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Research Article

Relationship of education and socio-economic status with knowledge about abnormal uterine bleeding and its risk factors

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ABSTRACT

Background: Abnormal uterine bleeding (AUB) is a common but overlooked condition. The lack of information and poor attitude towards health is often the reason. The knowledge of women regarding AUB and the preventable factors and its association with their education and socioeconomic status has never been assessed. Hence, the study was undertaken to assess the knowledge and attitude of women with AUB regarding the condition, its etiology, risk factors and treatment modalities in relation to their education and socio economic status.
Methods: The cross sectional descriptive study was carried out among women with AUB. Structured interviewer administered questionnaire was used to collect the required information. Knowledge of AUB and its risk factors from women with AUB were given scores 1-8 and 1-6 respectively. Information on education and socioeconomic status was also noted. Statistical analysis of data was done.
Results: Knowledge score for AUB ≤4 and its risk factors ≤3 was found in 63% and 72% of respondents respectively. Poor reading ability and low socio economic status was significantly associated with poor knowledge scores.
Conclusions: Intensive enlightenment of population using the mass media by trained personnel and strengthening of primary health care services is recommended.

Keywords: Knowledge, Socio-economic status, Education, Abnormal uterine bleeding

INTRODUCTION

One third of outpatient's visits to the gynaecologists are for abnormal uterine bleeding (AUB), and it accounts for more than 70% of all gynaecologic consults in the perimenopausal and postmenopausal years.[1] The International Federation of Gynaecology and Obstetrics (FIGO) has proposed a classification system for 9 major causes of AUB (PALMCOEIN). [2] and the likely cause of abnormal uterine bleeding is usually related to age. Abnormal bleeding caused by hormone imbalance is more common in teenagers or in women who are approaching menopause. Obesity, PCOS, anorexia or crash diets, stress and extreme exercise account can all disrupt normal ovulatory function and may be considered as preventable risk factors for AUB.[3] There has been a move to describe AUB in terms of its impact on a woman's physical, emotional, social and material quality of life (QOL).

Though few studies have been done to assess the burden of AUB on society however, the knowledge of women regarding various aspects of AUB and its association with their socio demographic status had never been assessed. Hence, the study was undertaken to assess the knowledge and attitude of women with AUB in relation to their education level and socio economic status.

METHODS

This was a cross sectional descriptive study carried out among women with AUB. Two hundred women with

AUB were enrolled in the study. Written informed consent was taken of all participants.

Structured interviewer administered closed ended questionnaire was used to collect the required information. Knowledge about AUB and its risk factors were given scores 1-8 and 1-6 respectively. Education and socioeconomic status of respondents was noted. Updated BG Prasad socioeconomic classification, 2014 was used to record the socioeconomic status of women.[4] Descriptive statistical analysis was done for all relevant data (Table 1 and 2).

Table 1: Questionnaire for score of knowledge about AUB.

Questionnaire for score of knowledge about AUB	Yes/No	Score
AUB is a spiritual disease		
AUB is seen mostly in infertile women	No	1
Sterilization always causes AUB	No	1
Postcoital bleeding may occur in AUB	Yes	1
AUB may be associated with vaginal discharge	Yes	1
Medical treatment is helpful in AUB	Yes	1
Hysterectomy is the only treatment of AUB	No	1
	Total	

Table 2: Questionnaire for score of knowledge about risk factors of AUB.

Questionnaire for score of knowledge about risk factors of AUB	Yes/No	Score
Obesity is a risk factor of AUB	Yes	1
Diabetes mellitus is a risk factor of AUB	Yes	1
Having multiple sexual partners may be a risk factor for AUB	Yes	1
Positive family history may be a risk factor for AUB	Yes	1
Stress may be a risk factor for AUB	Yes	1
Rigorous physical exercise/dieting may be a risk factor for AUB	Yes	1
	Total	6

Data analysis and processing

All data thus collected was entered in Microsoft excel sheet and was subjected for statistical analysis. Quantitative data was summarized as mean and SD whereas qualitative data as percentage. Paired and unpaired "t" test was used for comparison of quantitative data. While 'Chi-square,' test was used for qualitative data. A p value less or equal to 0.05 was considered indicative of a significant factor effect.

RESULTS

The age of respondents ranged from 13 years to 47 years, 65% of them were in between 23 -37years (mean age ±SD = 29.705±7.852). 87.5% of the respondents were married. 85% were multiparous (mean parity±SD= 2.33±171). 44.5% were unemployed while only a small group (9.5%) were professionals.

