

Incorporating Menstruation Across Hospital Specialties to Improve Care for Women of Reproductive Age

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Abstract

Women and those who menstruate currently experience health inequalities. Menstruation should be viewed as a vital sign in women of reproductive age and can be useful when assessing overall health. Menstrual parameters should be part of the routine systemic enquiry when taking a history from those who menstruate, regardless of the clinical speciality to which they present. This will facilitate prompt detection and appropriate treatment of those with iron deficiency, a common finding in those who experience heavy or prolonged menstrual bleeding. A standardised approach should be used during history taking and documentation to improve scientific progress, aid communication across specialties and to provide the holistic clinical care that women require and deserve.

Key words: menses; abnormal uterine bleeding; heavy menstrual bleeding; women's health; iron deficiency

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Women experience different health problems to men, and they experience the same health problems differently. While women live longer than men, disability-free life expectancy is lower for women and women are more likely to report living with a long-term health condition (Patwardhan et al, 2024). Gender differences in risk factors, presentation, diagnosis and treatment currently result in suboptimal care for women. Our understanding of disease pathophysiology and response to treatment comes mainly from studies involving only men (Norton, 2016). For example, atherosclerotic cardiovascular disease is commonly thought of as 'a man's disease' hence delayed diagnosis of myocardial infarction is more common in women (Vogel et al, 2021). The UK Parliament Women and Equalities Committee (WEC) has recently published a report on women's reproductive health conditions, highlighting delays in diagnosis and a lack of understanding of women's reproductive health issues by healthcare professionals (WEC, 2024).

In order to address these health disparities, we need to reconsider and update our research methodologies and the care we offer to women. The Women's Health Plan in Scotland and Women's Health Strategy for England aim to reduce avoidable health inequalities and boost health outcomes for women and girls across the course of their lives. A key feature of these initiatives is that "women's health" should not be restricted to sexual, reproductive and maternal health and is the remit of all clinical specialties. However, women's reproductive physiology should not

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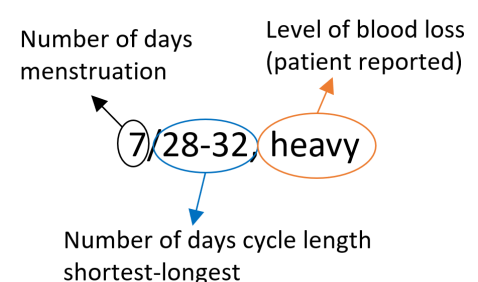
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be a taboo subject that is dismissed or ignored. Menstruation is an important physiological process which can have a significant impact on wider health. In order to deliver high quality, holistic care to those who menstruate, open discussion about menstruation should be taking place in all specialties, not just the gynaecology department. In this article, we outline the importance of a standardised approach to menstrual health in the hospital. We share, as **Supplementary material**, a standalone guidance document to support cardiology healthcare professionals who treat reproductive aged women, which was created as part of the Scottish Government's Women's Health Plan in a collaboration between menstrual health specialists and cardiologists. This guidance includes how to discuss menstruation and provides an overview of potential treatment options. We hope this document may be used as a template for use across other specialties.

One in three women of reproductive age experience abnormal uterine bleeding (AUB), which is defined as bleeding from the uterus that is abnormal in duration, volume, frequency and/or regularity (Munro et al, 2018). AUB can have a profoundly negative impact on quality of life and includes the symptom of heavy menstrual bleeding (HMB) (Jain et al, 2022; Watters et al, 2022). HMB can cause iron deficiency (ID) and is a leading cause of anaemia. A survey of European women reported that 63% of those with HMB had been diagnosed with ID (Fraser et al, 2015). Iron is essential for many key processes including mitochondrial metabolism, DNA repair and function of the immune system (Camaschella, 2019). Even without anaemia, those with ID can experience a range of symptoms including fatigue, "brain fog", breathlessness, muscle weakness, hair loss and sleep disturbance (Munro et al, 2023). Despite this, many women do not seek medical help for their symptoms. Scottish National Blood Transfusion records found that in one year, 175 women required hospital admission to receive a blood transfusion due to anaemia from menstruation. This under-recognition and late presentation is due to a combination of factors, including normalisation of symptoms, fear of dismissal from healthcare professionals and social taboos (da Silva Filho et al, 2021).

To address this, all clinicians should engage in open discussion about menstrual symptoms with those who menstruate. Menstruation should be viewed as an additional vital sign and has been described as an indicator of overall health in girls and adolescents (American Academy of Pediatrics Committee on Adolescence et al, 2006). This discussion can be easily incorporated into routine systemic enquiry to screen for abnormal menstrual symptoms. Hospital admission documentation or clerking proformas should include menstrual history to prompt clinicians to consider and document this important information. A standardised system for recording menstrual bleeding should be followed for clinical and scientific integrity. This will help to close the current data gaps in women's health. The International Federation of Gynaecology and Obstetrics (FIGO) provides this standardised approach (Munro et al, 2018), which can be elicited and recorded succinctly. Table 1 provides an overview of typical menstrual parameters, based on FIGO AUB system 1 (Munro et al, 2018): frequency, duration, regularity and volume of menstruation and how to summarise these. For example, 7/28-32, heavy = duration 7 days/shortest-longest frequency + volume. Intermenstrual bleeding and postcoital

Table 1. Menstrual symptoms and normal parameters.

