ORIGINAL ARTICLE

Knowledge of and attitudes towards of menstrual disorders adults in north-eastern state of Peninsular Malaysia

Nor Asyikin Y, Nani D, Nor Azwany Y, Shamsul Kamal A, Imran A, Shaiful Bahari I, Rosediani M.

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Authors:

Nani Draman
(Corresponding author)
MMed (F Medicine)
Department of Family Medicine School of Medical Science Universiti Sains Malaysia Health Campus, 16150 Kubang Kerian, Kelantan, Malaysia
E-mail: drnani@usm.my

Nor Asyikin Yahya
MMed (F Medicine)
Department of Family Medicine School of Medical Science Universiti Sains Malaysia Health Campus,16150 Kubang Kerian, Kelantan, Malaysia

Nor Azwany Yaacob
MCommMed (Epidemiology & Biostatistics)
Department of Community Medicine, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, Kubang Kerian,16150, Kelantan, Malaysia
E-mail: azwany@usm.my

Shamsul Kamal Abdullah
BA.Hons.Syariah
Politeknik Kota Bharu, Km 24 Kok Lanas, 16450
Ketereh, Kelantan, Malaysia
E-mail: ust.sham@gmail.com

Abstract

Introduction: In Malaysia, the prevalence of menstrual disorders among adolescents and young adults is high. However, most of them are not aware of the signs and symptoms of menstrual disorders in terms of medical issue as well as Islamic ruling. Awareness of the menstrual disorder symptoms is important so that early and appropriate treatment can be given.

Objectives: The objective of the study was to compare the knowledge and attitude of premarital men and women on menstrual disorders.

Methods: This was a comparative cross sectional study conducted in Kota Bharu, Kelantan. Self-administered questionnaires were given for data collection. The questionnaires consisted of 3 parts that required information on the women's and men's socio-demographic data, women's menstrual history and information in knowledge and attitude of men and women on menstrual disorders.

Results: A total of 460 respondents were involved in this study with a response rate of 93.5%. The prevalence of good knowledge was higher among women compared to men with 73.2% and 26.8%, respectively. There was a significant difference on knowledge and attitude on menstrual disorders between premarital men and women.

Conclusion: Both premarital men and women had low knowledge on menstrual disorder with men knowing less than the women.

Introduction

Menstrual disorders are common among adolescents and reproductive-aged women. Previous studies on menstrual disorders among teenagers and young women, including in Malaysia, have revealed high prevalence, especially in premenstrual syndrome up to 96%, followed by dysmenorrhoea 94%, heavy bleeding 47.0%, irregular bleeding, oligomenorrhoea and amenorrhoea up to 18%.[1-7]

Menstrual disorders are reported to be the cause of school absenteeism among adolescents and work stress, especially among young adults. Sufferers of menstrual disorders are at risk of the exacerbation of certain medical conditions, such as acne, asthma, migraine, anxiety, eating disorders and other mental health problems.[4,8-11] Women with menstrual problem might also face life threatening conditions, such as bleeding disorder, pregnancy complications, and gynaecological cancers.[12] These indicate the need for further medical assessment and assistance at some point in their lives.

Despite the seriousness of these consequences, many teens and young adult women fail to seek help due to the lack of knowledge. Houston et al. (2006) showed that only 2% of women reported of receiving information regarding menstruation from their healthcare providers.[1] A study among Hong Kong adolescents showed that a significant number of them have poor understanding of the menstrual cycle.[9] In fact, 66.9% of those who believed that their menstrual cycle was abnormal actually had normal cycle length. On the other hand, among those who believed that their menstrual cycle was normal, 3.7% adolescents had short menstrual cycle and 3.2% adolescents had long menstrual cycles; and a further 2.8% had

Imran Ahmad
MMed (F Medicine)
Department of Family Medicine School of Medical Science Universiti Sains Malaysia Health Campus, 16150 Kubang Kerian, Kelantan, Malaysia
E-mail: profimran@usm.my

Shaiful Bahari Ismail
MMed (F Medicine)
Department of Family Medicine School of Medical Science Universiti Sains Malaysia Health Campus, 16150 Kubang Kerian, Kelantan, Malaysia
E-mail: shaifulb@usm.my

