Making sure: integrating menstrual care practices into activities of daily living

Menstruation, when it is occurring, is a continuous phenomenon and is not under voluntary control. In order to manage the menstrual flow and continue to participate in daily life, women have created a self-care process, which is termed "making sure." Making sure enables a culturally appropriate response to an eliminative process, while it minimizes the time and effort directed to menstrual care. This recurring process enables menstruating women to continue their daily activities knowing that the current menstrual care practice is effective and that future menstrual demands can be met easily and readily.

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MENSTRUATION IS no longer the confining event it was as recently as the early part of this century. Health care professionals encourage menstruating women to continue their normal daily activities, and menstrual absorbents have been developed that conveniently meet the hygienic demands of menstrual flow. While these developments have freed women from some of the confining aspects of menstruation, taboos surrounding menstruation are remarkably similar to earlier taboos of the 19th century. Menstruation is not discussed openly, and a substantial majority of Americans believe that, in public, a woman should make an effort to conceal the fact that she is menstruating.[1] The resulting climate is one in which menstruating women are encouraged to remain active participants in society, while at the same time they are cautioned against revealing their state of menstruation and are urged to be discreet.

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Nineteenth century prescriptions against activity during menstruation were more consonant with menstrual taboos than today's prescriptions for activity. At that time, women were admonished by their physicians to avoid activity during menstruation. "We cannot too emphatically urge the importance of regarding these monthly returns as periods of ill health, as days when the ordinary occupations are to be suspended or modified."[2(p13)]

Several factors changed medical attitudes toward women's activities during menstruation. Advancing knowledge of the physiology of female reproduction and the role of hormones in the regulation of this process dispelled some of the confusion surrounding menstruation. Empirical reassurance that education and work did not contribute to reproductive infirmity was found in the growing number of college-educated and career women who appeared perfectly healthy. Challenge by feminists also stimulated new ways of considering menstruation.

In addition to advanced medical attitudes toward menstruation, a second development, marketing of sanitary products, served to mainstream menstruating women into society.[3] Prior to the late 1890s, diapers of bird's-eye or outing flannel were used to collect the menstrual flow. Some women pinned these homemade devices as a diaper, while others folded them into pads to be pinned to underclothing. These diapers and towels were washed and reused. In 1921, Kotex became the first sanitary pad to be widely marketed; and in 1936, Tampax, the first internal tampon, was developed. Interestingly, the ideas for both of these products originated with nurses.[4]

As a result of developments such as an enlightened understanding of the physiology of female reproduction, technological advances in menstrual absorbents, and greater involvement of women in the work force, women no longer remain confined to the home during menstruation. They find themselves, however, in an atmosphere where menstruation is considered an unclean event that is to be concealed.

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As Stubbs observed, "Unfortunately, cultural beliefs about menstruation *are* currently negative. It is not surprising that most reports of menstrual experiences reflect negative attitudes about and describe negative accounts of menstruation."[5(p54)]

The research reported here focused on the discrepancy between what is known about integrating menstrual care practices into daily activities and what must be learned to help women manage this aspect of their health. Managing the menstrual flow is not an event that occurs in a social vacuum. Menstrual care practices take place within a framework of daily living that includes other people, places, and events. No research could be found in the literature that described or conceptualized the process of integration. Therefore the purpose of this research was to discover

how women integrate menstrual care practices into their activities of daily living.

STUDY SIGNIFICANCE

Orem[6] briefly discussed self-care as a subsystem of the system of daily living, and encouraged nurses to look at how patients incorporate self-care actions into their activities of daily living. According to Orem,[7] when individuals are well, self-care is not a major concern and individuals follow a habitual pattern of self-care. Ill persons, however, may experience new and more self-care requisites in a totally different time distribution. Menstruation, which is one of Orem's developmental self-care requisites, appears to share commonalities with universal self-care requisites (health) and health deviation self-care requisites (illness). Though menstruation is clearly not an illness, it does precipitate different self-care requisites that are not present every day of a woman's life.

Investigating how women integrate menstrual care practices into their activities of daily living may provide useful information that can be applied to the larger problem of helping people integrate any new developmental or health-deviation, self-care practice into their lives. Additionally, identification of the conditions and contexts where integration is facilitated or impeded may provide information that is transferable to other domains of self-care.

