

## Evaluation of Knowledge and Attitude of Women Towards Abnormal Uterine Bleeding

Zahra Wasim<sup>1\*</sup>, Tahira Riaz<sup>1</sup>, Humaira Tariq<sup>1</sup>, Zaib un Nisa<sup>2</sup>, Nusrat Noor<sup>3</sup>, Sadaf Shafique<sup>4</sup>

<sup>1</sup>Department of Obstetrics & Gynecology, CMH, Rawalpindi, Pakistan.

<sup>2</sup>Department of Obstetrics & Gynecology, CMH, Peshawar, Pakistan.

<sup>3</sup>Department of Obstetrics & Gynecology, CMH, Sakardu, Pakistan.

<sup>4</sup>Department of Obstetrics & Gynecology, CMH, Gujranwala, Pakistan.

**Correspondence:** zahrawasim1973@gmail.com

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### ABSTRACT

**OBJECTIVE:** To evaluate the knowledge and Attitude of women towards abnormal uterine bleeding (AUB).

**METHODOLOGY:** This descriptive cross-sectional was conducted at the Department of Obstetrics and Gynecology, The Combined Military Hospital (CMH), Rawalpindi, Pakistan, from January to December 2022. The inclusion criteria were women aged 18 to 45 who attended the outpatient obstetrics and gynaecology department. All pregnant females, those who had a history of hysterectomy, were excluded from the study. Females unwilling to be part of this study were also not involved. The participants were given pre-designed questionnaires with 30 items of knowledge and 10 items of attitude domains of AUB. A dichotomous scale (yes/no) was used for the knowledge domain. The expertise and Attitude were labeled good if females answered more than 60% of questions correctly. Statistical Package for Social Sciences version 26.0 was used for data analysis.

**RESULTS:** In 151 women, the mean age and body mass index (BMI) were 27.4±6.2 years and 24.1±1.2 kg/m<sup>2</sup>. Lower abdominal pain was described to be the most common presenting complaint by 98 (64.9%) females, while mood swings, weakness and irritability were the other most frequently reported presenting complaints reported by 69 (45.7%), 66 (43.7%) and 61 (40.4%) females respectively. Overall, AUB knowledge was considered good in 24.3% of females. Attitude towards AUB was good in 74 (49.0%) females.

**CONCLUSION:** Good knowledge of AUB was noted in 24.3% of females, while 49.0% reported good Attitudes towards AUB.

**KEYWORDS:** Abdominal pain, abnormal uterine bleeding, Attitude, irritability, knowledge.

## **INTRODUCTION**

Abnormality of uterine corpus bleeding regarding its regularity, volume, rate of occurrence or duration, and occurrence in the non-existent state of pregnancy is termed abnormal uterine bleeding (AUB)<sup>1</sup>. The AUB is characterized by heavy menstrual bleeding and/or inter-menstrual bleeding<sup>2</sup>. The definition of IMB is the occurrence of bleeding between clearly defined cyclic and expected menses, and its main features are episodes of random bleeding and simultaneous occurrence of these episodes in every cycle<sup>3</sup>.

Every year, almost 1 out of 20 females of age between 30 and 49 years experience menstrual disorders<sup>4</sup>. The contribution of AUB to the gynecological ailments is around 30%.<sup>5</sup> Women of young and middle age groups are more likely to present with AUB<sup>3</sup>. How women interpret menstruation and perceive its functioning defines normal or abnormal menstruation<sup>6,7</sup>. Hence, it is of great importance to know women's understandings, their misconceptions, and possible available treatments for the resolution of abnormal vaginal bleeding<sup>8,9</sup>. Practically, it is challenging to quantify menstrual bleeding (MBL) in clinics, so the guidelines of "The National Institute of Health and Clinical Excellence (NICE)" present a subjective definition of heavy menstrual bleeding as "excessive blood loss interfering with a woman's physical, emotional, social and marital quality of life (QoL)"<sup>4</sup>.

Conducting a study on women's understanding of AUB may benefit the community and research. The assessment can identify gaps in awareness, enabling targeted awareness programs and empowering women to recognize symptoms early. Understanding women's attitudes towards AUB is essential for tailoring interventions promoting early detection and timely medical assistance, potentially preventing complications. The study's insights can inform healthcare policies, leading to improved reproductive health services. By contributing new data, the research advances the overall understanding of AUB, potentially uncovering regional variations and enhancing global knowledge of women's health. This study was planned to evaluate the knowledge and Attitude of women towards AUB.

