

Knowledge, Attitude and Behavior of Women toward Abnormal Menstrual Bleeding and Its Impact on Quality of Life

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ABSTRACT

Abnormal menstrual bleeding (AMB) is a common gynecological complaint. It may have serious repercussions on women's quality of life. Most of the studies on abnormal menstrual bleeding focus on the quantity of blood loss with little emphasis on the effect, it has on the quality of women's life. Recent research in the area of abnormal menstrual bleeding has recognized the importance of the 'patient experience' as an outcome that should be measured. So, it is very important to know about women's perception about the problem so that the healthcare professional can provide them appropriate care. The present study was undertaken to assess effect of AMB on various aspects of women's life and to assess their knowledge toward causes and management of AMB and its health impacts. Though majority of women know about abnormal bleeding as something serious, but still they lack in depth understanding of its consequences and various treatment modalities available.

Significance for public research: The article gives us valuable inputs regarding patient's viewpoint about abnormal uterine bleeding. Knowing the patients perceptions, their attitude toward abnormal menstrual bleeding and various social factors affecting it may be very helpful for the health professionals and researchers in knowing the impact of abnormal bleeding on quality of life and hence selecting the treatment strategies that will improve patient's satisfaction.

Keywords: Abnormal menstrual bleeding, Quality of life, Awareness.

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INTRODUCTION

Abnormal menstrual bleeding (AMB) is a common gynecological problem. Two main categories of abnormal

menstrual are heavy menstrual bleeding (HMB) and irregular menstrual bleeding, and many patients experience the combination of these symptoms. Heavy bleeding has been objectively defined as blood loss more than 80 ml per cycle. This threshold value of menstrual blood loss was set due to the pathologic consequences of menstrual loss of this volume, as this is associated with a high frequency of iron deficiency.

It is difficult to measure the menstrual blood loss objectively and the quantitative criteria do not take into consideration its impact on quality of life which is significant.¹⁻³ AMB is important cause of female morbidity and one of the most common complaints with which patient presents to gynecology outpatients department. It has significant impact on quality of life and is a cause for financial burden.² When measured quantitatively, AMB prevalence has been found to range from 9 to 14%, yet when measured qualitatively, it has been found to be as high as 52%.^{1,4}

Due to the impracticality of measuring heavy menstrual bleeding objectively in daily clinical practice, the most recent National Institute of Health and Clinical Excellence guidelines now subjectively define HMB as 'excessive blood loss which interferes with the woman's physical, emotional, social and material quality of life. So in future, the diagnostic modalities and treatment will focus more on women's perception about HMB.⁵

Traditionally, research on HMB has objectively measured menstrual blood loss as the main study outcome and defined 'heavy bleeding' as more than 80 ml blood lost per cycle.² But, in clinical practice, the diagnosis, evaluation, and treatment of abnormal uterine bleeding are based upon 'patient experience', the woman's personal assessment of her blood loss and its impact on quality of life.

Irregular menses are academically defined as menses with cycle to cycle variation of greater than 20 days total over 1 year.^{6,7} Irregular menstrual bleeding occurs very frequently following menarche and during the progression from late reproductive life in the late thirties to the menopausal transition.⁸ 'Patient experience' with irregular bleeding is important because women with irregular menstrual bleeding have difficulty 'predicting' when

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they will get their menstrual period and may experience staining of their clothes and embarrassing accidents.

The management of abnormal uterine bleeding (AUB) has been hampered both by confusing and inconsistently applied nomenclature and the lack of standardized methods for investigation and categorization of the various potential causes of abnormal menstrual bleeding. This makes it difficult to make comparison of different studies performed on heavy bleeding. Keeping this in view, FIGO Menstrual Disorders Group (FMDG) has developed a classification system for causes of abnormal bleeding.⁷

Recent research in the area of AUB has recognized the importance of the 'patient experience' as an outcome that should be measured.⁹ Because of this, patient-based outcome measures (PBOMs) and questionnaires of varying quality have been developed and used for clinical research in the area. Many of these questionnaires incorporate questions typically used by healthcare providers in clinical encounters with women with heavy or irregular menstrual bleeding, although no single PBOM or questionnaire is accepted as the 'standard of care' for evaluating women with AMB.