Rosediani Muhamad
MMed (F Medicine)
Department of Family Medicine School of Medical Science Universiti Sains Malaysia Health Campus, 16150 Kubang Kerian, Kelantan, Malaysia
E-mail: drrosediani@gmail.com

cycles of >45 days.[9] These findings suggest that both young girls, as well as their parents, have difficulty in assessing what constitutes normal menstrual cycles or patterns of bleeding. Tangchai et al. (2004) revealed that only a few of the first and second year university students knew that mefenamic acid and ibuprofen are an effective treatment for dysmenorrhoea.[13]

Research on knowledge, attitude and menstrual experience is necessary for women's health. Based on a menstrual attitude questionnaire by McPherson (2004), a comprehensive menstruation preparation with positive menarcheal experience is related to a more positive adult menstrual attitudes, experiences and behaviours and vice versa.[12]

Studies on menstruation and menstrual disorders are mainly confined to female adolescents.[1-3] Our team, on the other hand, believes that menstrual disorders also affect the male population indirectly. Thus, men are also included in this study as their dynamic relationship with their wives, daughters and mothers in terms of menstrual experience is significant, but are often overlooked. In a marital relationship, especially in the Malay culture, the men hold the role as the head of the family and should support the family not only financially but also emotionally. However, when understanding is lacking, frustration sets in men and they may go to the extent of seeking extramarital affairs. The Department of Islamic Development Malaysia has reported an increase in divorce cases with 20,259 cases in 2007.[14] Therefore, we would like to assess how much men really know and are aware of menstrual disorders in women. More specifically, this study was conducted to look at the level of knowledge and attitude on menstrual disorders among premarital couples, men and women as part of their preparation before embarking on family life.

Methods

This cross-sectional study was conducted among Muslim women and men who attended the compulsory premarital course held from January 2012 to June 2012 in the North-East state of Peninsular Malaysia. Data were collected for 10 premarital courses at the Islamic centre, Lundang Kota Bharu within a 6-month period. Premarital course participants were 18 to 40 years' old. Illiterate participants were excluded as this study used self-administered questionnaire. Systematic random sampling 1 in 2 was used to select 460 eligible participants from the registration course list.

The questionnaire was developed in a few stages. The first stage involved literature search on the topics of knowledge and attitude followed by creating each question and item. The questionnaire was then divided into two components, which were knowledge (51 items) and attitude (10 items). The knowledge component covered general knowledge on menstruation (8 items), symptoms (12 items), causes of menstrual disorders (19 items) and Islamic ruling on menstrual disorders (12 items).

Content validity was carried out by a group of experts consisting of an obstetric and gynaecologist, two family medicine specialists, a medical statistician expert in questionnaire development and validation and an Islamic religious teacher. The face validity of the self-administered questionnaire was tested on 10 premarital men and women who attended the earlier premarital course. The Cronbach's alpha was used to verify the face and content validity of the questionnaire. The coefficients obtained for the knowledge component ranged from 0.708 to 0.895 while for the attitude component, coefficients ranged from 0.600 to 0.824.

Three point Likert scale was used for all knowledge domain (Correct/Incorrect/Not sure). The response was scored as '1' for 'correct' response and 0 for 'incorrect' and 'not sure' response. Reversed scoring was done for negative knowledge item.

Attitude component contained 10 items with 5-Likert scale response (Strongly agree/Agree/Neutral/Disagree/Strongly disagree). The following scoring was used, for positive attitude item, scores of '4', '3', '2' '1' and '0' for 'strongly agree', 'agree', 'neutral', 'disagree' and 'strongly disagree', respectively. Respondents who answered 'agree' and 'strongly agree' for positive item and 'disagree' or 'strongly disagree' for negative items in the attitude domain were considered to have positive attitude. The scoring was reversed for negative attitude items. Initially 5-Likert scale response was used to look at the pattern of answers and to discriminate the extreme answers. However, in this study there was no specific pattern of answering and no extreme answers. Thus, for analysis response of similar direction were combined (strongly agree/agree as agree, neutral as neutral, disagree/strongly disagree as disagree).

