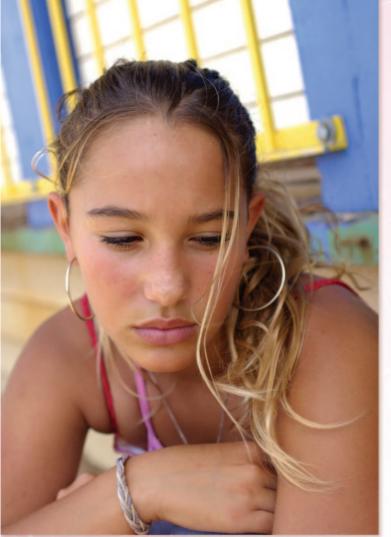




- Trabajo realizado por el equipo de la Biblioteca Digital de la Fundación Universitaria San Pablo-CEU
- Me comprometo a utilizar esta copia privada sin finalidad lucrativa, para fines de investigación y docencia, de acuerdo con el art. 37 del T.R.L.P.I. (Texto Refundido de la Ley de Propiedad Intelectual del 12 abril 1996)



Mimi McEvoy, MA, RN, PNP, Jane Chang, MD, and Susan M. Coupey, MD

ABSTRACT

Menstrual disorders such as amenorrhea, excessive uterine bleeding, dysmenorrhea, and premenstrual syndrome are common reasons for visits to healthcare providers by adolescent girls. Although menstrual irregularity can be normal during the first few years after menarche, other menstrual signs and symptoms may indicate a pathological condition that requires prompt attention and referral. This article discusses four common menstrual disorders seen in adolescent girls and focuses on specific nursing interventions aimed at eliciting an accurate menstrual history, providing confidentiality and communicating therapeutically, administering culturally sensitive care, and promoting independence and self-care.

Key Words: Adolescents; Amenorrhea; Dysfunctional uterine bleeding; Dysmenorrhea; Females; Menstrual disorders; Nursing care.

Menstrual Disorders in Adolescence

Nursing Interventions

urses working with adolescent girls know that preoccupation with appearance and body function is a normal accompaniment to the physical changes of puberty. This preoccupation is often heightened by the fact that as many as 75% of adolescent girls experience some kind of problem associated with menstruation (Ziv, Boulet, & Slap, 1999). Therefore, it is no surprise that for adolescent girls, menstrual disorders, such as delayed or irregular cycles, excessive flow, and painful menses, are

common reasons for visiting healthcare providers (Tuttle, 1991; Ziv et al., 1999). Although menstrual irregularity can be normal during the first few years after menarche, there are many different congenital, endocrine, hematologic, and psychosocial conditions that can present as menstrual disorders during adolescence.

This article describes the four most common menstrual disorders seen in adolescent patients: amenorrhea, excessive uterine bleeding, dysmenorrhea, and premenstrual syndrome (PMS). Also addressed are specific nursing interventions designed to address the accurate assessment of menstrual problems, communication challenges, cultural differences in attitudes toward menstruation, and empowering adolescents to seek reproductive healthcare.

Normal Menstrual Cycle

To identify and treat menstrual disorders, it is helpful to briefly review the menstrual cycle. There are three phases to the ovulatory menstrual cycle: the follicular phase, ovulation, and the luteal phase. During the follicular phase, there is pulsatile release of gonadotropin-releasing hormone



Up to 75% of adolescent girls experience some kind of problem associated with menstruation.

from the hypothalamus, which then stimulates the pituitary to secrete follicle-stimulating hormone (FSH) and small amounts of luteinizing hormone (LH), which stimulate ovarian follicular growth. The growing follicle secretes estrogen, which induces proliferation of the endometrial lining of the uterus. A dominant follicle is present approximately 7 days before ovulation. As estrogen levels peak, the pituitary gland releases a large LH surge and a smaller FSH surge at midcycle, and ovulation occurs.

The luteal phase is characterized by the presence of the corpus luteum, which is formed by the luteinization of the follicular cells. The corpus luteum produces estrogen and progesterone. Progesterone counteracts the effects of estrogen on the endometrium, inhibiting proliferation and producing the glandular changes that make the lining receptive to implantation by the fertilized ovum. Without fertilization, the corpus luteum cannot survive and regresses, which results in a decrease in both estrogen and progesterone. The decrease in hormones triggers synchronous sloughing of the endometrial lining approximately 14 days after ovulation.

Then FSH begins to rise again in response to the low estrogen and progesterone levels, and the next cycle begins.

