

# An International Response to Questions about Terminologies, Investigation, and Management of Abnormal Uterine Bleeding: Use of an Electronic Audience Response System

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## ABSTRACT

More than 600 registrants attended a two-hour interactive symposium on abnormal uterine bleeding (AUB) at the Federation of Gynecology and Obstetrics World Congress in Cape Town, October 2009. Nearly 250 of these participants answered multiple questions through an electronic audience responder system. The audience heard five structured presentations on clinically important and controversial aspects of AUB, including terminologies and definitions, classification of causes, mechanisms of AUB in the absence of structural lesions of the reproductive tract, the potential for a structured menstrual history, and management of heavy menstrual bleeding (HMB) in low-resource settings. Numerous demographic details were collected, and a total of 30 questions to the audience were interspersed through each of the presentations. The audience demonstrated great variation in the way the terms *AUB*, *menorrhagia*, and *dysfunctional uterine bleeding (DUB)* are used, and considerable majorities agreed that the terms *menorrhagia* and *DUB* should be abolished. *AUB* should be the overarching term to describe all symptomatic departures from normal menstruation or the menstrual cycle. *HMB* is a suitable replacement term for *menorrhagia*. *DUB* can be replaced by the three clinical entities comprising “nonstructural” causes of AUB. There was a high consistency across demographic subgroups in answers to most questions. Acute and chronic AUB were defined, and aspects of a classification system for causes of AUB and of a structured menstrual history were explored. Issues related to investigation and hormonal treatment of HMB in low-resource settings were explored by registrants from developing countries.

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## BACKGROUND

Design and interpretation of studies into the pathogenesis, investigation, and treatment of abnormal uterine bleeding (AUB) have been hampered by a lack of consistency of terminologies and definitions.<sup>1</sup> Recognition of this limitation led to the development of a process designed to evaluate current perceptions regarding the status of AUB terminologies and definitions, and to formulate a set of recommendations that would be supported by basic scientists, clinical investigators, and clinicians worldwide. The series of activities began with the selection of a group of worldwide experts in AUB to begin the process that first culminated in an interactive workshop in Washington, D.C., in 2005. This workshop, supported by several international organizations, resulted in published recommendations for new terminology for the description of AUB symptoms and the abandonment of several terms that were deemed obsolete or lacked the specificity required for an unambiguous system that would translate into a variety of languages.<sup>2,3</sup> Another product of this workshop was the initial structuring of a system for classification of causes or potential causes of AUB that would facilitate the design and interpretation of clinical studies and databases that would have a similar impact to that of reproductive tract cancer staging introduced by the International Federation of Gynecology and Obstetrics (FIGO) in the 1920s. Indeed, FIGO, one of the sponsoring organizations of the Washington workshop, supported the creation of a FIGO Menstrual Disorders Working Group to facilitate the organization and implementation of this process. Members of the working group continued to refine the systems identifying gaps or ambiguities and framing issues for presentation to another set of experts at a workshop in Cape Town held in conjunction with the 2009 FIGO World Congress. The resulting work was presented to a FIGO audience of ~600 people in a major symposium within the main scientific program during which an electronic audience response system was used to obtain feedback from the series of five lectures using a set of predetermined multiple-choice questions.

## METHODOLOGY

The two-hour session was held in Cape Town on October 6, 2009, and simply titled "Abnormal Uterine Bleeding." In addition to a listing in the paper and web-based programs, attendance was encouraged with several flyers included in the attendee bags provided to each registrant. Table 1 lists the topic titles, contents, and Congress speakers.

A wireless keypad was provided to each of the first 250 to arrive in the theater. The system allowed the attendee to quickly respond to a question comprising up to 10 multiple-choice answers. The total number of responses was displayed live on the presentation screen, allowing meeting organizers the opportunity to determine when all had answered the question, or, short of that, until no more responses were obtained. Respondents could change their answer as many times as they wished until the question was closed. Data were stored in a digital spreadsheet (Excel, Microsoft Corp., Redmond WA) for later analysis.