The total score for each subdomain and domain was computed by summing up the relevant item scores. Then, each subdomain and domain total score was transformed to percentages for better clarity by dividing the score with the possible maximum score and multiplied by 100. The score for knowledge was then categorised into good and poor knowledge level using the agreed cut-off point of 53%. This cut-off point was based on consensus of the expert's opinion, which takes into consideration that there are 27 important questions out of 51 questions that must be answered correctly to be classified as good knowledge. Those who scored less than the cut-off point were considered to have poor knowledge. For the attitude score, the determination of good or poor, experts agreed on 80% as the cut-off point as good attitude.

The participants were briefed on the study before consent was sought out. The self-administered questionnaire was distributed to both male and female participants without identifying their partner specifically. Research team members were available to clarify any items whenever necessary. The research proposal was approved by the Human Research and Ethics Committee, Universiti Sains Malaysia on December 2011.

Results

A total of 460 participants were given questionnaires with equal numbers of men and women. The response rate was 93.5% with 430 respondents completing the questionnaires, with 202 being men and 228 women.

Most of the respondents were young adult with mean age of 24.05±4.30 years and 67.7% were employed. Majority of the respondents had obtained secondary and higher education. The mothers were reported as the main source of menstruation information (Table 1).

Table 1. Socio-demographic characteristics of male and female respondents

Variable	Women *n* (%), *n* = 228	Men *n* (%), *n* = 202	Total *n* (%), *n* = 430
Race			
Malay	227 (99.6)	200 (99.0)	427 (99.3)
Non-Malay	1 (0.4)	2 (1.0)	3 (0.7)
Age			
18–24 years old	164 (71.9)	103 (51.0)	267 (62.1)
≥25 years	64 (28.1)	99 (49.0)	163 (37.9)
Education			
Primary	12 (5.3)	39 (19.3)	51 (11.9)
Secondary	133 (58.3)	112 (55.4)	245 (57.0)
Tertiary	83 (36.4)	51 (25.2)	134 (31.2)
Stream of education			
Science	57 (25.0)	61 (30.2)	118 (27.4)
Art	155 (68.0)	100 (49.5)	255 (59.3)
Islamic	16 (7.0)	41 (20.3)	57 (13.3)
Working status			
Working	119 (52.2)	172 (85.1)	291 (67.7)
Not working	109 (47.8)	30 (14.9)	139 (32.3)
Information source regarding menstruation			
Mother/sister	144 (63.2)	81 (40.1)	225 (52.3)
Friends/school	58 (25.4)	91 (45.0)	149 (34.7)
Mass media	26 (11.4)	30 (14.9)	56 (13.0)

Knowledge and attitute on menstrual disorder

The proportion of good knowledge among women was 73.2%, which was higher than men (26.8%). There was a significant difference of mean score between men and women for the subdomain of general and symptoms of menstrual disorder (Table 2).

Respondents from both genders had high knowledge percentage score for general knowledge on menstrual disorder. However, domain causes of menstrual disorders had the lowest percentage score followed by Islamic ruling on menstrual disorder. Generally, men had a significantly lower knowledge score compared to women except for causes on menstrual disorders and knowledge on Islamic ruling (Table 3).

Table 4 shows in detail the percentage of the respondents' score on knowledge items on menstrual disorder among premarital men and women in Kota Bharu, Kelantan.

Table 2. Comparison of knowledge on menstrual disorder between premarital men and women

Variable	Knowledge *n* (%)		X^2 (df)	*P*-value
	Good	Poor		
Men (*n* = 202)	11 (26.8)	191 (49.1)		
Women (*n* = 228)	30 (73.2)	198 (50.9)	7.386 (1)	0.007*

**Chi square test, p<0.05 set as significant at 95% CI*

Table 3. Comparison of knowledge between premartial men and women score on each domain of knowledge on menstrual disorder

Domains of knowledge on menstrual disorder	Knowledge percentage score		*P*-value[a]
	Women (*n* = 228)	Men (*n* = 202)	
	Mean (SD)	Mean (SD)	
General knowledge on menstruation	70.56 (18.9)	49.75 (27.1)	<0.001
Symptoms on menstrual disorder	51.64 (21.1)	38.94 (28.0)	<0.001
Causes on menstrual disorder	27.33 (18.7)	21.65 (21.0)	0.061
Islamic ruling	34.50 (22.4)	21.03 (21.2)	0.11

SD, Standard deviation

[a]Independent t test

Table 4. The respondents' score on knowledge items on menstrual disorder among premarital men and women in Kota Bharu, Kelantan