In anovulatory cycles, the LH surge at midcycle does not occur, thus the follicle does not release the ovum and no corpus luteum forms. The endometrial lining of the uterus remains in the proliferative phase because no progesterone is secreted. Eventually, the unruptured follicle involutes, estrogen levels decrease, and menstrual bleeding occurs. Sometimes during an anovulatory cycle, the follicle does not involute, continues to increase in size, and forms a follicular cyst. The estrogen secreted by the cyst continues to stimulate the endometrium to proliferate and grow. An endometrium that has not been exposed to progesterone is unstable, so the patient may experience irregular spotting and/or bleeding and sometimes may bleed heavily. In the United States, the average age at menarche is 12.16 years for African-American girls and 12.88 for Caucasian girls (Herman-Giddens, Slora, Wasserman, et al., 1997). The average interval between the beginning of breast development and menarche is two years. Most girls menstruate by the time they reach Tanner stage 4 breast and pubic hair development. The menstrual cycle is defined as the number of days between the first day of bleeding of the last menses to the first day of bleeding of the next menses. In the World Health Organization (WHO) study on menstrual and ovulatory patterns in adolescent girls, the mean menstrual cycle length was 50.7 days in the first cycle after menarche and bleeding lasted for an average of 4.7 days. The mean cycle length decreased steadily until it was 30 days by the 24th cycle and lasted for an average of 4.9 days (World Health Organization [WHO], 1986).

Four Most Common Menstrual Disorders in Adolescents

Amenorrhea and Oligomenorrhea

For any menstrual disorder, use of appropriate terminology will help to accurately describe and communicate the problem to the healthcare team. Primary amenorrhea is the absence of menses within 2 years of achieving Tanner stage 4 breast development or with delayed puberty, defined as no breast development by the 12th birthday. If menarche has not occurred in either of these circumstances, an investigation should begin, regardless of the girl's chronologic age (Iglesias & Coupey, 1999). Breast development begins at a mean age of approximately 9 years for African-American girls and 10 years for Caucasian girls in the United States; 99% of African-American girls and 96.5% of Caucasian girls will have at least Tanner stage 2 breast development by age 12 years (Herman-Giddens et al., 1997). Secondary amenorrhea is a more common complaint and is defined as an absence of menses for 6 months or more in a girl who had been menstruating regularly. Oligomenorrhea is defined as irregular, infrequent menses for a period of 1 year or longer.

There are many different causes of amenorrhea. There are anatomic causes, such as imperforate hymen or agenesis of the vagina and uterus, which always present as pri-

Figure 1. Selected causes of oligomenorrhea and amenorrhea				
	Pregnancy			
	Chronic illness			
	Substance abuse			
	Anorexia nervosa			
	Excessive exercise			
	Depression			
	Psychological stress			
	Hypothyroidism			
	Polycystic ovary syndrome			
9i	gure 2.	Causes of excessive uterine bleeding		
Fi		Causes of excessive uterine bleeding tional uterine bleeding		
Fi	Dysfund			
9i	Dysfund Complic	tional uterine bleeding		
<i>4i</i>	Dysfund Complic Sexually Bleeding	tional uterine bleeding ations of pregnancy		
Ai	Dysfund Complic Sexually Bleeding disease Endocrin	tional uterine bleeding ations of pregnancy transmitted infection g disorders, such as von Willebrand		
<i>Gi</i>	Dysfund Complid Sexually Bleeding disease Endocrin syndron	tional uterine bleeding sations of pregnancy ransmitted infection g disorders, such as von Willebrand or factor deficiencies ne disorders, such as polycystic ovary		
9i	Dysfund Complic Sexually Bleeding disease Endocrit syndron Vaginal	tional uterine bleeding sations of pregnancy r transmitted infection g disorders, such as von Willebrand or factor deficiencies ne disorders, such as polycystic ovary ne or thyroid disease		

mary amenorrhea, but most other conditions can present as either primary or secondary amenorrhea. Turner syndrome is a chromosomal abnormality and is the most common cause of primary amenorrhea with pubertal delay seen in adolescent girls. This syndrome is often associated with short stature, webbed neck, and other physical findings, as well as laboratory evidence of ovarian failure with elevated FSH levels. Primary amenorrhea with delayed pubertal development also may be seen in children with chronic illness, such as Crohn's disease, cystic fibrosis, or sickle cell disease. Adolescents with severe psychological stress, significant weight loss, intense exercise regimens, or eating disorders often have suppression of hormones from the hypothalamus, which leads to suppressed levels of FSH and LH from the pituitary gland and, hence, no follicle stimulation or ovulation; thus, they can develop either primary or secondary amenorrhea (Patterson, 1995).