Questions were designed first to provide demographic information regarding the nationality, training, and clinical experience of the audience, then to provide feedback regarding options, conclusions, and recommendations developed by the expert group.

## RESULTS

### Demographic Distribution

Table 2 shows the demographic distribution of the attendees using the keypads. The modal age was 50–59 years, and the gender was equally distributed between men and women. Only 30% listed English as their first language; Spanish or Portuguese was the primary language of 16%, and languages from the Indian subcontinent 10%. Twenty-two percent were English-speaking participants from Africa, another 22% were from Europe, and the remainder included those from the Asian-Indian subcontinent (11%), South-East Asia (11%), North America (6%), North Africa and the Middle East (5%), and East Asia including both China and Japan (4%). This broad range of cultural backgrounds allowed for an assessment of potential trends in cultural differences.

### Clinical Distribution

Approximately 97% provided care to women or girls with AUB. The majority (57.6%) were senior consultants or specialists who had been in practice for at least 10 years; the remainder were largely junior consultants, subspecialists, and trainees, either medical students or residents (Table 2). Nearly 40% were in an academic or university practice. This is the first indication that a high proportion of attendees at a FIGO World Congress are in fact academic and key opinion leaders in their own cultures. This has allowed valuable discussion of cultural issues around AUB.

**Table 1** Abnormal Uterine Bleeding Presentations

Speaker	Topic	Question Topics	N-ARS Questions
I.S. Fraser	Introduction	• Demographics	5
	Background and Clinical Issues	• Training and practice	3
		• Current use of terms to describe symptoms	2
I.S. Fraser	Nomenclature—"Menorrhagia vs. HMB"	• Menorrhagia versus HMB	3
H.O.D. Critchley	Replacing the term "Dysfunctional Uterine Bleeding—DUB"	• DUB-related questions	3
M.G. Munro	Proposed Classification System for Abnormal Uterine Bleeding in the Reproductive Years	• Acute vs. chronic AUB definition	2
		• Classification system	4
	• Resources	1	
K.A. Matteson	Structured Medical History	• Current and potential use of a symptom-based questionnaire	15
R. Haththotuwa	Management of HMB in Low-Resource Settings	• AUB practice patterns	4

HMB, heavy menstrual bleeding; AUB, abnormal uterine bleeding.

### Use of Terms Related to Uterine Bleeding

Approximately 30% of the 237 respondents used the term *abnormal uterine bleeding* (AUB) as a symptom and/or a sign, 8% as a diagnosis, and 48% as both a symptom/sign and a diagnosis (Table 3).

The term *menorrhagia* was used by almost 9% as a diagnosis, almost 50% as a symptom or a sign, and by 35% as both a symptom/sign and a diagnosis. There was strong majority support that this term be discarded.

The respondents overwhelmingly agreed there was confusion with the definition and use of the term *dysfunctional uterine bleeding* (DUB), and >75% agreed the term should be discarded (Table 4).

There was a surprising consistency in the responses to most questions across the demographic subgroups. Table 5 shows the responses of all the demographic subgroups to the question "Do you agree that the term 'dysfunctional uterine bleeding' should be discarded?" It is of considerable interest that percentages in agreement or disagreement should be so similar across ages, gender, language, geography, professional experience, and clinical practice, although there was a tendency for those in agreement with the recommendation to discard DUB to be younger, female, and earlier in their career development. This similarity also applied to some of the other questions posed to the audience, so that small differences within subgroups could not be explored with any power. In general, those who agreed there is confusion in the use of the term *DUB* agreed it should be discarded, but there were a few exceptions (Table 6).

