **Pain (dysmenorrhea):** The muscle contractions that accompany the shedding of the endometrium are sometimes not noticeable, or cause only mild discomfort, but sometimes they are felt as painful cramps. This is referred to as dysmenorrhea. The pain is sometimes felt in the lower abdomen, sometimes also in the back or legs. It can cause nausea, vomiting, diarrhea, headaches or general discomfort (Proctor, 2006).

  Dysmenorrhea is very common, although it varies greatly by population. In some populations it is reported to be 70-80% (Fernández-Martínez et al., 2018; Grandi et al., 2012).

[2] PBAC stands for the pictorial blood loss assessment chart, considering as a good method for validating accuracy of MBL determination as well as complementing assessment of HMB using quality of life (QoL) (Magnay, J.L et al., 2018).

There are two main types of dysmenorrhea (Proctor, 2006;pmhdev, 2016):

1. ‘Primary’ dysmenorrhea refers to pain which occurs in the first few days of menses, where prostaglandin and contractions are at high levels. It is very common in young women, but often decreases with age. Although it may need medication, it can be quite ‘normal ’.
2. ‘Secondary’ dysmenorrhea develops in women who may previously have had normal cycles. The pain lasts longer, may get worse as menses progresses, possibly continuing after bleeding stops. This may be considered ‘irregular’.

Question: What may be some causes of irregularity?

- As mentioned above, some irregularities are more likely to occur close to menarche or menopause (NHS Direct Wales,n.d; NICHD, n.d)

- Medication or contraception (for example, spotting is associated with long acting hormonal contraception, heavy bleeding with use of IUD/IUS, spotting often occurs during the first few months after beginning contraceptive pills (NHS Direct Wales, n.d; NHS f, 2018).

- Pregnancy and breastfeeding cause amenorrhea. Postpartum bleeding (referred to as ‘lochia’) generally occurs with fresh blood for a few days, and some spotting for a few weeks, but after that it should subside (NHS b, 2017; NIH, n.d).

- Anovulation (the absence of ovulation) or oligo-ovulation (irregular ovulation) (Gordon Serena, n.d)

- Stress, nutritional deficiencies, extreme weight (BMI high or low) or weight loss or gain, high levels of exercise and physical training, or travel may contribute (NIH, n.d; NHS Direct Wales.n.d)

- For primary dysmenorrhea It is not known why some women experience more pain than others. One possibility is that some women have higher levels of prostaglandins, and

therefore experience stronger contractions. Women who have heavy blood flow (volume or duration) often have more intense pain. Studies point to widely ranging risk factors but there is little agreement (drinking cola drinks, eating meat, genetic factors - having a first-degree relative affected by dysmenorrhea) (pmhdev, 2016)

- For secondary dysmenorrhea, there may be associations with an identifiable condition or disease: endometriosis, uterine polyps or fibroids (women experiencing fibroids suffer from heavy periods, unpredictable bleeding between periods, and/or painful periods), adenomyosis, endometrial polyps, pelvic inflammatory disease, as well as the use of an IUD/IUS (pmhdev, 2016; NHS d, 2017)

- There may also be ill health associated with other types of irregularity - Polycystic ovary syndrome, Pituitary disorders, Premature Ovarian insufficiency, uncontrolled diabetes, under- or overactive thyroid gland, Sextually Transmitted Infections, cancer (NIH, n.d).

  Whereas all of these conditions may be very rare, it is important that girls and women with unexplained irregularities seek the advice of a health provider (NHSb, 2017).

Question: what are some of the consequences of various irregularities?

- Anemia: menstruation is a major reason for low blood counts, especially in women who are already undernourished (Dars et al., 2014).
- Difficulties conceiving: irregularities (especially related to anovulation) may both make it less likely and harder to plan pregnancy (NCC-WCH, 2004; Gurevich, 2018) .
- Attending school or other social functions: one of the main reasons girls give for staying away from school during menses is that they experience pain (Miiro et al., 2018).

Question: What should be done?

Tracking menses history. After about 3 cycles it will be possible to see a pattern which can help to understand whether there is significant irregularity (Ruby Cup, n.d).

Nutrition: Sufficient nutrients can help blood production and prevent anemia. Extreme weight and weight change contribute to irregularity, and therefore maintaining optimal weight may help.

Good nutrition is also a contributory factor in the production of hormones (gonadotropin, LH) which is important for regulairy. There is a variety of studies which indicate that walnuts, almonds, broccoli, whole grains, beans, asparagus, fish, meat, eggs and herbal products like herbal teas may be beneficial (Jahangir, 2018; Juliyatmi & Handayani, 2015; Łagowska et al., 2014; Halder, 2012).

Applying heat (hot water bottles, warm baths) or various types of exercise may reduce pain, as may stress reduction and relaxation techniques. Regular exercise is recommended, but very high levels might be avoided if there are irregularities (pmhdev, 2016).

Taking painkillers such as ibuprofen or naproxen (NHSe, 2017).

Birth control pills may help, but side effects of contraception should be clear so that girls/women may make an informed choice (NHSb, 2017)

Seek medical advice: As mentioned, there is a wide range of ‘normal’ menstrual patterns, and most irregularity may have very benign reasons. Yet, studies indicate that many girls and women feel ashamed to consult health personnel and instead engage in self-medication (Chandra-Mouli et al. 2017). This may be exacerbated if there is also infection, resulting in odour or discharge (WebMD c, n.d).

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