## **METHODOLOGY**

This descriptive cross-sectional study was conducted at the Department of Obstetrics and Gynecology, The Combined Military Hospital (CMH), Rawalpindi, Pakistan, from January to December 2022. Approval from "Institutional Ethical Committee" was acquired (IRB letter No. 324). Written and informed consent were obtained from all women participating in this research. Considering the prevalence of AUB as 5% among females of reproductive age<sup>4</sup>, with a 95% confidence level and 8% margin of error, the sample size was calculated to be 151. A non-probability convenient sampling technique was adopted. The inclusion criteria were women aged 18 to 45 who attended the outpatient obstetrics and gynaecology department. All pregnant females, those who had a history of hysterectomy, were excluded from the study. Females unwilling to be part of this study were also not involved.

The participants were given pre-designed questionnaires with 30-item knowledge and 10-item attitude domains of AUB. A dichotomous scale (yes/no) was used for the knowledge domain. The knowledge was labeled good if females answered more than 60% of questions correctly<sup>10</sup>. Same criteria were used to mark the attitude domain. Socio-demographic characteristics of female studies, such as age, body mass index (BM), residential status, educational background, socioeconomic status, and marital status, were recorded. A quiet place was designated to interview the females studied, and questions were asked in the national language (Urdu).

Data analysis was performed using "Statistical Package for Social Sciences (SPSS)", version 26.0. Qualitative variables were shown as proportions and percentages. Quantitative variables were represented by mean and standard deviation (SD). Descriptive statistics were applied to highlight the study data.

### **Questionnaire**

#### **Assessing the knowledge and Attitude of females towards abnormal uterine bleeding**

##### **Assessing knowledge about abnormal uterine bleeding**

1. Have you ever heard of abnormal uterine bleeding (AUB)?
2. Can you define what abnormal uterine bleeding means to you?
3. Are you aware of the common causes of abnormal uterine bleeding?
4. How would you differentiate between normal menstrual bleeding and abnormal uterine bleeding?
5. Do you know the typical age range when AUB is more likely to occur?
6. Are you familiar with the various symptoms associated with AUB?
7. Can you identify any risk factors that may contribute to abnormal uterine bleeding?
8. Do you know how AUB can impact a woman's overall health?
9. Are you aware of the potential complications associated with untreated AUB?
10. Have you ever sought medical advice or treatment for abnormal uterine bleeding?
11. Can you name any lifestyle factors that may influence the occurrence of AUB?
12. Do you know if hormonal imbalances can contribute to abnormal uterine bleeding?
13. Are you familiar with the role of stress in causing AUB?
14. Can you identify any specific medical conditions or diseases linked to AUB?
15. Have you ever encountered information about AUB in the media or through healthcare campaigns?
16. Do you know how AUB is typically diagnosed by healthcare professionals?

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17. Do you know that AUB is treatable?
18. Can you name any lifestyle changes that may help alleviate symptoms of AUB?
19. How often do you think women should have regular check-ups to monitor reproductive health?
20. Are you familiar with any preventive measures to reduce the risk of AUB?
21. Can you recognize signs that may indicate a more serious underlying issue causing AUB?
22. Do you think AUB can impact a woman's fertility or ability to conceive?
23. Are you knowledgeable about the role of hormonal contraceptives in managing AUB?
24. Have you ever discussed AUB with friends, family, or healthcare providers?
25. Can you name any dietary factors that may influence AUB?
26. Are you aware of the impact of AUB on mental health and well-being?
27. How confident do you feel in identifying AUB-related symptoms in yourself or others?
28. Do you think there is a stigma associated with discussing AUB openly?
29. Can you name any organizations or resources that provide information on AUB?
30. Are you open to participating in educational programs or workshops focused on AUB awareness?

### Questionnaire

#### **Assessing Attitude about Abnormal Uterine Bleeding**

1. How comfortable do you feel discussing issues related to menstrual health, including abnormal uterine bleeding, with friends or family?
2. Do you perceive AUB as a common and normal aspect of a woman's reproductive health, or do you view it as a cause for concern?
3. What emotional impact, if any, do you think AUB may have on a woman's overall well-being?
4. In your opinion, how supportive is society in addressing the challenges women face regarding abnormal uterine bleeding?
5. How likely are you to seek professional medical advice if you were experiencing symptoms of abnormal uterine bleeding?
6. Do you believe there is adequate awareness and education about AUB within your community?
7. To what extent do you think cultural or societal norms influence a woman's willingness to discuss AUB openly?
8. Are you aware of any misconceptions or myths surrounding AUB, and how do you perceive them?
9. How would you rate the level of importance placed on addressing reproductive health concerns, including AUB, within healthcare systems?
10. In your view, what measures can be taken to reduce any stigma or discomfort associated with discussing AUB openly and seeking medical help when needed?