The most common reason for secondary amenorrhea is pregnancy; this must be ruled out, regardless of whether the adolescent acknowledges sexual activity (Figure 1). Another common cause of oligomenorrhea or secondary amenorrhea is *anovulation*. For perimenarchal girls, anovulation results from immaturity of the hypothalamic-pitu-

itary-ovarian axis. The female reproductive system usually requires approximately 2 years to mature before adolescent girls will have consistently regular ovulatory cycles. These anovulatory cycles are most often fairly regular; however, they can be either shorter or longer than the standard 28-day cycle of the mature ovulating woman. Apter, Viinikka, & Vihko (1978) studied the hormonal patterns of the adolescent menstrual cycle and found that the majority of cycles within 2 years of menarche were anovulatory, as determined by peak progesterone levels of <1.0 ng/mL, whereas subjects who were at 5 years since their menarche ovulated in more than 80% of their cycles, achieving peak progesterone levels of 8-10 ng/ml. Therefore, "gynecologic age," which is the amount of time in months or years since menarche, is more pertinent to the consideration of the different causes of anovulation than chronologic age.

However, for many adolescents, anovulation results from a pathological condition. Polycystic ovary syndrome (PCOS), also referred to as functional ovarian hyperandrogenism or hyperandrogenic chronic anovulation, is a common condition seen in adolescent girls and is estimated to occur in up to 10% of women (Knochenhauer, Key, Kahsar-Miller, et al., 1998). The clinical manifestations are variable, but the most common signs and symptoms include irregular periods or intervals of amenorrhea, hirsutism, acne, and obesity. Classical polycystic ovaries are not a common feature of this condition in the adolescent age group.

The evaluation of a girl with amenorrhea includes a detailed history, including history of growth and pubertal development, sexual history, and psychosocial history, with specific questions regarding athletic training, depression, weight loss or gain, or stress. Physical examination must include Tanner staging of both breasts and pubic hair and a genital examination. Laboratory evaluation is guided by the pubertal development of the patient but should always include consideration of a pregnancy test.

Anovulation from either
HPO axis immaturity or
PCOS is a common cause of
oligomenorrhea, amenorrhea,
and DUB in adolescents.



Excessive Uterine Bleeding

The most common cause of excessive uterine bleeding in adolescents is *dysfunctional uterine bleeding (DUB)* related to anovulation. This is defined as irregular, painless menstrual bleeding that is prolonged, excessive, and unpat-

Figure 3. Areas of inquiry for eliciting the menstrual history.

Menstrual issues	Medications or substance use*			
Age at menarche	Contraceptives			
Frequency and duration of flow	Steroids and other medications (antianxiety agents, anticoagulants, anticonvulsants, antidepressants, antihypertensives,			
Number of pads/tampons per day				
Date of last normal menstrual period	antipsychotics, and antineoplastics)			
Symptoms associated with menses	Alcohol			
Past treatments and comfort measures	Tobacco			
Impact on normal daily activities	Marijuana			
Family history of gynecologic problems	Cocaine			
Maternal menarche	Related health concerns*			
Dysmenorrhea/premenstrual syndrome	Weight gain or loss			
Endometriosis	Nutritional history			
Malignancy	Exercise and sports			
Exposure to diethylstilbestrol	Emotional symptoms			
Ovarian cysts	Psychiatric diagnoses			
Bleeding disorders	Body Image			
Surgeries	Eating disorders			
Fertility problems	Sexual behavior*			
Hirsutism or virilization	Sexual activity			
Medical history	Contraceptive use, including condoms			
Hospitalization and surgeries	Sexually transmitted infections			
Serious infections	Number of sexual partners			
Congenital malformations	Gender of sexual partners			
Chronic illness	Frequency of sexual contact, last contact			
Bleeding disorders	Pregnancies and pregnancy outcomes			
Prior gynecologic evaluation and treatment	Sexual molestation or abuse			
Growth and developmental history	Types of sexual contact (genital, oral, anal)			
#Information also in the matter of Adalescent Adalescent for Comman Manager of Adalescent for Adalescent for the matter of				

*Information obtained privately with patient. (Adapted with permission from Common Menstrual Problems of Adolescence. Blythe, M. J. *Adolescent Medicine: State of the Art Reviews*, Vol. 8, No.I, 1997. Philadelphia: Hanley & Belfus, Inc.).

terned. It is caused by anovulation from either immaturity of the hypothalamic-pituitary-ovarian axis or PCOS or other conditions. Although DUB is common and accounts for as much as 95% of cases of excessive uterine bleeding in adolescents, it is a diagnosis made by exclusion (Dealy, 1998; Deligeoroglou, 1997). Other causes of excessive uterine bleeding include complications of pregnancy, such as ectopic pregnancy and spontaneous abortion, sexually transmitted infection, or a bleeding disorder (Figure 2). When a patient presents with heavy menses and significant anemia from the time of menarche, congenital coagulation disorders, such as von Willebrand disease or a factor deficiency, should be considered. Acquired coagulation disor-

ders, such as thrombocytopenia, may occur at any time and may present as excessive menstrual bleeding.