Parameter	Normal
Frequency — <i>how many days does a typical menstrual cycle last?</i> <i>Day 1 is the first day of menstrual bleeding.</i>	24–38 days If absent >3–6 months, consider secondary amenorrhoea.
Duration — <i>how many days do you bleed for?</i>	Up to 8 days
Regularity — <i>over the last few months, how many days was your shortest cycle and how many days was your longest cycle?</i>	Regular variation (shortest to longest ≤9 days)
Volume (patient determined) — <i>would you describe your periods as light, normal or heavy?</i>	Normal
Intermenstrual bleeding — <i>do you have any bleeding between periods?</i> 	None
Unscheduled bleeding on progestins ± oestrogen — <i>do you have any irregular bleeding episodes?</i>	Not applicable if not on hormonal medication or none
Postcoital bleeding — <i>do you have bleeding after intercourse?</i> 	None
Suggested system for recording duration, cycle length and volume	<div style="display: flex; justify-content: space-around;"> <div>Number of days menstruation</div> <div>Level of blood loss (patient reported)</div> </div> <div style="text-align: center; margin: 10px 0;">  <p>7/28-32, heavy</p> </div>

Note: Red flag symbol denotes symptoms which always require further investigation to exclude gynaecological cancer.

bleeding are considered red flag symptoms that require further investigation and treatment via discussion with general practice (GP) or gynaecology. Secondary amenorrhoea is present when a patient reports absence of menses for over 3 months (when menses was previously present and regular) or over 6 months (when previously present but irregular) and they are not using exogenous hormones (Klein et al, 2019). Again, discussion with GP and/or referral to gynaecology is necessary for further investigation. Physiological causes of secondary amenorrhoea (pregnancy, lactation and menopause) should not be forgotten. Primary amenorrhoea is defined as failure to establish menses by the expected time of menarche and discussion with GP and/or referral to gynaecology is recommended (Klein et al, 2019).

Hospital admissions provide an opportunity to identify and investigate iron deficiency anaemia in those with AUB. Low ferritin (<30 µg/L) or haemoglobin (<120 g/L) should be treated as per local guidelines and should trigger discussion and recording of menstrual parameters (Table 1). Treatment with iron or blood products may replenish stores but clinicians also need to consider initiating treatments to reduce menstrual blood loss to prevent recurrence of anaemia. Whilst further investigations are arranged to investigate the underlying cause of AUB or HMB symptoms, via discussion with GP or gynaecology, medications which have

been demonstrated to reduce menstrual blood loss such as tranexamic acid and/or non steroidal anti-inflammatory drugs (NSAIDs) should be commenced where appropriate.

Anticoagulants are a common iatrogenic cause of AUB. When prescribed at treatment dose (e.g., treatment of venous thromboembolism), reproductive aged women should be asked about menstrual symptoms and counselled on the possibility of experiencing menstrual disturbance. Two out of three women who commenced treatment for acute venous thromboembolism experienced AUB (de Jong *et al*, 2022). Tranexamic acid is contraindicated in this population and those with pre-existing AUB should be referred to gynaecology for discussion of treatment options.

A collaborative approach is essential to improve women's health. This will involve clear communication between specialties and ensuring that menstruation is prioritised for discussion in routine patient interactions. Our guidance for cardiology healthcare professionals is an example of how clinicians may discuss and record menstruation easily to enhance and individualise the care they provide to patients. We would encourage all clinicians to consider how they can update their own practice as a step towards routinely including menstruation across hospital specialties and improving the care of women. This could start with the simple question, "How are your periods?".

Key Points

- Women and those who menstruate currently experience health inequalities.
- When eliciting a history from women of reproductive age, menstrual parameters should be included in routine systemic enquiry by all clinical specialties to detect those at risk of iron deficiency and instigate appropriate treatment.
- A standardised approach should be used to improve scientific progress, communication across specialties and to provide the holistic clinical care that women require and deserve.

Availability of Data and Materials

Not applicable.

Author Contributions

MW wrote the article, including leading on the creation of the manuscript and supplementary material. AG and JM created an editorial outline and aim, pioneered the creation of supplementary material and facilitated cross disciplinary input. All authors made important revisions to manuscript drafts and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

Not applicable.

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Conflict of Interest

AG is also Women's Health Champion for Scotland and Honorary Professor at London School of Hygiene and Tropical Medicine. The other authors declare no conflicts of interest. For the purpose of open access, the authors have applied a CC-BY public copyright licence to any Author Accepted Manuscript version arising from this submission.

Supplementary Material

Supplementary material associated with this article can be found, in the online version, at <https://www.magonlinelibrary.com/doi/suppl/10.12968/hmed.2024.0944>.

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