Items	Women (*n* = %)			Men (*n* = %)		
	Correct answer	Not sure	Incorrect answer	Correct answer	Not sure	Incorrect answer
General knowledge on menstrual cycle						
Average age of menarche is 12 years old[a]	182 (79.8)	32 (14.0)	14 (6.1)	141 (69.8)	53 (26.2)	8 (4.0)
Normal length of menstrual cycle is 28 days[a]	116 (50.9)	61 (26.8)	51 (22.4)	61 (30.2)	97 (48.0)	44 (21.8)
Secondary sexual characteristic						
Breast development[a]	210 (92.1)	17 (7.5)	1 (0.4)	130 (64.4)	64 (31.7)	8 (4.0)
Axillary hair growth[a]	182 (79.8)	37 (16.2)	9 (3.9)	103 (51.0)	84 (41.6)	15 (7.4)
First menstruation[a]	178 (78.1)	31 (13.6)	19 (8.3)	148 (73.3)	49 (24.3)	5 (2.5)
Pubic hair growth[a]	197 (86.4)	24 (10.5)	7 (3.1)	117 (57.9)	74 (36.6)	11 (5.4)

Table 4. The respondents' score on knowledge items on menstrual disorder among premarital men and women in Kota Bharu, Kelantan (Continued)

Items	Women (*n* = %)			Men (*n* = %)		
	Correct answer	Not sure	Incorrect answer	Correct answer	Not sure	Incorrect answer
Normal menstrual blood characteristics						
Dark red blood[a]	186 (81.6)	31 (13.6)	11 (4.8)	89 (44.1)	107 (53.0)	6 (3.0)
Smelly blood[b]	34 (14.9)	59 (25.9)	135 (59.2)	15 (7.4)	114 (56.4)	73 (36.1)
Knowledge on Symptoms of menstrual disorder						
PMS (premenstrual syndrome)						
PMS lasted few days after menstruation[a]	90 (39.5)	120 (52.6)	18 (7.9)	64 (31.7)	131 (64.9)	7 (3.5)
PMS symptoms						
Stress[a]	145 (63.6)	69 (30.3)	14 (6.1)	113 (55.9)	77 (38.1)	12 (5.9)
Palpitation[a]	62 (27.2)	113 (49.6)	53 (23.2)	56 (27.7)	120 (59.4)	26 (12.9)
Insomnia[a]	88 (38.6)	93 (40.8)	47 (20.6)	61 (30.2)	108 (53.5)	33 (16.3)
Fatigue[a]	184 (80.7)	33 (14.5)	11 (4.8)	112 (55.4)	82 (40.6)	8 (4.0)
Anxious[a]	117 (51.3)	79 (34.6)	32 (14.0)	103 (51.0)	84 (41.6)	15 (7.4)
Forgetful[b]	36 (15.8)	102 (44.7)	90 (39.5)	20 (9.9)	129 (63.9)	53 (26.2)
Headache[a]	135 (59.2)	62 (27.2)	31 (13.6)	89 (44.1)	92 (45.5)	21 (10.4)
Hot burning cheeks[b]	73 (32.0)	115 (50.4)	40 (17.5)	33 (16.3)	137 (67.8)	32 (15.8)
Tension gives rise to PMS[a]	122 (53.5)	88 (38.6)	18 (7.9)	85 (42.1)	102 (50.5)	15 (7.4)
Normal menstrual blood characteristics						
Lower abdominal pain[a]	170 (74.6)	45 (19.7)	13 (5.7)	100 (49.5)	82 (40.6)	20 (9.9)
Felt during 1st day of menstruation[a]	190 (83.3)	25 (11.0)	13 (5.7)	108 (53.5)	75 (37.1)	19 (9.4)
Knowledge on causes of menstrual disorder						
Causes of dysmenorrhoea						
Fibroid[a]	27 (11.8)	138 (60.5)	63 (27.6)	30 (14.9)	130 (64.4)	42 (20.8)
Uterine cancer[b]	62 (27.2)	144 (63.2)	22 (9.6)	61 (30.2)	121 (59.9)	20 (9.9)
Cervical cancer[b]	59 (25.9)	148 (64.9)	21 (9.2)	52 (25.7)	129 (63.9)	21 (10.4)
Endometriosis[a]	37 (16.2)	163 (71.5)	28 (12.3)	25 (12.4)	154 (76.2)	23 (11.4)
Sexual transmitted infection[b]	65 (28.5)	142 (62.3)	21 (9.2)	47 (23.3)	131 (64.9)	24 (11.9)
Causes of dysmenorrhoea						
Hormonal imbalance[a]	150 (65.8)	70 (30.7)	8 (3.5)	92 (45.5)	103 (51.0)	7 (3.5)
Fibroid[a]	56 (24.6)	136 (59.6)	36 (15.8)	32 (15.8)	137 (67.8)	33 (16.3)
Endometriosis[a]	31 (13.6)	176 (77.2)	21 (9.2)	22 (10.9)	169 (83.7)	11 (5.4)
Sexual transmitted infection[b]	40 (17.5)	162 (71.1)	26 (11.4)	31 (15.3)	138 (68.3)	33 (16.3)
Cervical cancer[a]	39 (17.1)	157 (68.9)	32 (14.0)	29 (14.4)	144 (71.3)	29 (14.4)
Uterine cancer[a]	41 (18.0)	155 (68.0)	32 (14.0)	29 (14.4)	146 (72.3)	27 (13.4)
Causes of amenorrhoea						
Hormonal imbalance	159 (69.7)	61 (26.8)	8 (3.5)	102 (50.5)	91 (45.0)	9 (4.5)
Brain cancer[a]	20 (8.8)	127 (55.7)	81 (35.5)	17 (8.4)	123 (60.9)	62 (30.7)
Obesity[a]	68 (29.8)	121 (53.1)	39 (17.1)	31 (15.3)	125 (61.9)	46 (22.8)
Imperforated hymen[a]	65 (28.5)	141 (61.8)	22 (9.6)	42 (20.8)	134 (66.3)	26 (12.9)
Chromosome abnormality[a]	58 (25.4)	150 (65.8)	20 (8.8)	40 (19.8)	142 (70.3)	20 (9.9)
Causes of oligomenorrhoea						
Hypothyroidism[a]	62 (27.2)	146 (64.0)	20 (8.8)	67 (33.2)	125 (61.9)	10 (5.0)
PCOS (polycystic ovarian syndrome)[a]	57 (25.0)	161 (70.6)	10 (4.4)	36 (17.8)	151 (74.8)	15 (7.4)
Birth control pills[a]	86 (37.7)	123 (53.9)	19 (8.3)	46 (22.8)	132 (65.3)	24 (11.9)