The audience was presented with recent research perspectives on mechanisms underlying different types of AUB unrelated to structural lesions of the reproductive tract, the broad group of women previously encom-

passed by the diagnostic term *dysfunctional uterine bleeding*. When asked about replacing this "diagnosis" of DUB with the entities "coagulopathy," "ovulatory disorders," and "endometrial dysfunction," more than two thirds supported this approach; only 18% disagreed (Table 4).

### Definitions of Acute and Chronic Abnormal Uterine Bleeding

The proposed definition of *acute abnormal uterine bleeding* was "An episode of bleeding in a woman of reproductive age, who is not pregnant, that is of sufficient quantity to require immediate intervention to prevent further blood loss." This definition was supported by 82% of the respondents with only 9.5% disagreeing (Table 7). The FIGO Menstrual Disorders Working Group (FMDWG) defined *chronic* AUB as "bleeding from the uterine corpus that is abnormal in duration, volume, regularity, and/or frequency and has been present for the majority of the last six months." The definition was supported by 84% of the 221 respondents with only 7% disagreeing (Table 7).

### Proposed PALM-COEIN Classification System for Abnormal Uterine Bleeding

The responses to the questions posed regarding the proposed classification system are shown in Table 7. A total of 71% of the 221 respondents suggested that the system helped them ("somewhat" or "very much") to understand the pathogenesis of AUB, and 84% agreed it would help them improve diagnostic accuracy. When asked if the system would facilitate counselling of

**Table 2 Demographic Distribution (Fraser Presentation 1)**

		No.	%
Age	1. 20–29 years	7	2.9
	2. 30–39 years	41	17.2
	3. 40–49 years	69	29.0
	4. 50–59 years	74	31.1
	5. 60–69 years	38	16.0
	6. ≥70	2	0.8
	7. Not stated	7	2.9
	Total	238	100.0
Gender	1. Female	118	49.6
	2. Male	110	46.2
	3. Not stated	10	4.2
	Total	238	100.0
Language	1. English	70	29.4
	2. Spanish/Portuguese	37	15.5
	3. Chinese	7	2.9
	4. Indian subcontinent	22	9.2
	5. French	4	1.7
	6. Italian/Greek	1	0.4
	7. Arabic	15	6.3
	8. German	4	1.7
	9. Russian/Eastern European	7	2.9
	10. Other	63	26.5
	11. Not stated	8	3.4
	Total	238	100.0
Continental groupings	1. Australasia and Oceania	6	2.5
	2. Latin America or Caribbean	30	12.6
	3. North America	14	5.9
	4. North Africa and Middle East	11	4.6
	5. Africa Francophone	5	2.1
	6. Africa English speaking	51	21.4
	7. Europe (including UK and Eastern Europe)	50	21.0
	8. Asia: Indian subcontinent	25	10.5
	9. East Asia: China, Japan	10	4.2
	10. Southeast Asia	25	10.5
	11. Not stated	11	4.6
	Total	238	100.0

women with AUB, 86% answered in the affirmative and 81% thought it would improve teaching.

### Access to Clinical Investigation Technology

If a classification system is to be universally accepted and properly implemented, it is important that the tools required for complete assessment are accessible to the vast majority of clinicians and women worldwide. Approximately 66% of the 221 respondents stated they had access to transvaginal ultrasound and hysteroscopy in various forms (Table 7). Only 5% stated they did not have access to ultrasound or hysteroscopy, but 8.6% did not provide a response.

### Structured Medical History

An appropriate medical history is important for the care of patients and for assigning them to the appropriate classification category. Table 8 depicts the many questions posed and the answers received from 199 respondents that covered their practice in taking a medical history as well as their perceptions on the value of a structured menstrual history. Although the vast majority (91%) inquired about the amount of bleeding, almost half did not routinely ask about the impact of AUB on quality of life, and only a quarter routinely screened for disorders of hemostasis. Very few used a standard set of questions (14%) or a questionnaire (7%) in their evaluation of AUB patients, but approximately three quarters