Furthermore, Diers[8] said that in a factor-searching study, such as this, a worthy justification for the study may be that a nurse has never looked at the phenomenon before; and the nursing perspective "may bring to the study a richness not available in existing studies by investigators more remote from the clinical impact."[8(p103)] Because menstruation is an all-encompassing social, emotional, and biological event, it needs to be investigated as it is grounded in the everyday lives of healthy women. It has been assumed that women practice menstrual self-care and that menstrual self-care is equated with use of modern sanitary products to collect the menstrual flow. How these practices, in reality, are put into operation in the daily lives of women is not known. The nursing perspective, because it emanates from the interface of health care practices and the daily lives of individuals, is a relevant approach to bring to the study of menstruation.

LITERATURE REVIEW

Until the occurrence of toxic shock syndrome, little was published about menstrual care practices. Most menstrual cycle research focused on negative behaviors and physical symptomatology surrounding menstruation, but not the phenomenon of menstrual flow. It is possible that the menstrual taboo governing discussion of menstruation may have exerted an effect on the questions posed and not posed by researchers.

A review of menstrual cycle literature demonstrated that considerable research has been directed toward problems associated with menstruation, specifically premenstrual distress and dysmenorrhea. Contrasted with this has been the absence of research on the healthy dimensions of menstruation. Additionally, data are scarce on the role of menstrual flow per se in premenstrual distress or dysmenorrhea. Research on menstrual flow has been from a physiologic perspective and has provided

quantifiable information about variables such as volume of blood loss during menstruation and duration of menstrual flow.

The literature is essentially void of investigations into how women manage their menstrual flow. Studies done in the area by menstrual product companies are proprietary and are rarely released. Because research was not identified that described or conceptualized how women integrate menstrual care practices into their activities of daily living, this study was initiated.

METHODOLOGY

Glaser and Strauss'[9] methodology for the discovery of grounded theory, often referred to as constant comparative analysis, was selected as an appropriate research strategy for this project. This methodology has been most productively used in studying previously unresearched areas and in gaining fresh perspectives on familiar situations.

When using grounded theory methodology, a substantive theory is generated from data obtained through interviews, observations, reviews of written documents, or a combination of the previous methods. Each piece of data is compared with every other piece, and data collection is directed by the ongoing advancing theory. False leads are dropped and new questions may appear. Instead of using random sampling techniques, theoretical sampling is used where the researcher looks for situations that provide new properties of the main categories and for situations that support or do not support the developing theory. The final product of this methodology is a substantive theory that will conceptualize the processes of a given phenomenon.[10]

Grounded theory methodology was an appropriate choice to approach the research question for two reasons. First, considerable criticism has been directed to the lack of fit between theory and practice in studying women's experiences.[11-16] This lack of fit makes clear the need to examine subjective experiences as they are gounded in the daily lives of women and to reexamine extant theories in light of these new data. It is particularly important that this be done in domains of women's lives that have for many years been shrouded in secrecy and obscured by myth and misogynous theory. Menstruation is such an area.

Second, at this stage in the development of nursing science, it is important that diligent efforts be made to conceptualize accurately phenomena that occur within the nursing domain. This effort will provide the sound foundation on which further theory development and concept formalization can be built. Grounded theory methodology has proven to be a rigorous avenue by which concepts grounded in the raw data can be isolated.[17-24]

Data collection

Sampling

Initial interviews were conducted with members of a women's volunteer organization, a ready source of healthy women living in the community. Once the theory began to emerge, other women were identified and selected for interviews because of theoretically relevant variables, such as the nature of their work. A total of 25 women were formally interviewed.

Sampling through formal interviews was not the exclusive method of data collec-

tion. Anecdotes shared by friends and colleagues, as well as personal menstrual experiences, aided in the development of theoretical sensitivity, and confirmed and disconfirmed emerging hypotheses. Opportunities for serendipitous sampling were numerous—overhearing conversations in public restrooms, taking a camping trip with eight women, reading advertisements for pads and tampons, and even engaging in cocktail party conversations.

Interviewing

The primary method of data collection was through interviews with women menstruating at the time of the interview. Glaser and Strauss[9] also suggested that data could be gathered through observation and review of written documents. Because social norms dictate that menstruation be concealed, observation, by corollary, would doubtfully yield a significant amount of data. Second, the review of the literature suggested that a considerable amount of mental activity might be involved in these integrative processes. Therefore, interviewing seemed to be the most appropriate mode of tapping into these mental efforts.

