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Is Objective Testing for Menorrhagia in General Practice Practical?: Results from a Qualitative Study

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Is objective testing for menorrhagia in general practice practical?

Results from a qualitative study

Alison Chapple, Carl May, Margaret Ling

Objectives: To explore the interpretative character of medical knowledge and the way that clinicians respond to the patient's assertion that her menstrual blood loss is excessive. In particular, we are interested in the boundary between 'normal' and 'abnormal', and whether or not general practitioners would consider conducting objective tests for menorrhagia in their surgeries. We also wanted to explore the extent to which clinicians pay attention to women's subjective accounts of 'heavy' menstrual blood loss when making a diagnosis. The consequences of making a distinction between 'normal' and 'abnormal' blood loss may be considerable. A diagnosis of menorrhagia may crucially affect quality of life, morbidity and mortality.
Method: Qualitative study using 73 semi-structured interviews with general practitioners in Northwest England.
Results: Two thirds of the respondents indicated that they seriously attempt an assessment of menstrual blood loss, while one third of the respondents appeared to pay more attention to the women's subjective assessment of unacceptable 'heavy' bleeding. Some general practitioners had a very negative attitude to menstrual blood. Very few would consider conducting objective tests for menstrual blood loss if such tests involved the collection of soiled pads and tampons. However, about half of the respondents thought that a pictorial chart might be useful when trying to estimate menstrual blood loss.
Conclusion: Since general practitioners are not in agreement about the manner in which women's complaints of heavy bleeding should be assessed, evidence-based clinical guidelines that deal with both 'subjective' and 'objective' menorrhagia are timely.
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Keywords: menorrhagia, general practitioner, diagnosis, primary care

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Introduction

Excessive menstrual blood loss is commonly encountered in primary care. For women who suffer from it, there may be a variety of unpleasant psychological and physical symptoms.[1,2] For the family practitioner to whom these symptoms are presented, the initial question is one of diagnosis: first, discounting sinister signs or symptoms, and then distinguishing between the patients' subjective constructs of excessive blood loss and 'objectively' constructed menorrhagia.[3]

In this paper we examine the process of constructing the diagnosis of menorrhagia within a study group of British general practitioners (GPs). The objective of the paper is to explore the interpretative character of medical knowledge and practice and the way that clinicians respond to the patient's assertion that her menstrual blood loss is excessive. In particular we are interested in the boundary between 'normal' and 'abnormal', because such boundaries are socially constructed.[4-6] The paper also explores GPs' reactions to the suggestion that they might conduct objective tests for menorrhagia in their surgeries.

Background

Menstrual blood loss is highly variable: the mean is around 33 ml per menstrual period,[7] but while many women lose less than 20 ml, others may lose up to 200 ml or more.

Table 1. Interview schedule (see text).

- The consulting rate for menorrhagia has increased considerably over past years. Have you any idea why that may be?
- How many patients do you think you see with this complaint in a week/month?
- Do you refer internally to other GPs in the practice? Do other GPs refer to you?
- How do you *assess* the severity of a woman's blood loss? How do you elicit a woman's perceptions of her menstrual loss?
- Do you think a pictorial chart would be useful? (Show Janssen's chart) Do you think your patients would be happy to fill in such a chart?
- Sometimes in hospital practice the doctors ask women to bring in all their pads and tampons and they soak everything in 5% sodium hydroxide and convert the blood into alkaline haematin whose optical density can be measured. In this way blood loss can be measured.
- If there were a simple test that could be done at GP level, would you consider asking women to bring all their pads and tampons into the surgery?
- Would you do any tests or examinations before starting any treatment, or before referring the patient?
- If you decide that a woman has menorrhagia, what is your next step?
- What treatments may be tried before you decide to refer the patient?
- If you decide to refer the patient, what sort of thing would you discuss with the patient before writing a referral letter? When you decide to refer the patient, at that stage, is there any discussion of possible surgical treatment? If so, what surgical treatments are mentioned?
- What factors, apart from the severity of the bleeding, might affect your decision to the refer the patient? (e.g., age of patient, demands made by patients)
- What factors affect your choice of consultant? (waiting list? type of surgery practised? success rate and patient satisfaction?) How much choice do you give the patient?
- Where are these consultants located?
- Do your partners tend to refer to the same or other consultants?
- When you refer a patient with menorrhagia, what do you expect the consultant to do or suggest?
- How easy or difficult is it for you to refer a patient outside the area?
- If a patient has private health insurance, is it easier to make a referral for menorrhagia, either locally or outside the area?
- Does having private health insurance affect the choice of consultant?
- To what extent might the social, or cultural background of the patient affect your choice of consultant?
- Have you ever been given 'guidelines' for the management of abnormal uterine bleeding? (Which ones? Where from? How were they developed?)
- Have the guidelines been helpful? (or would you like guidelines)
- Have you been given any other recent information on this subject (e.g., from drug reps?) Would you like more information easily available?
- Is there anything else you think I should know?

