

Indigenous practices of Saudi girls in Riyadh during their menstrual period

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العادات الشعبية التي تمارسها الفتيات السعوديات في مدينة الرياض أثناء الحيض

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خلاصة: كان هدف هذه الدراسة، التعرف على التدابير الصحية التي تمارسها الفتيات السعوديات أثناء الحيض في مدينة الرياض. فتم اختيار ستمئة فتاة تتراوح أعمارهن بين 11 و18 سنة، من المترددات على العيادات الخارجية لثلاثة مستشفيات مختلفة في الرياض. وجمعت البيانات اللازمة عن طريق المقابلات المفصلة. وأظهرت النتائج أن ثلثي الفتيات تقريباً كن يتجنبن بعض المأكولات والمشروبات وبعض الأنشطة، ومن بينها الاستحمام والعناية بمنطقة العجان، وكان يمارسن كثيراً من الشعائر الشعبية في تلك الفترة. وكانت الأمهات والكُتب الدينية والأخوات أهم مصادر معلومات هؤلاء الفتيات. وتقترح هذه الدراسة أنه ينبغي على الممرضات ومقدمي الرعاية الصحية اغتنام كل الفرص المتاحة لتثقيف صغار الفتيات حول أمور الحيض.

ABSTRACT The objective of this study was to identify the indigenous menstrual hygiene practices of Saudi girls in Riyadh. A total of 600 girls aged from 11 years to 18 years were selected from outpatient clinics at three different hospitals in Riyadh. Data were collected using a structured interview. The results revealed that nearly two-thirds of the girls avoided certain foods, drinks and activities, including showering and performing perineal care, and practised several indigenous rituals during the period. Mothers, religious books and sisters were the main sources of the girls' information. The study suggests that nurses and health care providers should use all available opportunities to educate young girls about menstruation.

Pratiques locales des filles saoudiennes à Riyad pendant la période menstruelle

RESUME L'objectif de cette étude était d'identifier les pratiques d'hygiène menstruelle locales des filles saoudiennes à Riyad. Au total, 600 filles âgées de 11 à 18 ans ont été sélectionnées dans les services de consultations externes de trois hôpitaux différents de Riyad. Des données ont été recueillies à l'aide d'un entretien structuré. Les résultats ont révélé que près des deux tiers des filles évitaient certains aliments, boissons et activités, notamment la douche et les soins périnéaux, et pratiquaient plusieurs rituels locaux durant cette période. Les mères, les livres religieux et les sœurs étaient les principales sources d'information des filles. L'étude indique que les infirmières et les dispensatrices de soins devraient utiliser toutes les ressources disponibles pour éduquer les jeunes filles en ce qui concerne les menstruations.

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Introduction

Menstruation is the monthly discharge of the inner lining of the uterus, lasting about 4–5 days [1]. As the physiological process of menstruation is still regarded by many women as an unclean state, old wives' tales persist that segregate girls from the activities of normal life, such as bathing, swimming and exercise [2]. In Islam, a menstruating woman is not allowed to enter the mosque for prayer, touch the Quran, or fast during Ramadan. In addition, she cannot have sexual intercourse or divorce at this time; yet young girls are expected to keep clean and tidy, and practice all daily activities [3].

Girls usually share their parents' customs and beliefs. Some traditional practices are useful while others are harmful. The term indigenous practice is synonymous with the term folk or traditional practice, meaning practices that are inherited from generation to generation and may be traced back to ancient times. Belief systems vary from culture to culture, and the success of health care depends on how well it fits with the beliefs of those being served. Therefore, ignorance of culturally divergent beliefs may lead to failure in health care delivery [4,5]. The study of menstrual practices and beliefs will help maternity nurses to plan intervention strategies that promote healthy behaviour in this target population.

The aim of this study was to identify indigenous practices of Saudi girls in Riyadh during their menstrual period.

Methods

The study was performed at three hospitals in Riyadh city (the Security Forces Hospital, Elshemasy Hospital and Prince Sulaiman Hospital) over a period of 8 months

from September 1997 to March 1998. These hospitals are considered to be the largest in Riyadh. The first hospital is affiliated to the Ministry of the Interior, while the other two are affiliated to the Ministry of Health. The clients of these three hospitals represent almost all of the sociocultural groups making up the community of Riyadh city. About 90% of the patients or clients served by these hospitals are Saudi nationals.

All Saudi girls who attended the Gynaecology or Medical Outpatient Clinics were screened for inclusion in the study. For inclusion, a girl had to be aged between 11 years and 18 years, have started menstruation and have no chronic systemic diseases. The eligibility criteria were abstracted from old or new health records.