With the woman's consent, the interview was taped, and once transcribed, the tape was erased. The interviews ranged from approximately 30 minutes to one hour and yielded 260 pages of single-spaced transcriptions. The early interviews began with an open-ended question such as, "When thinking about what you've done today (or yesterday), how did managing your menstrual flow fit into your activities?" When cues were needed, the following questions were posed: "Where were you when you changed your pad or tampon?" "What were you doing before and after you changed your pad or tampon?" and "When did you change your pad or tampon?" As the grounded theory emerged, these general questions were replaced with theory-specific questions, such as, "How does the day of your period affect how you go about managing your menstrual flow?"

Data analysis

The process of data analysis involved coding, memoing, and sorting. These components were interwoven with data collection and did not always follow in sequential order. Transcriptions were coded line by line, with the analyst focusing on the process in which the subject was engaged. Ongoing comparison of incidents and codes revealed similarities and differences, and many codes were collapsed into higher-level concepts. Memoing was the writing up of theoretical ideas sparked by the coding. Last, the memos were sorted with the goal of arriving at the most parsimonious set of concepts that represented the phenomena under study. Sorting forces drawing of relationships between concepts, as well as stimulating the analyst's creativity.

Limitations

Several limitations of the study were encountered. First, there was only one investigator. Diers[8] said that the process of reviewing field notes, developing concepts, and returning to the field for more data collection profits from discussions with others and multiple perspectives. In this study, discussions with other women, committee members, and experts in grounded theory methodology were used to offset

the limitation of a single investigator. Additionally, during early data collection and analysis, the researcher was sensitive to her own surprise and used this as a barometer of her openness to the emerging data.

Another limitation was one of time. While the researcher has complete confidence in the categories generated, more time and further comparisons might yield additional nuances, such as variations in contexts and conditions on the discovered categories. Related to this limitation is the need for further comparative groups. While the researcher attempted to search for many theoretically relevant comparison groups to saturate the categories, other useful comparative groups probably do exist.

THE SUBSTANTIVE THEORY

Unlike most eliminative processes, menstruation, when it is occurring, is a continuous phenomenon and is not under voluntary control. Because the flow is ever present during a woman's menstrual period, a continuous demand exists to manage the menstrual flow. Although the menstrual demand cannot be ignored, other demands of daily living often assume higher priority. The problem becomes one of continuing to participate in daily living while not having the menstrual demand interfere. Women do not want to "have to worry about" or "think about" the menstrual demand. One subject, a lawyer, expressed her concern about making sure, stating:

> Now court, this is a very limiting thing. And it causes consternation. You can be sure I wouldn't wear a white skirt then, because that would be the last thing I would want to worry about. If I'm in that courtroom, and I'm going in at nine, I may not start until ten-thirty, and I may be striking a jury until eleven, and I've been talking to people all that time, and I have not had time to think about me. And then I'm standing there in the middle of the courtroom, and all of a sudden I do. From that moment on, I've got half my mind on the case, 'cause the other half is thinking, "Well, I'm gonna start flooding all over this courtroom."

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Frank discussed how, through physiologic adjustments such as toilet training, elimination processes are transformed from purely physiologic events to cultural events "in the sense that their occurrence now becomes dependent upon external situations and cultural requirements rather than intra-organic functional needs."[25(p114)] Menstruation differs from eliminative processes such as urination and defecation in that there is no physiological mechanism that allows for voluntary control over the elimination act, and the nature of menstruation precludes its being a brief, time-limited phenomenon.

No physiologic mechanism exists with which to transform menstruation from a purely physiologic event to a cultural event; nonetheless, menstruation has been transformed into a cultural event through the institution of self-care adjustments. The self-care adjustment made by the women in this study formed the core category of making sure. Making sure allows a culturally appropriate response to

a physiologic process, while at the same time it minimizes the time and effort directed to menstruation. Thus daily demands of higher priority will not be neglected because of distractions from the continuous menstrual demand.

Making sure is the process that enables menstruating women to continue their daily activities knowing that the current menstrual care practice is effective and that future menstrual demands can be met easily and readily. Making sure provides a sense of certainty that lasts for varying lengths of time and solves the problem of "having to worry about it." A considered decision alone, or a decision and action together stemming from the menstrual demand, is made that allows attention to be directed to other daily activities. "I make sure and then I can go about my business."

Making sure is a goal-directed process that is highly individualistic and varies with the social context. Making sure can be a way of ensuring personal cleanliness and comfort, protecting the environment such as clothes and sheets, and preventing social revelation of the menstruating state. Making sure recurs throughout the menstrual period. Though the process involves some effort and energy, it is a relatively brief operation that serves to isolate managing the continuous menstrual demand to a discrete, efficient, time-limited segment of the day.