Women's perceptions of what is 'normal' with regards to menstruation depend largely upon their understanding of menstruation and what they perceive its function to be. The view of menstruation as a monthly cleanser has given rise to the idea that when women experience excessive menstrual blood loss, it is medically beneficial. Due to the myths attached to menstruation as something or unhygienic, many a times abnormal menstrual bleeding conditions, such as HMB, may go undiagnosed and untreated, leading to unnecessary suffering in women.¹

Very few studies have addressed the impact of AMB on women's quality of life, like daily activities, social life, relationships and religious life. The present study was undertaken to assess effect of AMB on various aspects of women's life and to assess their knowledge toward causes and management of AMB and its health impacts.

MATERIALS AND METHODS

The present study was undertaken on 253 women attending gynecology OPD during February 2012 to August 2013, at Gian Sagar Medical College and Hospital, Banur, Patiala, Punjab (India). Main objective of the study was to assess the knowledge, attitudes and beliefs of women regarding abnormal menstrual bleeding and its impact on daily life. All women were given written performa addressing demographic data and questionnaire regarding abnormal menstrual bleeding. Data from the literature was used as basis for preparation of questions. Main points covered in the performa were relating to the following:

- Demographic data.
- Impact of AMB on quality of life.
- Knowledge regarding causes, treatment of abnormal menstrual bleeding and its relation with gynecology malignancies.

Inclusion criteria were women 21 to 60 years of age attending gynecology OPD for various reasons.

Exclusion criteria were women who had undergone hysterectomy, who did not give consent to participate in study.

Data from women with AMB was analyzed separately from the ones with normal menstrual bleeding. Informed consent was taken from all women. Abnormal menstrual bleeding was defined subjectively as bleeding which led to disruption of normal activities as per NICE guidelines.

STATISTICAL ANALYSIS

The statistical analysis was performed using statistical package for social sciences (SPSS Inc., Chicago, IL, version 17.0 for Windows). All the data were recorded on a specially prepared. Performa and discrete categorical data were presented as n (%); Chi-square test or Fisher's exact test was applied for comparison between two groups of normal bleeding and excessive bleeding. Statistical significance was set at $p < 0.05$.

RESULTS

The results of the study are presented in the Tables.

DISCUSSION

The baseline characteristics of women, i.e. age, parity, educational level and BMI, were comparable in the normal and abnormal bleeding group. Majority of women were in 20 to 40 years age group and having 2 to 4 children (Table 1). All the women were asked about their perception of normal periods. All of them said it is important to have periods as its monthly cleaner and many of them (42%) said that amenorrhea or oligomenorrhea might lead to weight gain.

When asked about as what bothers them the most during periods response varied in normal and abnormal bleeding group (Table 2). Majority of women in heavy bleeding group quoted irregularity (74.4%) and heaviness (90.69%) as the most bothersome complaint. Other significant complaints were pain in 53% and mood changes. Whereas in the normal bleeding group majority quoted mood changes as most bothersome complaint (34.8%). In a study by Santer M et al, pain (27%) was the symptom which bothered them the most followed by heaviness (19%) and mood changes (17%). It is important to understand the concern of women with the menstrual

Table 1: Baseline data (n = 253): The baseline characteristics of women, i.e. age, parity, educational level and BMI were comparable in the normal and abnormal bleeding group. Majority of women were in 20 to 40 years age group and having 2 to 4 children