The sample consisted of 600 girls, 200 from each outpatient clinic. Each girl was interviewed privately by the investigator and one student nurse in an examination room, just after having been seen by a physician. Unexpectedly, girls in the study sample who had not been anticipated to attend gynaecological clinics before marriage, did attend accompanied by their mothers. They came to consult a female gynaecologist about vaginal discharge, vulvitis, menstrual disorders and dysmenorrhoea.

A questionnaire was developed to collect detailed biosocial information related to menstruation, including the behaviours adopted during menstruation, the beliefs which motivate the behaviours and the sources of information. Data were analysed using *SPSS*, version 6.0.

Results

The age of the girls ranged between 11 years and 18 years (mean \pm standard deviation = 14 ± 1 years). The mean age of me-

narche was 12 ± 1 years. More than half the sample (55.8%) was at the secondary school level of education, 23.8% were illiterate and over one-third (37.0%) was employed. For more than one half the sample (69.2%), menstruation lasted more than 5 days. Almost half (47.0%) of the sample stated that their menstrual cycle was more than 30 days. About three-fifths of the sample (60.8%) were living with extended families and 91.3% in apartments (Table 1).

Table 2 shows the different symptoms that the girls complained of during the premenstrual period. Table 3 records the beliefs the girls had about menstrual blood. The distribution of girls according to intake

of special foods, drinks or drugs before and during menstruation is illustrated in Table 4, which shows that 89.3% of the sample took certain drinks during menstruation. More than two-thirds took specific drugs, or refrained from or consumed certain foods (76.5%, 68.5% and 61.8% respectively). The drinks taken by the girls are shown in Figure 1. As regards special foods, 55.7% preferred salty food, 26.6% sweet food, while 17.6% ate junk food. The majority of girls (76.5%) took drugs in the form of analgesics and antispasmodics before and during menstruation. These were Buscopan (52.9%), Panadol (30.3%), Ibuprofen (21.7%) and Ponstan (16.7%). Table 5 shows the activities undertaken by the girls during menstruation while Table 6 shows their hygiene practices during menstruation.

Table 7 gives the reasons for the various behaviours during menstruation. The girls believed they should refrain from showering during menstruation as it might stop the menstrual flow (38.8%), or increase the intensity of pain (32.1%), or simply because they were used to doing so (29.1%).

About two-thirds (65.6%) of the girls limited their physical activity during menstruation for fear of pain, and nearly one-third (34.4%) did so for fear of excessive blood loss. They also believed that exercise during menstruation was either unnecessary (50.7%) or harmful (49.3%).

Approximately one-third (32.4%) of the sample stayed home during menstruation for fear of bleeding, or of soiling their clothes with menstrual blood, about one-quarter (26.5%) did so because of pain, 21.1% because of fatigue and exhaustion and 18.9% because of poor mood or psychological upset.

More than half (64.7%) of the girls ate special foods during menstruation for pain relief. Only 2.2% of the sample did so to

Table 1 General characteristics of the 600 girls

Characteristic	No.	%
<i>Educational level</i>		
Illiterate	143	23.8
< Secondary	335	55.8
≥ Secondary	122	20.3
<i>Occupation</i>		
Unemployed	43	7.2
Student	335	55.8
Employed	222	37.0
<i>Duration of menses (days)</i>		
< 3	28	4.7
3-5	157	26.2
> 5	415	69.2
<i>Frequency of menstrual cycle (days)</i>		
< 22	79	13.2
22-30	239	39.8
> 30	282	47.0
<i>Family structure</i>		
Nuclear	235	39.2
Extended	365	60.8
<i>Residence</i>		
House	52	8.7
Apartment	548	91.3

Table 2 Premenstrual symptoms reported by the 600 girls

Symptom	Yes		No	
	No.	%	No.	%
Cramps	400	70.7	140	23.3
Back pain	353	58.8	247	41.2
Fatigue	300	50.0	300	50.0
Breast enlargement and tenderness	270	45.0	330	55.0
Headache	200	33.3	400	66.7
Constipation	107	17.8	493	82.2
Nausea and vomiting	138	23.0	462	77.0

Categories are not exclusive.

Table 3 Beliefs about menstrual blood reported by the 600 girls

Belief	No.	%
Unclean and unnecessary	483	80.5
Normal	87	14.5
Do not know	30	5.0

Table 4 Intake of specific drinks or drugs during menstruation reported by the 600 girls

Food, drinks or drug intake	Yes		No	
	No.	%	No.	%
Intake of special foods	371	61.8	229	38.2
Prohibition of special foods	411	68.5	189	31.5
Intake of special drinks	536	89.3	64	10.7
Intake of drugs	459	76.5	141	23.5

replace blood loss, while 33.2% did so as part of a family ritual. Almost equal proportions avoided the consumption of some foods out of custom (48.7%) or because of nausea and vomiting (51.3%).