A detailed menstrual and sexual history should be elicited. Vital signs should be obtained, including orthostatic pulse and blood pressure, which may indicate significant blood loss. The clinician must do a pelvic examination to rule out vaginal laceration and verify that the blood is coming from the uterus. Laboratory tests should include a pregnancy test and complete blood count at the minimum. The management of excessive uterine bleeding depends on the degree of anemia and the underlying cause.

For a patient with DUB, if she is not anemic (hemoglobin >12), you can offer reassurance and ask her to keep a men-

strual calendar in addition to taking iron supplements. For moderate bleeding with mild to moderate anemia (hemoglobin 8–12), it is recommended to start hormonal therapy, such as low-dose estrogen-progestin oral contraceptive pills. Adolescent girls may be instructed to take up to four pills a day until the bleeding stops and then gradually taper to one pill daily. After 3 weeks, a withdrawal bleed may be allowed and the pills continued for 3–6 months to control the menstrual bleeding while the anemia is corrected and iron stores are replenished. Antiemetics are usually given because the high doses of estrogen can cause significant nausea. If the bleeding has been of short duration and it appears that enough endometrium remains to allow progestin-induced stabilization, the adolescent may be treated with progestin alone. Severe bleeding with a hemoglobin <8 and hemodynamic instability requires hospitalization for an intravenous form of conjugated estrogen to stop the bleeding quickly. Transfusions may be necessary, but surgical dilatation and curettage is almost never required. Most adolescents with DUB respond well to treatment, and many will develop a regular menstrual pattern; however, those with PCOS will continue to have oligomenorrhea and may have repeated episodes of DUB (Goldfarb, 2000). When a bleeding disorder is diagnosed, specific treatment for the disorder, as well as hormonal management of the uterine bleeding, is indicated.

Dysmenorrhea

Primary dysmenorrhea is defined as painful menses despite normal pelvic anatomy and ovulation. Conversely, secondary dysmenorrhea is painful menses associated with pelvic pathology, such as endometriosis, salpingitis, or congenital anomalies of the mullerian system. For purposes of this article, only primary dysmenorrhea is discussed, because it is far more common in the adolescent population.

Dysmenorrhea is the greatest single cause of lost work and school hours in females. Klein and Litt (1981) performed a classic study of dysmenorrhea in adolescents and found that 60% of 2,699 menstruating adolescents reported dysmenorrhea, and 14% of those girls frequently missed school because of cramps.

Primary dysmenorrhea usually begins 1 to 3 years after menarche, with the establishment of ovulatory cycles. Local symptoms include spasmodic pain in the lower abdomen or lower back. Some girls will also have associated systemic symptoms, such as nausea, vomiting, loose bowel movements, or dizziness. The pain is related to excessive prostaglandin secreted by the endometrium after ovulation, which stimulates the contraction of vascular and uterine smooth muscle. Anovulatory cycles are associated with lower levels of prostaglandins and usually no dysmenorrhea.

Management first requires the healthcare provider to acknowledge and legitimize the patient's discomfort. Prostaglandin synthesizing enzyme inhibitors and oral contraceptives are the two most effective treatments. Nonsteroidal antiinflammatory drugs (NSAIDs), such as ibuprofen, naproxen sodium, and mefenamic acid, are the most common prostaglandin enzyme inhibitors used and can relieve 80% of dysmenorrhea (Zhang

& Li, 1998). The medication should be started as soon as possible when dysmenorrheic symptoms occur or with the first sign of menstruation. These medications are usually only needed for the first 1 to 3 days of the menstrual cycle. Over-the-counter ibuprofen or naproxen sodium is usually tried first before giving prescription-strength medication.

If the pain is severe and not responsive to NSAIDs after a trial period of three to four menstrual cycles, combination oral contraceptive pills can then be tried. These pills inhibit

Ground rules for the adolescent interview include discussion of the terms of confidentiality.