**All these questions were asked in Urdu to the participants, and responses were noted as per the Methodology described in the methodology section.**

**RESULTS**

In a total of 151 females, the mean age was 27.4±6.2 years, while 80(52.3%) females were aged between 18 and 25. The mean BMI was 24.1±1.2 kg/m<sup>2</sup>, whereas 123(81.5%) females had a BMI below 25 kg/m<sup>2</sup>. The residential status of 91(60.3%) females was rural. There were 27(17.9%) females who were illiterate. Socioeconomic status of 84(55.6%) females was low. Characteristics of females who participated in this study are shown in **Table I**.

Lower abdominal pain was described to be the most common presenting complaint by 98(64.9%) females, while mood swings, weakness and irritability were the other most frequently reported presenting complaints reported by 69(45.7%), 66(43.7%) and 61(40.4%) females respectively. **Figure I** shows the frequency of ABM's most commonly reported complaints.

General knowledge about the AUB was good in 34(22.5%) females. There were 44(29.1%) females who had good knowledge about the most common symptoms of AUB, while 32(21.2%) females had good knowledge about the possible causes of AUB. Overall, AUB knowledge was considered good in 24.3% of females. Attitude towards AUB was good in 74(49.0%) females. **Table II** shows details of knowledge and attitude domains among females towards AUB.

**Table I: Baseline Socio-demographic characteristics of Females (n=151)**

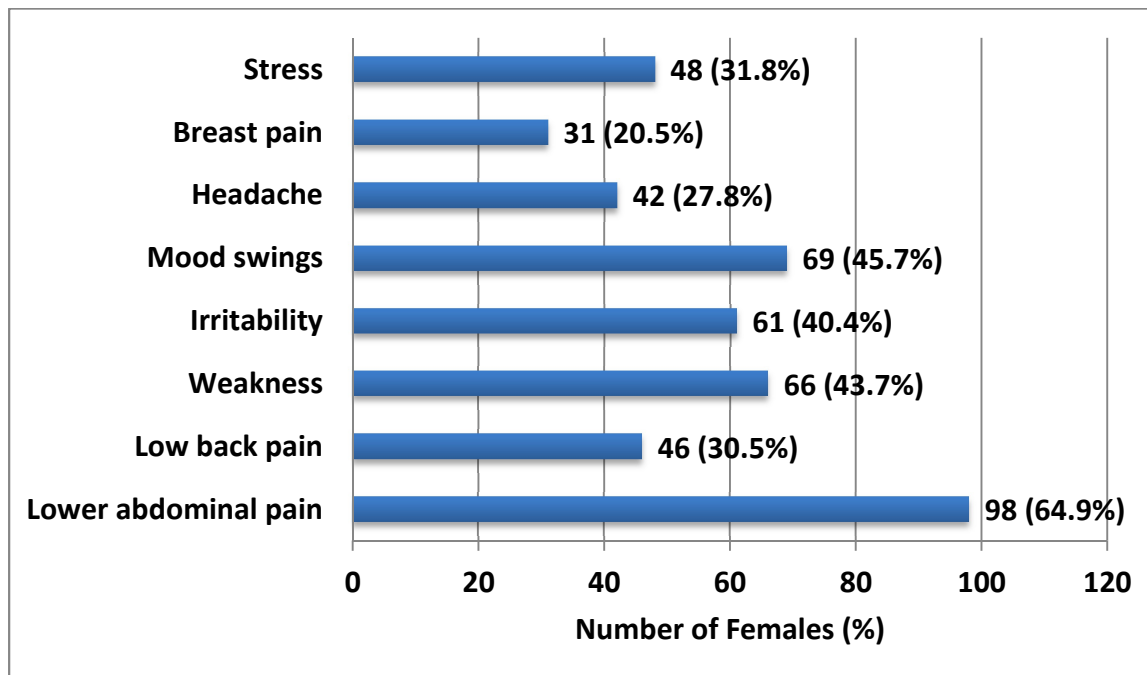
Characteristics	Frequency (%)	
Age (years)	18-25	80 (52.3%)
	26-35	48 (31.8%)
	36-45	23 (15.2%)
BMI (kg/m <sup>2</sup> )	<25	123 (81.5%)
	≥25	28 (18.5%)
Residential status	Rural	91 (60.3%)
	Urban	60 (39.7%)
Educational status	Illiterate	27 (17.9%)
	Literate	124 (82.1%)
Socio-economic status	Low	84 (55.6%)
	Middle	41 (27.2%)
	High	26 (17.2%)
Marital status	Unmarried	72 (47.7%)
	Married	79 (52.3%)