Pathologically excessive menstrual blood loss, defined as 'objective menorrhagia', is commonly taken to be a blood loss of 80 ml or more per period,[3,8] on the basis of Hallberg et al.'s 1966 study[9] that suggested a significant risk of anaemia as a result of blood loss at this level or more. But there is disagreement about the validity of the 80 ml 'threshold' for 'objective' menorrhagia. More recent work by Janssen et al.[10] suggests that Hallberg and colleagues' results were skewed by the presence of a group of women suffering extreme blood loss (up to 540 ml) in a 'high risk' group (the 'more than 80 ml' group was not subdivided). In this context, they suggest that the risk of anaemia becomes significant at around 120 ml lost per period, and that the objective diagnostic criterion for menorrhagia needs to be adjusted upwards accordingly.

Debates about a clinically defined 'norm' are problematic for women presenting with subjectively defined blood loss that they regard as unacceptably heavy. It is well established that periods that are subjectively defined as involving 'excessive' blood loss may in fact be light. Hallberg et al.[9] found that 14% of women who had a measured menstrual blood loss of 20 ml or less thought their periods were heavy. In the UK it is estimated that only about half of the women attending gynaecology outpatients clinics complaining of 'heavy' bleeding are losing 80 ml or more of blood per menstrual period.[11] Negotiating these subjective definitions of 'excessive' blood loss with primary care physicians often leads to conflict about boundaries and definitions of excess.[12,13] The problem in clinical practice, as O'Flynn and Britten[13] have observed, is disentangling the relationship between objective (clinical) notions of 'disease' and sufferers' (subjective) constructs of 'illness'.

It is this disease/illness boundary that the family practitioner is required to negotiate in the consultation, for in most cases of 'menorrhagia' there is no evidence of underlying organic pathology.[14] Menorrhagia is a problem where the social and the clinical compete for explanatory force. The products of this competition may be serious, since most British women who are referred to hospital clinics for such problems ultimately undergo surgical procedures, whether or not there is evidence of an abnormal uterus.[15] Women who are losing excessive quantities of blood per period may suffer considerable discomfort and embarrassment, and are at risk of anaemia.[16] However, women who are losing relatively little blood may be at risk of the consequences of surgery of uncertain justification. Invasive procedures such as endometrial ablation and hysterectomy may lead to increased morbidity and mortality.[17]

How GPs respond to this illness/disease boundary and to the competing norms that this involves is important in understanding the foundation of a range of clinical decisions about treatment and referral that stem from it. Recent work has drawn attention to the 'paucity of information about doctors' perceptions of menstruation and their approach to patients with menstrual problems'.[13] This paper is intended to go some way towards meeting the demand for knowledge about this domain of clinical practice.

Study group and method

A qualitative research strategy was employed in this study, and its methodology and sampling strategy have been described in detail elsewhere.[18] The interviews took place in two medium-sized towns ('A' and 'B') and a major city ('C') in Northwest England. Seventy-three doctors were interviewed (28 female, 45 male). In accordance with the precepts of qualitative research, a purposive sampling strategy[19] was employed, and therefore the sample may not be statistically representative of GPs in these areas. The study was designed to reflect different practice settings. Town A was of medium size, a socially deprived area, with a relatively large Muslim ethnic minority population. Some of the GPs working in this town also held surgeries in more affluent country practices. Town B was larger, and had a fairly large Hindu ethnic minority population. City C was a vast industrial conurbation. The GPs working there had the advantage of having regular contact with consultants working in a large hospital that was devoted entirely to the gynaecological and obstetric needs of women living in the area.