Accidents: errors in making sure

Accidents occur when the menstrual demand exceeds the effectiveness of the menstrual care practice and may be visible to others or known only to the woman herself. An accident is "when I just completely mess up everything—underpants, slip, and sometimes skirt or pants." Accidents happen most often when there is a change in the known pattern of menstrual flow, when attention to the menstruating state is absent, when miscalculations are made, and when situational constraints inhibit the making-sure process.

Day of flow: a condition affecting making sure

For the cognitive purpose of making sure, the day of flow, described as "heavy days," "light days," and "ordinary days," is used as a useful temporal point of reference. The day of flow serves as a reliable predictor of the menstrual demand, particularly the quantity and duration of flow. Quantity of flow is correlated with the day of menses.

Making sure occurs more frequently on heavy days because of increased menstrual demand. Likewise, light days are safe days, and less energy is directed to making sure. Accidents are more likely to happen on heavy days, because it is then that the menstrual demand may exceed the effectiveness of the menstrual absorbent.

Backup mechanisms: strategies to enhance making sure

Backup mechanisms are used "for assurance," "so I won't have to worry about it," "just in case," and "for safety's sake." Backup mechanisms increase the chance that the menstruating woman will become aware of an accident before others might and decrease the chance that outer clothing will be soiled. Backup mechanisms

include the use of more than one menstrual absorbent, selection of dark or plaid clothes on menstruating days, and the use of towels to protect the environment, particularly bed sheets during sexual activity. These preventive mechanisms are used especially on heavy flow days, when situational constraints hamper making sure. As one subject commented, "I used a pad just for extra protection because there are a lot of times I know I need to go change and I can't get away from the classroom right that minute. And so usually the first couple of days, I tend to overprotect myself rather than run the risk of really being in bad shape."

Public and private: contexts affecting making sure

Private and public contexts significantly alter and are altered by the making-sure process. Control over revealing information about the menstruating state is an inherent aspect of making sure. Making sure precludes having to worry that social disclosure might occur. Because of the nature of the private context, worry over social revelation is diminished, and therefore the need to make sure lessens.

Making sure maintains privacy and keeps other significant individuals from knowing a woman's menstruating state. These individuals might be employers, coworkers, children, students, and chance acquaintances. While maintenance of menstrual privacy is a consistent dimension of making sure, considerable variability exists concerning who must be kept from knowing specific information about the menstruating state.

SUBPROCESSES OF MAKING SURE

The making-sure process is comprised of three subprocesses: (1) attending, (2) calculating, and (3) juggling. These stages of making sure are analogous to Orem's[26] types of self-care operations—estimative, transitional, and productive—and provide substantive elaboration on these concepts. *Estimative* operations are oriented to the individuals making judgments about what is; *transitional* operations end in a determination of what should be done; and *productive* operations are the regulatory activities.

Attending

The need to assess the current menstrual demand comes into and out of awareness throughout the day and, for some women, the night. This attending to the demand is referred to as "staying on top of it," "keeping track of it," and "looking for it." It is the making sure process that allows for this intermittent vigilance to occur so that women do not have to attend continually to the continuous menstrual demand.

Prompters are deliberate strategies to facilitate remembering. Making a mental note to change the menstrual absorbent at a particular time is one prompting strategy. According to the observation of one subject, "Sometimes I'll like time it, like every three hours. When I get up in the morning I'll see how long I can go before I need to change it, and then I'll just kinda keep that time in mind and I watch the clock sometimes, and usually it's about every three hours."

Though not deliberate strategies to facil-

itate attending, reminders serve as useful, impromptu, memory-jogging strategies. Often tactile somatic reminders bring the menstruating demand into awareness, as in the case of tampons: "feeling like the bottom is falling out," "feeling like it's dropping out," and a "heavy feeling."

Calculating

Calculating is the second stage of the making-sure process, and is analogous to Orem's[26] transitional operation. It is a cognitive process that is conditioned by a woman's hierarchy of values and results in a decision about what to do with respect to self-care. As with the other subprocesses, calculating is done with the goal of making sure.

Menstrual-care practices take place within a larger system of daily living, and it is how these practices articulate within the broader system that is an important aspect of calculating. Additionally, knowledge of the menstrual flow demand and the effectiveness of self-care practices in relation to the demand is essential for calculating the appropriate self-care operation.