**Table 3 Training/Practice Distribution (Fraser Presentation 2)**

Training and experience	1. Medical student	4	1.7
	2. O&G Trainee (resident/registrar)	16	6.7
	3. Junior consultant/specialist (<10 years)	40	16.8
	4. Senior consultant/specialist (≥10 years)	137	57.6
	5. Subspecialist in an O&G area?	18	7.6
	6. Non O&G specialist	2	0.8
	7. Primary care provider	5	2.1
	8. Other	3	1.3
	9. Not stated	13	5.5
	Total	238	100
Do you provide care for women or girls with AUB?	1. Yes	209	87.8
	2. No	7	2.9
	3. Not stated	22	9.2
	Total	238	100
Primary clinical practice setting?	1. Academic/University practice	94	39.5
	2. Hospital, nonuniversity	26	10.9
	3. Government/Public	17	7.1
	4. Private multispecialty group	20	8.4
	5. Private O&G specialty group	22	9.2
	6. Solo practice	31	13.0
	7. Other	9	3.8
	8. Not stated	19	8.0
Total	238	100	

O&G, obstetrics and gynecology.

would use a structured history instrument and agreed it would help them in their clinical evaluation. Nearly 80% felt that a structured menstrual questionnaire should be designed to help with both diagnosis and the impact of AUB on quality of life. Almost half thought the instrument should be completed with the help of a health-care worker; just over 20% thought a questionnaire should be completed before the visit.

### Evaluation of Abnormal Uterine Bleeding in Low-Resource Settings

It was felt important to identify issues specific to the members of the audience from nations with low-resource settings (Table 9). Approximately two thirds of specialists from these countries routinely measure hemoglobin levels. Ultrasound examination was performed routinely by half, and in selected cases by 34%

**Table 4 Current Use of Terms "AUB" and "Menorrhagia" (Fraser Presentation 3)**

		No	%
Do you use the term "Abnormal uterine bleeding (AUB)" to describe:	1. A symptom and/or a sign?	70	29.4
	2. A diagnosis?	19	8.0
	3. Under some circumstances, as both a symptom/sign or a diagnosis?	114	47.9
	4. Never use the term?	24	2.5
	5. Not stated	11	4.6
	Total	237	100.0
Do you use the term "Menorrhagia" to describe:	1. A symptom and/or a sign?	117	49.2
	2. A diagnosis?	21	8.8
	3. Under some circumstances, as both a symptom/sign or a diagnosis?	82	34.5
	4. Never use the term?	6	2.5
	5. Not stated	6	2.5
	Total	237	100.0

**Table 5 Current Use of the Term “Dysfunctional Uterine Bleeding” or “DUB” (Critchley Presentation)**

		No	%
Do you agree there is confusion with use of term “DUB”? <i>N</i> = 222	1. Yes	188	84.2
	2. No	21	9.5
	3. Not stated	14	6.3
Do you agree term “dysfunctional uterine bleeding/DUB” should be discarded? <i>N</i> = 223	1. Yes	171	76.7
	2. No	31	13.9
	3. Not stated	21	9.4
Do you agree that the following clinical entities can replace previous use of the term “DUB”? Coagulopathies Ovulatory disorders Endometrial dysfunction (infection, disturbances of local hemostasis, inflammation, vasoactive regulators) <i>N</i> = 141	1. Yes	96	68.1
	2. No	26	18.4
	3. Not stated		
		19	13.5