Having reviewed the literature, ten exploratory interviews were conducted with five male GPs and five female GPs. They included a GP of South Asian descent. These GPs were selected from all three areas and were recruited with the help of colleagues and friends. The pilot interviews, which allowed respondents considerable freedom to describe the way in which they made a diagnosis of menorrhagia, helped the authors to develop a semi-structured interview schedule (see table 1). The main phase of the study used this interview schedule, although it was amended during the course of the study.

All GPs in towns 'A' and 'B' were invited to participate in the research, and 30% agreed to do so. Some males declined to take part because they said that their female partners generally cared for women with menorrhagia. In city 'C', 35 GPs were invited to participate and 20 agreed. In the city the GPs had local guidelines for menorrhagia, and this may account for the fact that a higher percentage of the GPs in the city agreed to take part. It was decided to interview all those who had volunteered. No payments were made to respondents. Interviews lasted approximately 30 minutes and were audiotaped and transcribed in full (with the respondents' permission).

After every interview memos were made to record insights, hunches and hypotheses. Notes were made of important themes that seemed to be emerging from the data.

Transcripts were then analysed using the constant comparative method.[20] Transcripts were constantly checked and compared to see if what was reported by one GP was reported elsewhere. Efforts were made to find reasons for any disagreement. By the time the study was finished, data saturation was reached on all of the themes discussed in this paper.

Results

The majority of GPs make some attempt to assess blood loss

Diagnosing menorrhagia is difficult in clinical practice because there is often no correlation between duration and blood loss during a woman's period.[21] However, 49 of the 73 GPs participating in the study indicated that they attempted an assessment of menstrual blood loss when patients complained of heavy bleeding. Apart from conducting a full blood count, doctors assessed blood loss by taking a detailed history; for example by asking women whether or not they passed clots of blood or whether or not they experienced 'flooding'. As one GP explained:

You have to go into great detail about how many sanitary pads they're using, and tampons. I mean even that's not very accurate because some women would change every hour because they are very fastidious. I think with true menorrhagia they usually describe waking up and the bed's soaking, and it [blood] running down their legs (C2).

It appeared that the male GPs in particular found it hard to assess 'abnormal' blood loss from a woman's description of events. Some male GPs may be unaware of the way in which women typically cope with heavy bleeding. For example, one male GP was unaware that women who bleed heavily may use both pads and tampons at the same time for protection. During the interview he reported that he never asked women about the use of tampons. Thus he may have seriously underestimated the amount of blood lost at each period.

Rees[14] has suggested that, since so many women who are not losing 80 ml of blood per period are referred to hospital for treatment, 'objective measurement' should be available in primary care so that informed decisions can be made about whom to treat. In hospital practice, women are sometimes asked to collect all their sanitary towels and tampons so that blood loss can be measured using the alkaline haematin extraction method.[22,23] A key question, therefore, is whether GPs are willing to assess blood loss in this way. Most rejected it, asserting that even if a relatively simple objective test were available, women would be too embarrassed, or medical staff would find the collection of sanitary items distasteful.

I find people loath enough to provide faeces samples, and things like that, let alone that *[blood stained pads]. (C18)*

Similarly:

It sounds disgusting. (B19)

Lack of time was another reason given for rejecting this idea:

At this stage it is impossible. The workload has increased tremendously for both the nurses and ourselves, so I can't push the nurse to do any more, unless there are more resources, and there is more money. (A5)

Only eight of the 73 GPs said that they might collect samples in the surgery for such a test. One doctor (A3)

observed that women might be reassured if it were shown that they were losing blood within 'normal' limits. The problem, of course, is establishing this *norm* in clinical practice.

Deeny and Davis[24] found a pictorial chart developed by Higham et al.[25] useful in the assessment of menstrual blood loss. This chart is sent home with the patient and filled in over the duration of a period. The chart seeks to record the number of pads and tampons used and the degree to which individual items are soiled with blood. The chart helps to discriminate between women who discard pads and tampons after very little soilage and those women who do not do so. According to Janssen et al.,[21] who validated and refined the visual assessment technique developed by Higham et al.,[25] '.... it is superior to a woman's subjective assessment of menstrual blood loss and the occurrence of anaemia for predicting menorrhagia, even if it is performed only once.'