Calculating occurs after the need to attend to the menstrual demand has come into awareness and the menstrual flow is assessed. A determination must be made of the most appropriate action to meet the present demand. Timing and guessing can be used in making the decision. The woman thinks back and calculates the time since she last changed her absorbent. She considers this along with her knowledge of her flow, most often conceptualized as the day of flow.

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In calculating for the future or planning, several variables must be considered. The value of some of these variables may be known and anticipated, but other contingencies are not predictable. By calculating, these new contingencies can be anticipated and managed before their occurrence. Calculating is achieved by expecting the unexpected. The unexpected can be a location constraint, a time constraint, or an equipment constraint. In describing her method of calculating one woman stated that: "Sometimes on the heavy days I go ahead and change. Like I say, lots of times I'm going in and out of the office and if I'm going out and I'm not knowing when I'm going to get back, then I'll go ahead and change knowing that I might get into a situation where I can't."

Juggling time, space, and supplies

The third phase of the making-sure process is juggling of time, space, and supplies, and is analogous to Orem's[26] productive type self-care operation. The result of this operation is the performance of self-care operations. For the menstrual self-care practice of changing to occur, time, space, and supplies must coincide.

Finding the time to practice menstrual care, or "having a chance," may be difficult within work constraints. If work breaks do not coincide with the menstrual demand, or if the menstrual demand requires more time than breaks provide, request for assis-

tance from another individual may give the woman the brief respite she needs from her duties to practice menstrual care. A woman working on an assembly line reported how she juggled her duties. "Well you ask your mechanic on your machine, 'Will you get somebody to relieve me?' and he will go see somebody in an area where there's not really that much work. He'll go there and get somebody and then you go to the bathroom and come back."

Finding an appropriate physical setting in which to practice menstrual care is most often not as problematic as finding time. In familiar settings, women are aware of the location and accessibility of private locations. Certain regions are set aside for particular modes of behavior,[27] and the bathroom is most frequently designated the choice location for practicing menstrual care.

Menstrual care is often fused spatially with the performance of other eliminative and hygienic functions, and gives rise to the euphemisms "going to the bathroom," "run to the ladies' room," and "go powder my nose." When this fusion occurs, there is either a synchronization of bladder and menstrual demands or one activity, voiding or changing, is perfunctorily performed along with the perceived demand.

Being "hemmed in" a social situation where exiting is difficult can be anxiety provoking when a woman has determined that checking or changing in a private location is required. Hemmed-in situations can arise out of status and power differences as in the case of judges and trial lawyers, teachers and students, and supervisors and employees. Social norms also create hemmed-in situations, as in the following vignette.

> Today after I had been thinking all morning, practically every hour, "Jane, you need to change it," we had this long lunch. We had a speaker at lunch, an hour and a half, and I was going, I was frightened, I knew I wasn't flooding, but I just felt like I was. And I was sitting in these white material chairs, and I was going, I sat on my hands most of the time. I was going, "Oh get me out of this place." I was on my hip and everything. I didn't have time to change before. I was miserable, I was a wreck.

In an effort to facilitate the juggling of time, space, and supplies, women make an effort to have a supply of menstrual absorbents readily available. These supplies, which have the potential for being stigma symbols, are kept under various forms of cover in public contexts: purses, briefcases, diaper bags, suitcases, beach bags, desk drawers, automobile glove compartments, and backpacks. There is some variability in the concealment of these supplies in semi-private contexts such as homes and public restrooms, and this concealment is directly related to how much information control the woman desires over individuals in those settings.

On occasion, there can be a demand for an impromptu menstrual absorbent. This may happen when supplies are forgotten, when miscalculations are made, and when a backup mechanism is needed, particularly on heavy days. One woman described this as makeshifting: "There has been some time when I have not had anything to change and just had to do the best I could with what, and makeshift. I have makeshifted with toilet paper before." Other items used in makeshifting include tissues, paper towels, and washcloths.