Education level of respondents also varied, with 3.5% being postgraduates and 9% graduates. 19.5% of them were illiterate and 33.5% had primary school education. We found a significant association between education and their knowledge score, with the more educated being better informed, both about AUB as well as about its risk factors (Table 3 and 4).

Table 3: Association of education level and knowledge about AUB.

Literacy status	Knowledge score of AUB		
	≤4	>4	Chi square test with D.F 1 30.176 P≤0.0001 HS
≤Primary(n=106)	86	20	
> Primary(n=94)	40	54	
Total (n=200)	126	74	

The result was significant at P < 0.0001.

Though respondents belonged to all economic backgrounds, 25.5% were from socio-economic class with per capita monthly income Rs. 2405 or less, 11% had Rs.736 or less. We also found a significant association between socio-economic status and their knowledge score, with the ones with more income being

better informed, both about AUB and about its risk factors (Table 5 and 6).

Table 4: Association of education level and knowledge about risk factors of AUB.

Literacy status	Knowledge of risk factors score of AUB		
	≤3	>3	Chi square test D.F 1 36.627 P≤0.0001 HS
≤Primary(n=106)	96	10	
> Primary(n=94)	48	46	
Total (n=200)	144	56	

The result was significant at P<0.0001.

Table 5: Association of socioeconomic status and knowledge about AUB.

SocioEco.class (modified Prasad)	Knowledge score of AUB		
Per capita monthly income	≤4	>4	Chi square test D.F 1 55.296 P=<0.0001 HS
>Rs.2405 (149)	116	33	
≤Rs.2405 (51)	10	41	
Total(200)	126	74	

The result was significant at P < 0.001.

Table 6: Association of socioeconomic status and knowledge about risk factors of AUB.

SocioEco class (modified Prasad)	Knowledge of risk factors score of AUB		
Per capita monthly income	≤3	>3	Chi square test D.F 1
>Rs.2405 (149)	124	25	36.496 P≤0.001 HS
≤Rs.2405 (51)	20	31	
Total (200)	144	56	

The result was significant at P<0.001.

DISCUSSION

Literacy can be defined as an individual's ability to read, write, speak and compute and solve problems necessary to function at the job and in society, to achieve one's goals, and to develop one's knowledge and potential.[5] Literacy sometimes describes a person's knowledge about a particular topic [e.g., computer literacy]. Health literacy is a constellation of skills that constitute the ability to perform basic reading and numerical tasks for functioning in the health care environment and acting on health care information.[6] Low health literacy may impair functioning in the health care environment, affect patient-physician communication dynamics, and inadvertently lead to substandard medical care.[7] It is associated with poor understanding of written or spoken medical advice, adverse health outcomes, and negative effects on the health of the population.[8] Certain groups have an especially high prevalence of low health literacy. They include people who completed fewer years of education, elderly [9] and persons with lower cognitive ability. [10] Other factors associated with lower literacy are income status classified as poor or near poor.

In this present study, the relationship of education level and socio-economic status of women with AUB and their knowledge regarding AUB and its risk factors was assessed. It showed women had little knowledge about AUB and its risk factors with high level of misconceptions about its etiology and treatment modalities. Poor literacy and low socio economic status was significantly associated with poor knowledge scores.

Quinlan et al reported that health knowledge was independently associated with education, income, and age.[11] Walker and colleagues found health literacy to be significant and positively associated with health knowledge.[12] Lack of knowledge left patients unable to recognize and respond to adverse side effects as reported by Davis et al.[13]

US Department of Health and Human Services searched several databases. According to this survey, many studies measured the relationship between literacy levels and knowledge of the use of health care services: Mammography, Cervical cancer screening, Emergency department discharge instructions, Heart Health Knowledge and informed consent, all of these demonstrated a statistically significant association between higher literacy level and knowledge of matters relating to use of these health services. Studies showed that various media which are understood even by the less read like educational videotapes and illustrated materials enhance the health knowledge more than print versions.[14]

CONCLUSION

Women with AUB presenting to the hospital were mostly unemployed females having primary schooling from middle and lower economic strata mostly in age group of 23-37 years. This study showed that low reading skill and poor health were clearly related.

It is therefore recommended that intensive public awareness campaigns about the etiology and modality of treatment of the condition should be done through use of radio, television, street plays and public camps besides the print media for the literate masses. Health care professionals should actively be involved in this initiative.

Reducing literacy-related barriers would go a long way in quelling the various misconceptions about AUB among the population and also encourage early presentation and hence prevent complications of AUB.

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