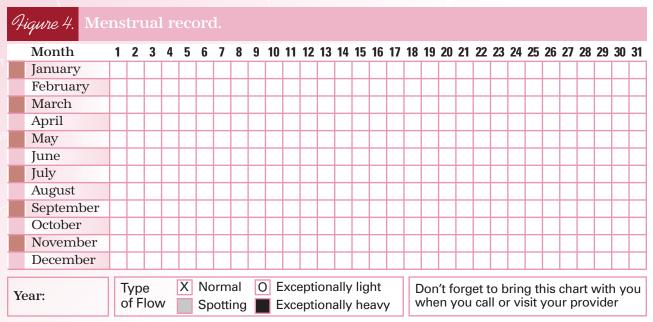


ovulation and lead to endometrial hypoplasia, causing decreased menstrual flow and prostaglandin release. Oral contraceptives decrease symptoms in more than 90% of patients with primary dysmenorrhea (Cholst & Carlon, 1998).

Premenstrual Syndrome

Premenstrual syndrome (PMS) is a distinct and separate entity from dysmenorrhea. The term PMS is used to describe an array of predictable physical and affective symptoms that occur cyclically during the luteal phase of the menstrual cycle and resolve quickly at or near the onset of menstruation. The etiology of PMS is unknown, and it is a relatively uncommon disorder during adolescence. However, it deserves consideration within this context because girls commonly complain of PMS when they are actually experiencing dysmenorrhea or psychosocial problems. PMS is characterized by symptoms of weight gain, headache, pelvic discomfort, fatigue, food cravings, irritability, and anxiety. Although true PMS should begin 7 to 10 days before menses and cease with the onset of bleeding, it is characteristic for adolescent girls to experience symptoms at the time of menses (Iglesias & Coupey, 1999).

It is helpful for adolescent girls to keep a diary to record their symptoms and to note the timing of these symptoms in relation to their menses. No single treatment is universally accepted as effective. Adolescent girls are usually managed with counseling, changes in diet, vitamin and mineral supplementation, or a trial of hormonal therapy, such as oral contraceptives. However, it is important to investigate any underlying psychosocial disorder that may exist in girls complaining of PMS.



Reprinted with permission: *Menstrual cycle abnormalities: Diagnosis and management*. Iglesias E. and Coupey S. Adolescent Medicine; 10(2):259, June 1999. Philadelphia, Hanley and Belfus, Inc.

Nursing Interventions

Elicit an Accurate Menstrual History

An accurate history is essential for arriving at a correct diagnosis; therefore, nurses play a pivotal role in helping to assess the problem. A menstrual history includes age at menarche, number and regularity of periods, duration of periods, number of pads or tampons used, and whether the adolescent has pain. These questions help to differentiate menstrual dysfunctions from each another (Blythe, 1997). Other areas of inquiry that may provide important information in helping to assess the problem accurately include family history of menstrual problems, past medical history, medications or substance use, sexual behavior, and other related issues, such as weight changes, nutrition, exercise, and sports. (Figure 3).

How the questions are asked may affect the accuracy and amount of information obtained because adolescents, especially younger adolescents, are still cognitively immature and think concretely rather than abstractly. Therefore, questions must be asked in a direct and concrete manner (Coupey, 1997). For example, adolescents may think they have skipped a month of their period if it came at the end of one month (e.g., January) and reoccurred at the beginning of March, "skipping February." In reality, this translates to a 32-day cycle. Using a calendar to have the adolescent point out the beginning of each previous period may yield more accurate information.

As stated, for adolescents, gynecologic age rather than chronologic age is used to help assess menstrual problems more accurately. Nurses can help supply valuable information by calculating and recording the gynecologic age of adolescent girls with any menstrual problem. For example, a 14-year-old girl who reports irregular cycles may still be having normal anovulatory cycles if she had menarche just before her 13th birthday. On the other hand, it would be abnormal for her to have irregular menses at age 14 if she experienced menarche at age 10 because at a gynecologic age of 4 years, the hypothalamic-pituitary-ovarian axis should be mature and menses is expected to be regular. Most adolescents need assistance in tracking their menstrual pattern. It may be useful to give them a preprinted card to make it easier to record their menstrual bleeding (Figure 4).

Family history, particularly related to the adolescent's mother and female siblings, is relevant because the nature and patterns of menstruation have a genetic basis (Blythe, 1997). Specific information about the mother's or female siblings' pubertal development, patterns of bleeding, and experience of pain and discomfort during menses may help to put the problem into perspective. Other areas that should be discussed with the adolescent privately include sexual behavior, use of contraceptives, eating patterns, dieting, body image, exercise, and history of chronic illness.