	Normal bleeding group (n = 210)	Abnormal bleeding group (n = 43)	Total	Chi-square (p-value)
Age				
21-30 years	86 (41)	10 (23.3)	96 (37.9)	5.49 (0.139)
31-40 years	62 (29.5)	14 (32.6)	76 (30)	
41-50 years	41 (19.5)	13 (30.2)	54 (21.3)	
51-60 years	21 (10)	6 (14)	27 (10.7)	
Parity				0.893 (0.640)
0-2	157 (74.8)	31 (72.1)	188 (74.3)	
3-4	50 (23.8)	12 (27.9)	62 (24.5)	
5 or more	3 (1.4)	0	3 (1.2)	
Education				10.278 (0.036)
Illiterate	23 (11)	12 (27.9)	35 (13.8)	
Under matric	54 (25.7)	12 (27.9)	66 (26.1)	
Matric	57 (27.1)	7 (16.3)	64 (25.3)	
Senior secondary	27 (12.9)	3 (7.0)	30 (11.9)	
Graduate and above	49 (23.3)	9 (20.9)	58 (22.9)	
BMI				3.8 (0.1496)
18-25 kg/m ²	140 (66.67)	25 (58.13)	165 (65.21)	
26-30 kg/m ²	58 (27.61)	12 (27.91)	70 (27.66)	
>30 kg/m ²	12 (5.71)	6 (13.95)	18 (7.11)	

Table 2: What bothers you most during periods?*: Shows the most bothersome symptom as perceived by women

	Normal bleeding group (n = 210)	Abnormal bleeding group (n = 43)	Total (n = 253)	Chi-square (p-value)
Pain	36 (17.1)	23 (53.48)	59 (23.32)	26.37 (<0.0001**)
Heaviness of bleeding	10 (4.76)	39 (90.69)	49 (19.36)	163.33 (<0.0001**)
Mood changes	73 (34.8)	16 (37.2)	89 (35.17)	0.09 (0.7642)
Irregularities	6 (2.85)	32 (74.41)	38 (15.01)	143.2 (<0.0001**)
Breast pain/swelling	13 (6.19)	6 (13.95)	19 (7.50)	-0.1059
Others	96 (45.71)	2 (4.65)	98 (38.7)	23.66 (<0.0001**)
Nil complaints	29 (13.8)	0	29 (11.46)	-0.0151 S

*Total number may be more as some women quoted more than one symptom as being most bothersome; **Highly significant; S: Significant

complaints. So, patient centered understanding of complaint may lead to better understanding of patient's illness and can contribute to improved patient satisfaction and results of treatment.¹⁰

The present study is in accordance with previous studies demonstrating the effect of abnormal bleeding on many aspects of women's life like relationship, social life, work and quality of life. The results from this study show that significantly more women in the abnormal bleeding subgroup identified their menstrual bleeding as problematic in comparison to those women in the normal bleeding subgroup (Table 3). Significantly more women in the abnormal bleeding group felt disruption of normal activity (86%) and limitation of work (83.87%). 90.7% of women with abnormal bleeding said that they avoid social activities and friends-family get together (83.7%) during bleeding. Significantly, higher proportion of women (81.4%) felt physically weak and unable to carry on day-to-day activities during days of heavy bleeding. There was variability in the perception of women as to what

should be considered as normal-majority felt 2 to 3 pads per day and bleeding lasting for 4 to 5 days as normal.^{1,3,11}

In a study by Bitzer et al, total of 6179 women, 18 to 55 years old, currently using or open to using, hormonal contraception were studied regarding their perception about heavy bleeding and its impact on quality of life. Of the women who perceived themselves as having above average menstrual flow, a significantly greater proportion identified their menstrual bleeding as problematic compared to those women who perceived having below average menstrual flow. Regarding impact of heavy menstrual bleeding on multiple aspects of women's lives, including social life, relationships, and work, a significantly greater proportions of women reported negative effects in these domains in the above average menstrual flow subgroup relative to the below average menstrual flow subgroup.¹

When asked about their awareness regarding heavy menstrual bleeding, majority of females (91.3%) were aware about abnormal bleeding, but as such they were not knowledgeable about the treatment options available and

Table 3: Effect of menstrual bleeding on QoL (n = 253)