**Table 6 Proposed “PALM-COEIN” Classification System (Munro Presentation)**

A. Definitions of Acute and Chronic AUB ( <i>N</i> = 221)		No.	%
Do you agree that chronic AUB is bleeding from the uterine corpus, that is abnormal in duration, volume, regularity, and/or frequency and has been present for the majority of the last 6 months?	1. Yes	186	84.16
	2. No	16	7.24
	3. Not stated	19	8.60
	Total	221	100.00
Do you agree that acute AUB* is an episode of bleeding in a woman of reproductive age, who is not pregnant, that is of sufficient quantity to require immediate intervention to prevent further blood loss?	1. Yes	182	82.35
	2. No	21	9.50
	3. Not stated	18	8.14
	Total	221	100.00
B. Proposed “PALM-COEIN” Classification System ( <i>N</i> = 221)		No.	%
Does a classification system like this help you to understand the pathogenesis of AUB?	1. Not stated	19	8.60
	2. Not at all	23	10.41
	3. Somewhat	79	35.75
	4. Very much	100	45.25
	Total	221	100.00
Would a classification system like this help you to make a more accurate diagnosis in a woman with AUB?	1. Not stated	21	9.50
	2. Not at all	14	6.33
	3. Somewhat	71	32.13
	4. Very much	115	52.04
	Total	221	100.00
Would a classification system like this make it easier to counsel patients with AUB?	1. Not stated	36	16.29
	2. Not at all	16	7.24
	3. Somewhat	49	22.17
	4. Very much	120	54.30
	Total	221	100.00
Would a classification system like this make it easier to teach students, residents/registrars, and other clinicians-in-training about AUB?	1. Not stated	31	14.03
	2. Not at all	10	4.52
	3. Somewhat	24	10.86
	4. Very much	156	70.59
	Total	221	100.00

AUB, abnormal uterine bleeding.



**Table 7 Access to Diagnostic Technology (Munro Presentation), N=221**

		No.	%
In your clinical environment, which of the following tools do you have access to for evaluation of patients with AUB?	1. Not stated	19	8.60
	2. TVUS only	22	9.85
	3. TVUS and SIS	20	9.05
	4. Hysteroscopy only	4	1.81
	5. TVUS and Hysteroscopy	62	28.05
	6. TVUS, SIS, and hysteroscopy	83	37.56
	7. None of the above	11	4.98
	Total	221	100.00

AUB, abnormal uterine bleeding; TVUS, transvaginal ultrasound; SIS, saline infusion sonography.

of the 105 respondents. Endometrial biopsy was performed in almost 60% on a selective basis and nearly 8% as a routine. Of the 53 responding to the question regarding hormonal therapy, cyclic oral progestogens were the most frequently selected approach by ~40%; combined oral contraceptives were the second most commonly used agents. Fifty percent of specialists from these countries did not answer this question, and subsequent discussion with individuals in the audience indicated the surgical option was typically preferred to medium or long-term hormonal therapy.

## DISCUSSION

This combination of a large multicultural audience at a World Congress of Gynecology and Obstetrics in a session that was devoted to AUB provided a unique opportunity to interrogate well over 200 respondents through an electronic audience response system. In general, the respondents overwhelmingly supported the recommendations of the FMDWG including the adoption of selected new nomenclature for symptoms, the abandonment of several terms, and the use of a classification system for categorizing patients according to identified potential contributors to AUB. We also identified strong support for the use of a structured medical history, particularly important because preliminary clinical identification of women with coagulopathies and disorders of ovulation largely depends on historical details.

The electronic audience response system provided immediate input from a large portion but not a majority of the individuals attending the session. Electronic digital storage was immediate and in a format that facilitated rapid analysis. The allocation of keypads was on a "first come, first served" basis; the possible biases involved with this approach cannot be evaluated. However, the sample was equally divided between men and women and included individuals from each of the seven age and nine language and continental categories (in addition to "other") offered to the respondents. The design of the keypads required that we limit the choices

to 10 items, so greater fidelity regarding language, age, and country of origin was not possible.

The FMDWG had previously identified inconsistencies with the use of terms such as *menorrhagia*, *meno-metrorrhagia*, and *dysfunctional uterine bleeding* and had recommended the abandonment of these terms. The respondents from the Cape Town session supported removing these terms from the AUB lexicon. The recommended nomenclature has been previously published<sup>2,3</sup> and is found in the article by Fraser et al in this issue of *Seminars*.<sup>4</sup> The respondents also overwhelmingly supported the recommended definitions of acute and chronic AUB that were not included in the symptom nomenclature publications.