Provide Confidentiality and Communicate Therapeutically

Most adolescents are uncomfortable talking about their body habitus and functions with adults, including their parents. This discomfort presents a communication challenge for any healthcare provider. However, there are techniques and skills that can be employed to alleviate the adolescent's

anxiety, reservation, and embarrassment in discussing menstrual problems. Ideally, a therapeutic relationship is developed over time, so that when difficult or embarrassing issues emerge, the adolescent may already feel comfortable discussing problems and divulging intimate information. Therefore, it is important to begin the process of building therapeutic communication at the initial encounter by laying ground rules before the interview. These ground rules are actually therapeutic techniques to establish trust between adolescent and provider and include introductions of provider and adolescent and significant family members, discussion of who will be in the examination room during the interview, and terms of confidentiality (Blythe, 1997; Coupey, 1997). In most instances, the interview is initiated with both the mother and the adolescent in the room. It is appropriate to address the adolescent first by inquiring in a direct manner, "What brings you here today?" If the nurse knows that the visit is for a menstrual problem and the adolescent is uncomfortable talking, it may be helpful to acknowledge her discomfort and embarrassment and offer reassurance by saying, "I know that it's a bit embarrassing to talk about these things, but a lot of girls have the same problems." Because adolescents often are relieved to know that they are not different from peers, this technique may create a more therapeutic milieu and encourage discussion

The issue of confidentiality is usually broached by informing the adolescent and parent(s) that some information discussed in a healthcare encounter is confidential and that private information divulged by the adolescent during an interview will be discussed with parent(s) only with knowledge and permission of the adolescent. However, adolescent (and parents) must also be told that if a serious problem is found that threatens her health, parents must be informed. In this context it is important to foster healthy communication between adolescent and parent because the adolescent may need additional support. For example, when caring for girls who are pregnant or have a sexually transmitted infection, confidentiality must be respected. However, involving a parent or close family member may be in the best interest of the adolescent (Alderman, 2000). The nurse is in a prime position to help negotiate this step by being compassionate and direct so that the adolescent girl has the needed guidance and support. For instance, stating, "This must be a very difficult and scary thing for you. While it is up to you if you want us to keep this confidential, we will respect it, but I think it might be good to let someone else know, so that they can give you the support or help you might need. Can you think of someone who you would feel comfortable talking to about this?" This approach is often effective in helping the adolescent to accept and be guided toward a plan of support to involve a parent or other adult.

It may also be helpful to adapt therapeutic communication techniques and discussions of confidentiality to the individual adolescent. There are many factors and circumstances that need consideration, such as the adolescent's age, level of maturity, cognitive ability, cultural background, and reason for the visit, as well as family dynamics. The interplay of these various factors is unique to each therapeutic encounter, making effective communication pivotal to nursing care.

Administer Culturally Sensitive Care

Menarche is a significant event in the life of nearly all girls and often marks the passage to adulthood. The social and cultural significance of this life event has been the subject

A pelvic examination usually is not indicated unless there is moderate to severe menstrual dysfunction or the girl is sexually active.



of great interest to many ethnographers (Paige, 1983). Discussion of the effect of menarche cross-culturally is beyond the scope of this article. However, it is worth mentioning that adolescents and families, especially mothers, are strongly affected by this event (Chrisler & Zittel, 1998). Culture, as well as family values and previous life experience, assigns different and individual meaning to the onset of menstruation. In discussions of menstrual problems, more intense feelings may be evoked, such as embarrassment, fear, and resistance. By merely exploring these feelings with the adolescent girl and family, the nurse is able to address the issues while conveying respect and sensitivity to the needs of the individual.

A pelvic examination usually is not indicated unless the girl has a moderate to severe menstrual dysfunction or is sexually active (Coupey, 2000). However, when indicated, cultural dictates seem more intense and should be respected, despite the reality that care cannot always be curtailed to meet all cultural expectations. For example, some cultures permit only a female provider to touch another female. If a female provider is not available, it is important to let the adolescent and parent know that this request is respected, yet might not be possible because of practical constraints. The reasons for needing to do the procedure should be explained, and permission should be negotiated to perform the task. This approach is generally successful in conveying cultural respect and accomplishing the necessary intervention.

Promote Independence and Self-Care

Within the normal course of psychosexual development, adolescent girls evolve toward greater independence and

responsibility for self-care. Despite the old notion that adolescence is fraught with tumultuous events, most adolescents welcome this stage of their lives and readily adapt. Nursing efforts toward empowerment of adolescents are likely to be more effective than efforts toward compliance, because the former conveys a message that the nurse recognizes the adolescent is able to assume an appropriate level of self-care, whereas the latter implies the need for the adolescent to simply follow instructions without acknowledging the adolescent's level of maturity and ability to take responsibility.