**Table II: Knowledge and Attitude about Abnormal Menstrual Bleeding (n=151)**

<b>Domains</b>		<b>Good</b>	<b>Poor</b>
Knowledge	General knowledge about AUB	34 (22.5%)	117 (77.5%)
	Symptoms of AUB	44 (29.1%)	107 (70.9%)
	Causes of AUB	32 (21.2%)	119 (78.8%)
Attitude towards AUB		74 (49.0%)	77 (51.0%)

AUB: Abnormal uterine bleeding

**Figure I: Frequency of most Common presenting Complaints of Abnormal Menstrual Bleeding described by Females (n=151)**



**DISCUSSION**

The mean age of females evaluated for knowledge and Attitude towards AUB was calculated to be  $27.4 \pm 6.2$  years, whereas more than half of the females (52.3%) had aged between 18-25 years in this study. A study from Malaysia analyzing the knowledge and Attitude of adults towards menstrual disorders reported the mean age of the study participants to be  $24.1 \pm 4.3$  years. In contrast, 62.1% of participants were 18-24 years old<sup>11</sup>. Another study from Turkey analyzed the mean age of the females for the pattern of menstrual disorders, which was 20.7 years. Still, the researchers evaluated university students in that study, which could have been the reason for the relatively lower mean age of the study participants<sup>12</sup>.

The studied females described lower abdominal pain (64.9%), mood swings (45.7%), weakness (43.7%) and irritability (40.4%) to be the most common presenting complaints of ABM. Compared with Kaur H 2015<sup>13</sup>, pain, heaviness, mood changes and irregularities were reported to be the most common presenting associations of ABM by 53%, 91%, 37%, and 74% of females, respectively. A study done by Joshi V 2022<sup>14</sup> revealed that females described pain (82.4%), physical weakness (65.7%), mood swings (58.8%) and irregularity (61.8%) to be the most common presenting associations of AUB. The variation exists among females of different regions about the most frequently accompanied presenting complaints of AUB, which could be due to the difference in ethnic, cultural and socio-economical characteristics of those populations<sup>15,16</sup>. Various aspects of women's lives, such as social character, mental state, health and QoL, are influenced by AUB, as shown previously<sup>17</sup>.

This research revealed that overall knowledge about AUB was reported to be suitable by 24.3% of females. Our findings are based on contemporary data, which has made it evident that females of reproductive age do not have adequate knowledge about the symptoms and causes of AUB<sup>11</sup>. So, there is a need to improve the education and knowledge of females about menstrual disorders, especially AUB. Females living in our society must be provided adequate knowledge about different aspects of AUB that can be performed by doing public awareness programs about the types and presentation of menstrual disorders, mainly focusing on AUB. In contrast, studying Islamic teachings about menstrual issues can further improve understanding.

Attitude towards AUB was good in 74(49.0%) females. Some researchers have shown that females (especially younger ones) feel embarrassed to discuss and share menstrual issues with others<sup>18</sup>. In a country like Pakistan, menstrual disorders like AUB are considered to be taboo or delicate matters, and females might feel depressed and reluctant to share these issues with their family members. Community-based campaigns must be designed to improve the importance of timely identification and seeking help towards nearby healthcare facilities, which can uplift QoL among females suffering from AUB. It might be helpful to upgrade the knowledge and facts about AUB and related issues in our population.

Some significant limitations of this study were the relatively small sample size and single study centre. Being a cross-sectional study, we could not verify the authenticity of the knowledge and Attitude of the study participants as formal interviews were only done to record the study data. We could not record the practices and quality of life of the females studied.

## **CONCLUSION**

Good knowledge of abnormal uterine bleeding was noted in 24.3% of females, while 49.0% reported good Attitudes towards abnormal uterine bleeding. The present study highlighted the need for a proper educational and awareness campaign to improve the knowledge, Attitude and overall understanding of abnormal uterine bleeding.

**Ethical permission:** Combined Military Hospital, Rawalpindi, Pakistan, IRB letter No. 324.

**Conflict of Interest:** No conflicts of interest, as stated by authors.

**Financial Disclosure / Grant Approval:** No funding agency was involved in this research.

**Data Sharing Statement:** The corresponding author can provide the data proving the findings of this study on request. Privacy or ethical restrictions bound us from sharing the data publically. The questionnaire used in this is given in the Annexure.

## **AUTHOR CONTRIBUTION**

Wasim Z: Study concept, Methodology, data collection

Riaz T: Substantial contributions to the conception of the work

Tariq H: Critical revisions, data collection

Un-Nisa Z: Data collection, data analysis.

Noor N: Substantial contributions to the conception of the work

Shafique S: Drafting and revising the work for important intellectual content



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