When the GPs in this study were asked if they might find such a chart useful to help to estimate menstrual blood loss, some 50% (n=38) of the entire sample agreed. Thirty-two of the 49 GPs who made a particular effort to assess blood loss said they would use the chart. However, of the group of GPs who tried to assess blood loss, five were uncertain, and 12 thought it unlikely that they would use the chart. The GPs that liked the chart suggested that it would be helpful to both women and clinicians who did not like talking about the details of menstruation and sanitary protection in the consulting room. A male GP explained why he would find it useful:

To my mind it would probably be useful having something with a diagram, because I expect that people have different thresholds of which they might change their pads or as to what they are describing as being a heavy pad or not. So in that respect, something that is diagrammatic, I would find a lot easier. (C7)

Some respondents commented that the pictorial chart would be especially useful for women who did not speak English. As one female GP remarked:

The pictorial chart is quite good, especially for Asian women and other ethnic minority women. (C19)

However, some GPs felt that they obtained enough information during the consultation without the help of a pictorial chart, and four female respondents did not like the graphic display of the chart, and said that some of their patients might find it distasteful. For example, one GP commented:

I feel perhaps for some women, that graphic display of blood loss might be a bit shocking for them. (C12)

Some GPs regard actual blood loss as relatively unimportant or even irrelevant

Twenty-four of the GPs asserted that objective testing is neither relevant nor important precisely because of the problem of subjective 'norms' noted above. These GPs, who mainly worked in Towns A and B, where there were no local guidelines for the management of menorrhagia, seemed less concerned about the detailed history of their patients' monthly blood loss. They rested their decisions on women's subjective assessment of blood loss. This was particularly true of male doctors. Almost one half of the male doctors (n=20) and one seventh of the female doctors (n=4) took this approach.

... because it is a subjective problem, ... if they [women] subjectively think that they have heavy periods and it is a problem to them I think the actual amount perhaps isn't relevant. (A8)

Another respondent said that he might ask the woman roughly how much blood she was losing, but he continued:

If they come to me and say, 'This is horrendous, and I am not coping with this, and it is far too much', then that's menorrhagia in my view. (...) I go by what the woman defines as unacceptable heavy bleeding, entirely, because if you went through all that hassle of actually determining blood loss, and you come back to the woman a week later and say, 'I'm terribly sorry, you haven't got heavy periods at all', she is not going to believe you, and it is not going to cure her perceived problem. (B9)

One female GP said that the key factor to consider was how much the bleeding was affecting lifestyle. She commented:

I haven't really got into trying to assess how much is being lost, I'm afraid. (A11)

The following comment made by a GP during the pilot study sums up the position taken by this group of GPs. He said:

If a woman comes in with bleeding that is heavy enough to interfere with her lifestyle, even though it is a lot less than 80 ml, she's got a problem, and I want to do something about it, so it's menorrhagia. (Pilot 5, Town B)

Although these GPs were mainly concerned with women's subjective accounts of 'heavy' bleeding, some did conduct blood tests. However, some restricted these tests to patients who exhibited signs of fatigue or possible anaemia. Six GPs in this group also said that they might use the menstrual chart in some circumstances.

Discussion

This qualitative study illuminates menorrhagia as a diagnostic problem in everyday general practice. Some GPs try 'objectively' to estimate menstrual blood loss, while others are guided almost entirely by their patients' subjective definition of the situation. Cornwell[26] suggests that those working in general practice may not always subscribe to a 'medical model' and, as Bury[27] points out, there is no longer such a sharp divide between 'medical knowledge' and 'lay belief' about matters pertaining to health and illness. But these shifts are not necessarily helpful to the clinician, who is still faced with the need to make a decision

about the pathological (or otherwise) nature of a symptom, and to define the possibilities for treatment and management. Therefore the problem that GPs face is one of interpreting subjective constructs, and building estimates of blood loss from highly individualised accounts.

The notion of an 'objective test' for menorrhagia appears to be impractical in everyday family practice. Our study has shown that GPs are reluctant to collect sanitary pads or tampons for objective measurement of menstrual blood. However, our study lends support to Janssen and colleagues'[21] view that the clinical encounter in such cases could be structured around a pictorial chart. This would enable GPs to more effectively distinguish between women who are losing relatively little blood per period and those who are losing 80 ml or more but who are not yet anaemic.

When women want treatment for their 'heavy periods', whether or not they are anaemic, it is important that GPs offer an informed choice of treatment to those who wish to be involved in the decision-making process.[3] ■

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