	Normal bleeding group (n = 210)	Abnormal bleeding group (n = 43)	Total (n = 253)	Chi-square (p-value)
Disruption in normal activities	105 (50%)	37 (86%)	142 (56%)	18.83 (p < 0.001)
Limitation of work	104 (49%)	36 (83.7%)	140 (55.3%)	16.88 (p < 0.001)
Skip social activities	104 (49%)	39 (90.7%)	143 (56.5%)	24.62 (p < 0.001)
Avoid travel	105 (49.5%)	40 (93%)	144 (56.9%)	27.51 (<0.001)
Avoids family/friends get together	91 (43.3%)	36 (83.7%)	127 (50.2%)	23.2 (<0.001)
Isolation at home	65 (31%)	25 (58.1%)	90 (35.6%)	11.51 (0.001)
Change in type and color of clothes	92 (43.8%)	28 (65.1%)	120 (47.4%)	6.49 (0.011)
Change in color of underwear	93 (44.3%)	28 (65.1%)	121 (47.8%)	6.207 (0.013)
Feeling of less attractive/confident	62 (29.5%)	22 (51.2%)	84 (33.2)	7.53 (0.006)
Feeling physically weak	110 (52.4)	35 (81.4)	154 (57.3)	12.28 (<0.001)
Any mood changes	73 (34.8)	25 (58.1)	98 (38.7)	8.4 (0.015)
Myths related/religious beliefs	101 (48.1)	18 (41.9)	119 (47)	0.806 (0.668)
Avoid sexual activity during periods	27 (12.9)	17 (39.5)	44 (17.4)	19.7 (<0.001)
Whether they feel shy discussing with healthcare professional	62 (29.5)	18 (41.9)	80 (31.6)	2.51 (0.113)

Table 4: Knowledge regarding AMB (n = 253): Knowledge of women about abnormal bleeding, its treatment and consequence

	Normal bleeding group (n = 210)	Abnormal bleeding group (n = 43)	Total (n = 253)	Chi-square (p-value)
Are they aware of AMB?	189 (90)	42 (97.7)	231 (91.3)	2.64 (0.104)
Knowledge about Rx options available	56 (26.7)	15 (34.9)	71 (28.9)	6.45 (0.091)
Knowledge about association with malignancies	99 (47.1)	27 (62.8)	126 (49.8)	3.49 (0.062)
Knowledge about consequences of HMB	18 (8.6)	10 (23.3)	28 (11.1)	10.43 (0.034)
Do they think HMB is something serious and needs to be treated?	192 (91.4)	43 (100)	235 (92.9)	3.96 (0.049)

consequences of AMB (Table 4). There was no significant difference in both groups regarding their awareness level. Majority correlated AMB with malignancy and felt that AMB is something serious and needs to be treated. Majority quoted healthcare professionals (19.01%) or friends and family (27.7%) as their source of information regarding AMB, 4.7% got information about AMB from media. 48.48% could not pin-point their source of information. In a multicenter study by Bitzer et al, awareness of HMB among the survey participants was found to be low. When the global study population was asked if they had heard of HMB, 34% of them answered 'no' or 'do not know'. Even in the awareness group, understanding of abnormal bleeding and available treatment options was found to be lacking.¹ Esimai et al conducted a cross-sectional survey of 400 college students to assess their awareness level about menstrual abnormalities and health seeking behavior. Students' awareness of menstrual abnormalities was poor (29%). A few of them (10.5%) decided to seek help for menstrual abnormalities.¹²

This study supports the findings of previous research showing HMB to be a common problem which can impact on many aspects of a women's life, including social life, relationships and work.^{1,3,12} It reinforces the need to consider women's perceptions of MBL and the subsequent impact on quality of life. Furthermore, the women in

abnormal bleeding group are affected more by their problem as compared to normal bleeding group. There is need to create awareness among women regarding abnormal bleeding and its consequences so that they can seek timely treatment.

CONCLUSION

Present study suggests that abnormal menstrual bleeding is a common problem which has impact on many aspects of women's daily activities. So, it is important to understand women's perceptions about abnormal bleeding and its effect on quality of life. Though majority of women know about abnormal bleeding as something serious, but still they lack in depth understanding of its consequences and various treatment modalities available, highlighting the need to raise awareness of abnormal menstrual bleeding and its treatment options among women as well as provide necessary guidance and resources to health workers in order to enable them to disseminate appropriate information to patients with this condition. Identifying the symptoms and situations that are most bothersome to women with heavy or irregular menstrual periods could help clinicians and researchers ask patients more meaningful questions and, therefore, improve both medical care and patient satisfaction.

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