Of the girls who specifically consumed hot drinks during menstruation, 52.8% believed that hot drinks relieved pain, while 42.9% believed that hot drinks prevented blood clotting.

Table 8 shows that slightly less than half (43.7%) of the respondents had not had any information about menstruation before menarche, while about one-third (34.2%) had received some information about it from their mothers. The percentage of the girls who were given information by their mothers after menstruation rose markedly to 61.5%. Religious books provided information to 16.5% of the girls, while a small percentage got such information from friends (2.0%) or school lessons (3.7%).

Discussion

In many cultures, health is the balance of mind, body and spirit. Health-promoting behaviours are the actions performed in each of these three dimensions to maintain health, prevent illness or restore health. However, health behaviours in general are greatly shaped by people's sociocultural background [5]. Women's health, in particular, is strongly influenced by several social and cultural factors that are interwoven with a young girl's upbringing and enculturation within her society [6].

In the present study, a substantial proportion of the sample took self-prescribed medications for treatment of menstrual cramps and fatigue. They used a variety of muscle relaxants and analgesics for symptoms of both primary and secondary dysmenorrhoea. Most of these girls live in an

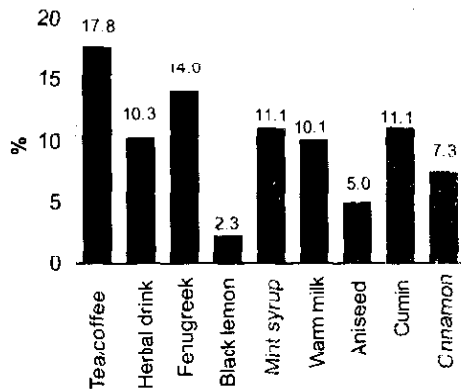
Table 5 Daily activities during menstruation reported by the 600 girls

Activity	Yes		No	
	No.	%	No.	%
Absence from school or work	370	61.7	230	38.3
Maintaining normal activity ^a	225	37.5	375	62.5
Exercise	97	16.2	503	83.8

^aFor example, shopping, visiting relatives or friends, studying, washing clothes.

Table 6 Hygiene practices during menstruation reported by the 600 girls

Hygiene practice	Yes		No	
	No.	%	No.	%
Abstaining from showering	374	62.3	226	37.7
Avoiding perineal care	390	65.0	210	35.0
Changing sanitary protection at work or school	255	42.5	345	57.5

**Figure 1 Distribution of the girls according to the drink they preferred to take during menstruation**

extended family where common myths centre on how a girl should behave during her period, encouraging some behaviours while discouraging others. In Saudi society, the father or older brother is responsible for running errands, including buying medication and/or seeking medical care for the female family members. Furthermore, health problems that are related to menstruation are woman's affairs that should never be discussed with any male, especially the father and/or brother. Therefore, girls have no alternative other than to use self-prescribed medicine in such cases, on the advice of an older female in the family.

Eggs, chicken and red meat are avoided during the period. Such foods are believed to induce or increase nausea and vomiting. Foods containing vitamin C are also avoided, as they are believed to stop the menstrual flow and lead to amenorrhoea.

Such a strict avoidance of these foods for 8 to 10 days per month has an adverse effect on girls' health, possibly leading to anaemia as well as some other forms of malnutrition. Other customs increase the intake of both salty and sweet foods. Salty foods can lead to water retention and increase premenstrual tension [7,8].

About one-tenth of the sample drank tea and/or coffee during menstruation to treat abdominal spasm, headache and nausea. Old wives' tales about other warm drinks such as Saudi herbs (*neka*), anise, ferugreek and cinnamon encourage their consumption for the relief of anxiety, premenstrual and menstrual discomfort, and constipation. These findings are in agreement with the results of several other studies [9-11].