Menarche marks a milestone for girls, and taking care of their own bodies can provide a sense of independence



Mothers are a major source of information on topics of sex and contraception for their adolescent daughters.

and fulfillment. Adolescent girls who are comfortable with their bodies may be more likely to discuss menstrual problems (Coupey, 2000). Some menstrual problems are related to sexual behavior; therefore, eliciting information from the adolescent regarding sexuality is important. Also, the promotion of healthy attitudes toward sexuality will help to empower adolescents to make healthy decisions about sexual behavior. Communication with adolescents about sexual behavior should be private and developmentally appropriate (Coupey, 1997). One way in which nurses can initiate a dialogue with adolescents is to first inquire about pubertal changes, including menstrual patterns, and then gradually guide the interview toward sexuality. If this approach seems too direct, the nurse may initiate a discussion with the adolescent about leisure time and friends and then move to asking about friends' sexual experiences. It may then seem natural to ask about the adolescent's own sexual experience. Such tangential approaches are less threatening because they afford an opportunity for adolescents to observe how the nurse reacts to responses about their peers before they confide their personal behaviors.

Mothers are a major source of information on topics of sex and contraception for their adolescent daughters, and, therefore, it is helpful to involve mothers in general discussions about sexual health so that accurate information can be disseminated (Beausang & Razor, 2000; Tucker, 1990). However, as stated, eliciting the history about the adolescent's specific sexual behavior should be done privately without the mother in the room.

Patient education is another helpful way to promote independence and self-care for adolescent girls by helping them to become more informed about their bodies and understand their menstrual function. There are many useful Web sites that provide a venue for self-education at any time that the adolescent girl is motivated to learn. The Internet is a helpful way to deal with the reluctance of talking directly to adults because communicating on the Internet does not involve face-to-face contact and can be done in the privacy of home at any time.

As communication techniques need to be adapted to the individual adolescent, so does promotion of independence and self-care. Nursing interventions to promote independence and self-care are best approached by first ascertaining a baseline level of the adolescent's strengths, needs, and capabilities and then designing a plan of care to empower the adolescent toward health.

Summary

Certain menstrual disorders are common in adolescent girls. It is often challenging for the healthcare team to determine the cause because the possibilities span a wide spectrum. Nursing interventions fulfill an integral part in the process by eliciting the menstrual history accurately, communicating therapeutically with assurance of confidentiality, administering culturally sensitive care by respecting individual and family beliefs and values, and promoting independence and self-care by empowering the adolescent to assume responsibility for her body. •

Mimi McEvoy is a Principal Associate in Pediatrics and Co-Director, Introduction to Clinical Medicine Program, Albert Einstein College of Medicine, and Director, Family Life Program, Jacobi Medical Center, Bronx, NY. She can be reached at 1300 Morris Park Avenue, Belfer 507, Bronx, NY 10461 (mcevoy@aecom.yu.edu.)

Jane Chang is a Post-Doctoral Fellow, Section of Adolescent Medicine, Children's Hospital at Montefiore, Bronx, NY. Susan M. Coupey is a Professor of Pediatrics and Director of Introduction to Clinical Medicine Program, Albert Einstein College of Medicine, and Chief, Section of Adolescent Medicine,, Children's Hospital at Montefiore, Bronx, NY.

References

Alderman, E. M. (2000). Negotiating Confidentiality. In S. M. Coupey (Ed.), *Primary Care of Adolescent Girls* (pp. 61-69). Philadelphia: Hanley & Belfus, Inc.

Apter, D., Viinikka, L., & Vihko, R. (1978). Hormonal patterns of adolescent menstrual cycles. *Journal of Clinical Endocrinology and Metabolism*, 47, 944-954.

Beausang, C. C., & Razor, A. G. (2000). Young Western women's experiences of menarche and menstruation. Health Care Women International, 21(6), 517-28.

Blythe, M. (1997.) Common menstrual problems of adolescence. Adolescent Medicine: State of the Art Reviews, 8, 87-109.

Chrisler, J. C., & Zittel, C. B. (1998). Menarche stories: Reminiscences of college students from Lithuania, Malaysia, Sudan and the United States. *Health Care for Women International*, 19(4), 303-312.

Cholst, I. N., & Carlon, A. T. (1988). Oral contraceptives and dysmenorrhea. *Sexually Active Teenagers, 2,* 231-238.

Coupey, S. (1997). Interviewing adolescents. Pediatric Clinics of North America, 44,1349-1364.

Coupey, S. (2000). The middle adolescent girl. In S. M. Coupey (Ed.), *Primary Care of Adolescent Girls*. Philadelphia: Hanley & Belfus, Inc.

Dealy, M. F. (1998). Dysfunctional uterine bleeding in adolescents. Nurse Practitioner, 23(5): 12-20.