Table 4. The respondents' score on knowledge items on menstrual disorder among premarital men and women in Kota Bharu, Kelantan (Continued)

Items	Women (*n* = %)			Men (*n* = %)		
	Correct answer	Not sure	Incorrect answer	Correct answer	Not sure	Incorrect answer
Islamic knowledge on menstrual disorder						
Minimum length of menses is 1 full day[a]	63 (27.6)	71 (31.1)	94 (41.2)	32 (15.8)	84 (41.6)	86 (42.6)
Maximum length of menses is 10 days[b]	68 (29.8)	46 (20.2)	114 (50.0)	26 (12.9)	82 (40.6)	94 (46.5)
Minimum duration recovering (clean) from menses is 15 days 15 nights[a]	95 (41.7)	95 (41.7)	38 (16.7)	49 (24.3)	25 (61.9)	28 (13.9)
The person who exceeds the maximum length of menses is considered having 'Istihadah'[a]	140 (61.4)	80 (35.1)	8 (3.5)	59 (29.2)	131 (64.9)	12 (5.9)
Those in Istihadah does not need to take compulsory bath[a]	73 (32.0)	75 (32.9)	80 (35.1)	43 (21.3)	89 (44.1)	70 (34.7)
Those in Istihadah should perform prayer[a]	142 (62.3)	57 (25.0)	29 (12.7)	59 (29.2)	79 (39.1)	64 (31.7)
Those in Istihadah should perform prayer at a later time[b]	60 (26.3)	100 (43.9)	68 (29.8)	37 (18.3)	90 (44.6)	75 (37.1)
Those in Istihadah should not pray in the mosque[b]	61 (26.8)	110 (48.2)	57 (25.0)	43 (21.3)	88 (43.6)	71 (35.1)
Ramadhan fasting is compulsory to those in Istihadah[a]	109 (47.8)	83 (36.4)	36 (15.8)	48 (23.8)	83 (41.1)	71 (35.1)
Those in Istihadah only need to pay 'fidyah' in Ramadhan[b]	63 (27.6)	142 (62.3)	23 (10.1)	47 (23.3)	115 (56.9)	40 (19.8)
Sexual intercourse with husband is prohibited during Istihadah[b]	27 (11.8)	126 (55.3)	75 (32.9)	34 (16.8)	83 (41.1)	85 (42.1)
Those in Istihadah is prohibited from reading Al-Quran[b]	46 (20.2)	131 (57.5)	51 (22.4)	33 (16.3)	102 (50.5)	67 (33.2)