The Cape Town respondents provided strong support for the concept of a classification system, and their responses suggested that the proposed PALM-COEIN system would facilitate diagnosis, the counseling of patients, and the education of health-care professionals. Although each component of the system was not submitted for response, the system's division of "nonstructural" causes of AUB was queried. Specifically these nonstructural causes included primary endometrial entities (AUB-E), those related to ovulatory disorders (AUB-O), and systemic disorders of hemostasis or coagulopathies (AUB-C). There was overwhelming support for discarding the term previously used for this trio of disorders, *dysfunctional uterine bleeding*, and strong support for a system that included each of the three entities independently.

Because, in practical terms, the complaint of abnormal uterine bleeding is one that is subjective and provided by the patient, the history is a cornerstone of diagnosis. Indeed, as described by Munro et al in this issue of *Seminars*,<sup>5</sup> the menstrual history can be used to identify those who are very likely to have a disorder of ovulation, and, as a result, those who have AUB in the context of ovulatory function. In addition, a structured history has been demonstrated to be effective at identifying a group of individuals more likely to have a systemic disorder of hemostasis prevalent in up to 13% of women with heavy but regular menstrual bleeding.<sup>6-8</sup> The respondent attendees at the Cape Town FIGO

**Table 8 Structured Medical History (Matteson Presentation), N= 199**

		No.	%
When you take a history from a patient with abnormal uterine bleeding, how often do you ask about amount of bleeding?	1. Always	180	90.5
	2. Sometimes	10	5.0
	3. Never	1	0.5
	4. Not stated	8	4.0
When you take a history from a patient with abnormal uterine bleeding, how often do you ask about how her symptoms affect her quality of life?	1. Always	112	56.6
	2. Sometimes	64	32.3
	3. Never	12	6.1
	4. Not stated	10	5.1
When you take a history from a patient with abnormal uterine bleeding, how often do you screen for disorders of hemostasis?	1. Always	48	24.1
	2. Sometimes	102	51.3
	3. Never	38	19.1
	4. Not stated	11	5.5
When you take a history from a patient with abnormal uterine bleeding, how often do you ask about mood during menses?	1. Always	31	15.6
	2. Sometimes	93	46.7
	3. Never	61	30.7
	4. Not stated	14	7.0
What is the most common reason that women consult you for AUB?	1. Because they are worried that the bleeding means they have a major illness	81	40.7
	3. Because their bleeding is affecting the way they live their lives	79	39.7
	4. Because they think they are bleeding "too much," but it is not affecting the way they live their lives	20	10.1
	5. Because they have pain	0	0.0
	6. Not stated	19	9.5
In your clinical practice, do you ever use a standard set of written questions (a questionnaire) for evaluation of patients?	1. Yes	28	14.1
	2. No	155	77.9
	3. Not stated	16	8.0
Do you currently use a questionnaire to evaluate women with abnormal uterine bleeding?	1. Yes	14	7.0
	2. No	158	79.4
	3. Not stated	27	13.6
Would you consider using a structured menstrual history (as described in this talk) to evaluate women with abnormal uterine bleeding?	1. Yes	149	74.9
	2. No	25	12.6
	3. Not stated	25	12.6
Do you agree or disagree with the following statement: "A structured menstrual history could help me evaluate why a patient has abnormal uterine bleeding."	1. Disagree	28	14.1
	2. Agree	147	73.9
	3. Not stated	29	14.6
Which of the following do you think a structured menstrual history should include:	1. Questions that help with diagnosis only	5	2.5
	2. Questions that assess the impact of symptoms on the patient only	7	3.5
	3. Neither	3	1.5
	4. Both	155	77.9
	5. Not stated	29	14.6
In your clinical practice, with your average patient, which do you think would work better?	1. A questionnaire a woman completes by herself before the appointment	45	22.6
	2. A questionnaire a woman completes with the help of a health-care worker	94	47.2
	3. Unsure	27	13.6
	4. Not stated	33	16.8

AUB, abnormal uterine bleeding.