Deligeoroglou, E. (1997). Dysfunctional uterine bleeding. Annals of the New York Academy of Science, 186, 158-164.

Goldfarb, A. F. (2000). Menstrual Dysfunction. In S. M. Coupey (Ed.), Primary Care of Adolescent Girls (pp. 251-266). Philadelphia: Hanley & Belfus, Inc.

Herman-Giddens, M. E., Slora, E. J., Wasserman, R. C., Bourdony, C., Bhapkar, M., Koch, et al. (1997). Secondary sexualcharacteristics and menses in young girls seen in office practice: A study from the research in office settings network. *Pediatrics*, *99*, 505-512.

Iglesias, E. A., & Coupey, S. M. (1999). Menstrual cycle abnormalities: Diagnosis and management. *Adolescent Medicine*, *10*, 255-273.

Klein, J. R., & Litt, I. F. (1981). Epidemiology of adolescent dysmenorrhea. Pediatrics, 68, 661-664.

Knochenhauer, E. S., Key, T. J., Kahsar-Miller, M, Waggoner, W., Boots, L., Azziz, R. (1998). Prevalence of the polycystic ovary syndrome in unselected black and white women of the southeastern United States: A prospective study. *Journal of Clinical Endocrinology and Metabolism*, 83, 3078-3082.

Paige, K. E. (1983). Virginity rituals and chastity control during puberty: Cross-cultural patterns. In S. Golub (Ed.), *Menarche*, Lexington, MA: D.C. Health and Co.

Patterson, D. F. (1995). Menstrual dysfunction in athletes: Assessment and treatment. *Pediatric Nursing, 21(3), 227-229, 310.*

Tuttle, J. (1991). Menstrual disorders during adolescence. Journal of Pediatric Health Care, 5, 197-203.

Tucker, S. K. (1990). Adolescent patterns of communication about the menstrual cycle, sex and contraception. *Journal of Pediatric Nursing*, 5, 393-400.

World Health Organization Task Force on Adolescent Reproductive Health (WHO). (1986). World Health Organization multicenter study on menstrual and ovulatory patterns in adolescent girls. *Journal of Adolescent Health*, 7, 236-244.

Zhang, W. Y., & Li, W. P. (1998). Efficacy of minor analgesics in primary dysmenorrhea: A systematic review. *British Journal of Obstetrics and Gynaecology*, 105, 780-789.

Ziv, A., Boulet, J. R., & Slap, G. B. (1999). Utilization of physician office by adolescents in the United States. *Pediatrics*, 104, 35-42.



Adolescent Wellness and Reproductive Education Foundation

www.awarefoundation.org/

U.S. Department of Health and Human Services www.girlpower.gov/

.....

Columbia University's Health Questions and Answers www.goaskalice.columbia.edu/

Kaiser Family Foundation Guide to Safe and Responsible Sex

www.itsyoursexlife.com/

Planned Parenthood www.plannedparenthood.org/teens/

The Nemours Foundation Kids Health www.kidshealth.org/

Peer Counseling for Teens http://teenadvice.org/

Teen Growth

www.teengrowth.com/

Center for Young Women's Health, Boston www.youngwomenshealth.org/healthinfo.html

2003 MCN Awards

MCN is delighted to announce the winners of the 2003 MCN Research Paper of the Year and the 2003 MCN Practice Paper of the Year awards. These papers were chosen from all articles published in 2003 (except those written by Editorial Board members, who are ineligible for these awards) by a majority vote of the MCN Editorial Board. These winners represent excellence in content, and help to continue MCN's commitment to improve nursing knowledge and evidence-based practice.

2003 MCN Practice Paper of the Year

Media Images, Body Dissatisfaction, and Disordered Eating in Adolescents published in March/April 2003 *MCN* vol 28, no 2

Linda Andrist, PhD, RNC, WHNP
Associate Professor and Coordinator, Adult/Women's Health NP Specialty
MGH Institute of Health Professions
Graduate Program in Nursing
Boston, MA

2003 MCN Research Paper of the Year

Maternal Management Behaviors for Young Children with Diabetes published in May/June 2003 MCN, vol 27, no 3

Susan Sullivan-Bolyai, DNSc, RN, CNS Assistant Professor, Graduate School of Nursing University of Massachusetts Worcester, MA

Kathleen Knafl, PhD, RN Professor, Yale University School of Nursing New Haven, CT

Janet Deatrick, PhD, RN, FAAN
Associate Professor, University of Pennsylvania School of Nursing
Philadelphia, PA

Margaret Grey, DrPH, RN, FAAN
Professor, Yale University School of Nursing
New Haven, CT

These nurses will each receive a cash award and a certificate of achievement. Congratulations!