The girls in the present study refrained from exercise and even ordinary daily activities during their period for fear of uterine displacement or increased pain or blood

Table 7 Reasons for behaviour during menstruation

Belief	No.	%
<i>Abstaining from showering (n = 374)</i>		
Habit	109	29.1
Increases pain intensity	120	32.1
Stops menstrual flow	145	38.8
<i>Avoiding daily activity (n = 375)</i>		
Increases bleeding	129	34.4
Increases pain level	246	65.6
<i>Avoiding exercise (n = 503)</i>		
Unnecessary	255	50.7
Harmful	248	49.3
<i>Absence from school or work (n = 370)</i>		
Habit	4	1.1
Accompanying pain	98	26.5
Fatigue and exhaustion	78	21.1
Fear of bleeding/smelling	120	32.4
Psychological upset	70	18.9
<i>Special food intake (n = 371)</i>		
Habit	123	33.2
Relieves pain	240	64.7
Replaces blood	8	2.2
<i>Special food prohibition (n = 411)</i>		
Habit	200	48.7
Because of the nausea or vomiting	211	51.3
<i>Special drinks (n = 536)</i>		
Habit	23	4.3
Relieves pain	283	52.8
Prevents blood clotting	230	42.9

loss. Although these findings about behaviours concur with other research [9,10], such behaviour is unhelpful because exercise and activity cause the release of naturally analgesic endorphins, and also help to increase blood flow to the uterus. Thus exercise does not intensify pain or blood loss [12].

A substantial proportion of the sample avoided bathing and perineal care during the menstrual period. Furthermore, they re-

Table 8 Sources of information about menstruation

Source	No.	%
<i>Before menarche</i>		
None	262	43.7
Mother	205	34.2
School	22	3.7
Friends	12	2.0
Religious books	99	16.5
<i>After menarche</i>		
Mother	369	61.5
Religious books	66	11.0
Older sister	60	10.0
School	40	6.7
Physician	30	5.0
Friends	20	3.3
Media (television, radio, newspaper)	15	2.5

frained from changing their sanitary protection while at school or work for up to 8 hours. Such behaviour indicates very poor menstrual hygiene. This is one of the leading causes of later difficulties such as infertility precipitated by salpingitis and similar conditions [13,14]. The girls' reasons for avoiding bathing, perineal care and pad changing included the fear of causing increased blood loss or of trapping menstrual flow within the body, leading to insanity. Similar beliefs have been reported among some African tribes [13,14].

Most of these girls received their gynaecological information from their mothers, religious books, an older sister or a peer. However, such information was generally given after menarche rather than before it. About two-fifths of the sample, especially those with no female siblings, did not discuss menstruation and had not received any information about it. Similar results have been reported in several other studies [8-15].

Conclusion and recommendations

The study revealed that a substantial portion of the sample followed some erroneous indigenous practices during menstruation. Such practices have environmental and sociocultural origins.

Improved health education is therefore highly recommended for both girls and their mothers.

Replication of the study in other regions of the country is recommended in order to identify subcultural similarities and variations and to provide a comprehensive picture of the nation.

References

1. Harlow SD, Campbell BC. Host factors that influence the duration of menstrual bleeding. *Epidemiology*, 1994, 5(3): 352-5.
2. Rierdan C, Rise J. Living arrangement and health behaviors in adolescence and young adulthood. *Health education research, theory and practice*, 1995, 8(4): 494-503.
3. Karachi N, El-Zubran A. Health knowledge among students of Saudi college girls. *Saudi medical journal*, 1997, 18(3): 219-23.
4. Spector RE. *Cultural diversity in health and illness*, 3rd ed. New Jersey, Appleton and Lange, 1991.
5. Spector RE. Cultural aspects of women's health and health-promoting behaviors. *Journal of obstetric and gynecologic and neonatal nursing*, 1995, 24(3):241-5.
6. Coupery MS. Menstrual disorders in adolescents. *Emergency medicine*, 1994, 40(1):13-8.
7. Helbert S, Rahmy J. Assessment of knowledge and practice related to menstruation and menstrual hygiene. *American journal of nursing*, 1995, 32(2): 120-4.
8. Dye L, Blundell JE. Menstrual cycle and appetite control: implication for weight regulation. *Human reproduction*, 1997, (12)6:114-8.
9. Saad W, Toma Z, Abdel Gany N. Identifying indigenous methods used in menstrual hygiene among preparatory school girls in Alexandria. *Tanta medical journal*, 1986, 14(1):499-653.
10. Chihal HJ. Premenstrual syndrome. An update for the clinician. *Obstetric and gynecology clinics of North America*, 1990, 17(2):457-9.
11. El-Shazly L. Knowledge and practice among secondary school girls. *Journal of public health*, 1990, 15(2):121-30.
12. Griffin M. Conception and misconception of the menstrual cycle. *Work and health journal*, 1997, 16(3):122-33.
13. Schrefer S. *Quick reference to cultural assessment*. St Louis, CV Mosby Incorporated, 1994.
14. United States Department of Health and Human Services. Public Health Service. *Clinician's handbook of preventive service*. Washington DC, United States Government, 1994.
15. Rosenfield RL, Barnes RB. Menstrual disorders in adolescence. *Endocrinology and metabolism clinics of North America*, 1993, 22(3):491-505.