[a] *Positive-worded item*

[b] *Negative-worded item*

Attitude towards menstrual disorder

The proportion of good attitude among women was 64.8% while in men it was 35.2%. There was a significant difference in attitude scores on menstrual disorder between premarital men and women (Table 5). Table 6 shows in detail the percentage of respondents' score on attitude items on menstrual disorder among premarital women and men in Kelantan.

Discussion

This study was carried out where the majority of the population is Malay Muslim. In Islamic teachings, the husband or father has an equal role in handling family member's issues including female specific issues. Therefore, if they have knowledge on menstrual disorder, especially on the Islamic part, they can guide their wives and daughters if these problems

Table 5. The proportion of Attitude towards menstrual disorder in premarital men and women

Variable	Attitude *n* (%)		X^2 (df)	*P*-value
	Good	Poor		
Men (*n* = 202)	38 (35.2)	164 (50.9)	8.051 (1)	0.005*
Women (*n* = 228)	70 (64.8)	158 (49.1)		

**Chi Square test, p value <0.05 set as significant at 95% CI*

Table 6. The respondents' score on attitude items on menstrual disorder among premarital men and women in Kota Baharu, Kelantan

Items	Women (*n* = %)			Men (*n* = %)		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree
Attitude towards menstrual disorder						
Male should know about menstrual disorders[a]	211 (92.5)	11 (4.8)	6 (2.6)	180 (89.1)	15 (7.4)	7 (3.5)
Traditional medicine is suitable to be used to treat menstrual disorders[b]	32 (14.0)	77 (33.8)	119 (52.2)	47 (23.3)	79 (39.1)	76 (37.6)
Islamic ruling regarding menstrual disorders should be taught during premarital course[a]	186 (81.6)	38 (16.7)	4 (1.8)	172 (85.1)	20 (9.9)	10 (5.0)
I will put effort to find more information on menstrual disorders in the mass media[a]	194 (85.1)	21 (9.2)	13 (5.7)	126 (62.4)	59 (29.2)	17 (8.4)
I am reluctant to ask regarding menstrual disorders from the healthcare providers[b]	130 (57.0)	47 (20.6)	51 (22.4)	81 (40.1)	58 (28.7)	63 (31.2)
I am not comfortable to discuss menstrual disorders with my partners[b]	135 (59.2)	48 (21.1)	45 (19.7)	114 (56.4)	44 (21.8)	44 (21.8)
I feel menorrhagia is normal[b]	114 (50.0)	57 (25.0)	57 (25.0)	78 (38.6)	64 (31.7)	60 (29.7)
I feel an irregular menstruation is normal[b]	146 (64.0)	43 (18.9)	39 (17.1)	101 (50.0)	53 (26.2)	48 (23.8)
I feel prolonged menstruation is a small problem[b]	195 (85.5)	16 (7.0)	17 (7.5)	146 (72.3)	36 (17.8)	20 (9.9)
I am embarrassed to discuss menstrual disorders with religious teacher[b]	164 (71.9)	31 (13.6)	33 (14.5)	116 (57.4)	38 (18.8)	48 (23.8)

[a]*Positive-worded item*

[b]*Negative-worded item*

occur. In Malaysia, there is a standard syllabus in school, which covers normal reproductive health and menstrual cycle; however, the syllabus does not extend to abnormal menstrual cycle.