**Table 9 Evaluation of Abnormal Uterine Bleeding in Low-Resource Countries (Haththotuwa Presentation)**

		No.	%
When investigating a woman with HMB would you measure hemoglobin (Hb)? <i>N</i> = 107	1. Routinely	73	68.2
	2. In selected patients	24	22.4
	3. Rarely	3	2.8
	4. Not stated	7	6.5
When investigating a woman with HMB, will you perform an ultrasound (US) scan in: <i>N</i> = 106	1. All patients	53	50
	2. Selected patients	36	34.0
	3. Rarely	2	1.9
	4. Never	1	0.9
	5. Not stated	14	13.2
When investigating a woman with HMB, will you do an endometrial biopsy (EB)? <i>N</i> = 106	1. All patients	8	7.5
	2. Selected patients	63	59.4
	3. Rarely	9	8.5
	4. Not stated	26	24.5
Which is the most frequently used hormonal treatment in patients with HMB by you? <i>N</i> = 105	1. OCP	17	16.2
	2. Cyclical oral progestogens	20	19.0
	3. DMPA	8	7.6
	4. LNG-IUS	7	6.7
	5. Not stated	53	50.5

HMB, heavy menstrual bleeding; OCP, oral contraceptive pills; DMPA, depot medroxyprogesterone acetate; LNG-IUS, levonorgestrel-releasing intrauterine system.

conference expressed strong support for the use of a structured history when evaluating women with AUB and suggested they would use such an instrument if provided. The issues are reviewed comprehensively in Matteson et al in this issue.<sup>9</sup>

It is apparent that at least the attendees of the Cape Town meeting, including those from low-resource nations, have access to the transvaginal ultrasound (TVUS) necessary to categorize most of the women with structural abnormalities like polyps, myomas, and adenomyosis. Although many stated they did not have “access” to contrast ultrasound studies like saline infusion sonography (SIS), it would seem that the transition from TVUS to SIS is more one of education, training, time, and expertise management than access to a capital asset.

Discussions in the Washington and Cape Town workshops revealed a range of cultural aspects of the understanding and management of heavy menstrual bleeding that had not previously been well recognized. These began with the recognition that many women from low-resource settings welcome a “heavy, red blood” as a healthy, “clean-out” of body impurities. Hence women generally do not present for investigation until the condition is acute and severe.<sup>9</sup> Even in this situation, only 68.2% of respondents would routinely measure hemoglobin levels, often because the facility is not always easily available or cannot be measured in the field. Similarly, only 50% would routinely use an ultrasound scan. Endometrial biopsies

were only utilized in selected patients. This approach typically leads to the use of a surgical solution in low-resource settings.<sup>9</sup>

The feedback from this session has provided strong support for further attempts at development of universally acceptable questionnaires as the basis for structured menstrual histories, taking into account cultural and language imperatives. However, there is also a real need for organizations like FIGO and the regional specialist obstetric and gynecology federations (in Asia-Oceania, Latin America, and Europe) to survey the true availability of investigative and management technologies for AUB and the skills to implement them in low-resource settings.

## CONCLUSION

The electronic audience response system provided a vehicle for real-time queries of up to 250 attendees. There was general support for the conclusions and recommendations formulated by the FMDWG, including changes in the nomenclature for describing AUB symptoms, the definitions of acute and chronic AUB, and for the creation of a classification system that includes stratification of nonstructural causes of AUB that previously were considered by some to be collectively termed *dysfunctional uterine bleeding*. It is also apparent that at least these respondents were supportive of the notion of a structured menstrual history, and they generally had some access to the good quality TVUS

necessary for identification of “structural” pathologies contributing to AUB.

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