The mean age of the respondents in our study was 24.0 years. The youngest respondent was 18 years old and the eldest was 40 years old. Previous studies were done among adolescents having a mean age of 15.6 and 15.4 years.[1-3] The study that had a most similar mean age (20.7 years) was among university students in Turkey.[15] In our study, the majority of our respondents had finished their secondary school level. This study took into consideration the variety of stream of education among the respondents, which were science, art and Islamic. This educational status variability may affect the knowledge and attitude percentage score of the respondents.

For the female respondents, half of them were not working, as many of them were still studying at tertiary education level whereas, the majority of male respondents were employed. Most female respondents received their first information on menstruation from their mothers and older sisters. Similarly, in the other study, mothers were the first information source regarding menstruation. On the other hand, the majority of male respondents in this study first learnt about menstruation from their friends and studied it at school. This reflects the social behaviour of our population where menstrual-related information is mainly shared among women.

Knowledge on menstrual disorder

This study showed a significantly higher knowledge score on menstrual disorder among women than men. As previously mentioned, information on menstruation is generally shared

among women; however, if men have this knowledge they can give support, advices and comfort. Sometimes, they can act as a referred person to the female members who suffer from such problems.

Female respondents scored higher in general knowledge and symptoms. This was most likely due to the fact that the questions covered experiences during menstruation. However, there was no significant difference in knowledge score of causes and Islamic ruling between the two groups, whereby the scores for both groups were low. This suggested that even women do not have adequate knowledge on causes of menstrual disorder and how to handle the issues according to Islamic teachings. Thus, these findings highlight the importance of further education on menstrual disorder not only to men but also to women who will experience it. Education to men also increases their perception of the possible severity of menstrual disorders and helps them to understand their partner or their female family members better. This also improves the dynamics of a healthy marriage.

In Islamic teachings, menstrual disorders may affect Muslim obligations, such as prayers, Ramadhan fasting and sexual relationship between husband and wife. For example, a woman who has menstruation is not obligated to pray and could not perform Ramadhan fasting or having intercourse with her husband and they may be facing pathological health problem. Therefore, it is important for both women and men to be able to differentiate between the two. This will help them to engage in proper Islamic exercises and prevent further health problems. Both female and male respondents were able to identify pathological menstruation ("Istihadah") but were not able to answer correctly on the Islamic ruling related to the condition. The findings suggested that education should not only focus on the types of menstrual disorder but also on medical and the relevant religious teachings on the issue. Knowledge on how to handle such issues based on religious teachings may reduce stress and anxiety of the affected woman and her spouse.

Attitude towards menstrual disorder

Male respondents were found to have less positive attitude towards learning more on menstrual disorders even though both men and women agreed that men should know about menstrual disorder. In Malaysia, especially in the Malay culture, menstrual disorders are still considered as a delicate issue related only to women, thus it is not discussed openly with the opposite sex. Consequently, women tend to hide their problems and are reluctant to seek help, especially from their spouse or male family members when their female family members are unavailable.

According to Wong LP et al, many girls and young women feel shameful and reluctant to seek help on problems with PMS and dysmenorrhoea.[17] This is partly due to the general conception that this is a normal phenomenon, which requires no medical advice.[17] Thus, the education on menstrual disorders should be included in premarital courses in preparing both partners for future family life.[18] This inclusion was also supported by positive attitude response from both men and women where more than 80% of respondents in both groups supported the suggestion.

Cultural beliefs, as well as religion play an important role in attitude or decision-making of certain people, especially those who are still young and not yet married.[12] Based on menstrual attitude questionnaire survey by McPherson, a good menstruation preparation with positive menarche experience would be related to more positive adult menstrual attitudes, experiences, and behaviours. Conversely, negative early menstrual experiences would correlate with subsequent negative experiences with menstruation.[12]

This study did not cover the practice component as it was done in a community setting and not among patients who suffer from menstrual disorders. Thus, this study was unable to discuss the health seeking behaviour of women experiencing menstrual disorder. It is beneficial to further explore the practice among the patients, as well as the current available education impact on health seeking behaviour among women and attitude of both men and women on this disorder.

Conclusion

This study highlights the need for proper educational module in educating both men and women on menstrual disorder to create a healthy symbiosis between the two genders in a family setting or society in general, as well as improving health-seeing behaviour in combating the psychosocial impact of menstrual disorder.

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