Finally, the first two phases of making sure, attending and calculating, are pri-

marily solitary experiences. In juggling time, space, and supplies, however, assistance from other women often facilitates the process. Assistance may be requested by the woman attempting to juggle, or it may be proffered by another woman:

> Once we were at a symphony concert over at church and this lady had on this beautiful beige suit. And when she got up she had soiled her clothes, and before a lady could reach to touch her, a man did. He stood up behind and he said, "Miss, you need to sit down," and the lady, I don't know, she seemed, I know it probably frightened her. So I reached over and I said, "It's something personal he's talking about." She eased down. He said, "Well you tell her." I said, "You have soiled your clothes." She just kinda dropped her head, she was really embarrassed. I don't know if it was so much she was embarrassed or she was hurt or what. She just sat there. And I said, "Are you all right?" She just said, "Yes, fine, thank you, I'm so embarrassed." And I said, "Well, it can happen to anybody." She said, "But I wasn't looking for it 'till, maybe I had three more days." I said, "Well, sometimes things just happen. Maybe it was due to the excitement of the concert because the orchestra, it was good. I didn't know they had gotten that good, you know. Maybe it's due to that." I said, "You just can't sit here until everybody leaves. I'll tell you what you do. Just turn the skirt around to the front and then get up and walk." And she said, "OK, is anybody looking?" I said, "Everybody's just shaking everybody's hand, talking, no one is looking. Just unbutton it, then turn it around to the front right quick." So she kinda didn't quite stand up, just raised her body up, enough to unbutton it, turned it around the front, and she said, "Thank you, dear." She was just sweating all at once. You know, she was really upset and she walked on out. And then that man came to me later and he said, "Thank you, Miss, because I really didn't know how to tell her. The first thing I knew I had my hand on this strange woman's shoulder," and then he said, "I got speechless." And I said, "Well, that was very courteous of you." He said, "OK then, thank you," and he went on. And then a friend of mine said, "Did you know that man?" I said, "No." Now he's (the friend) sitting right beside me applauding and still didn't know what was going on. He thought I knew the man and we knew the lady, you know. He didn't know what was going on. Some people are very observant and some people are not. But thank God it never has happened to me.

IMPLICATIONS

Theory development

As noted earlier, the making-sure process closely parallels Orem's[26] types of self-care operations. In essence, the making-sure process is a substantive explication of self-care operations. Additionally, Orem has said that it is important to examine how self-care practices fit into the larger system of daily activities. Though Orem does not give any theoretical direction to examining this question, the theory generated here does provide some substantive suggestions. The concepts of attending, calculating, and juggling can potentially be applied to any recurrent self-care operation that must be integrated into the broader scheme of daily activities.

In considering how this substantive theory might be used in the generation of further, higher-level theory, the idea of menstruation as an involuntary eliminative process kept recurring. A brief review of the ostomy literature revealed several commonalities between making sure and the process ostomates use to meet their self-

care demands as they continue to participate in activities of daily living. Perhaps the commonality between these two processes stems from the cultural notions of elimination as a taboo subject and the high value placed on achieving self-control of elimination.

There appear to be enough commonalities between the processes used by menstruants and ostomates to justify further comparison of the groups in an effort to develop a substantive theory of managing involuntary eliminative processes within a framework of daily activities. Other comparative groups could be individuals experiencing chronic inflammatory bowel disease, individuals with urinary incontinence, and lactating women.

Practice

Accounts from women interviewed for this study indicate that making sure was difficult to accomplish during their early experience with menstruation. They had not yet learned the appropriate processes delineated here. Additionally, by virtue of adolescents often being in situations where they have little control over exiting, such as classrooms, juggling was even more problematic.

The theory of making sure contains conceptual elements and relationships between these elements that would be a useful tool for the nurse functioning in the educative role with clients anticipating menarche. For example, day of flow has been shown to be a useful way of conceptualizing qualitative and quantitative changes in the flow, backup mechanisms are helpful in preventing possibly embarrassing accidents, and juggling clarifies how menstrual care practices are performed in both public and private contexts.

Also for the nurse functioning in the educative role, concepts from this theory may be useful in assisting menstruating women in decreasing their risk of toxic shock syndrome. Current data[28] suggest that tampons serve as a source of oxygen for staphylococci in the vagina and that frequent changing of unsaturated tampons may result in vaginal trauma and increased oxygen content in the vagina. Additionally, the higher the absorbency of the tampon, the more oxygen is introduced into the vagina. All of these factors increase the risk of contracting toxic shock syndrome.

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Women, therefore, need to learn their own flow patterns and their own requirements for tampons of differing absorbencies, specifically what is the lowest absorbency that will conveniently meet the menstrual demand while considering other daily demands. In this way, trauma and excessive introduction of oxygen can be avoided while continuing to meet the menstrual demand through the use of tampons. The concepts generated for this theory, such as day of flow, backup, attending, calculating, and juggling, could be useful in understanding present practices and in

giving direction for changing these practices if indicated.

Research

Further elaboration of the concepts isolated in this research project is possible by identifying other comparative groups. For example, variations in monitoring, particularly attending to somatic cues, may exist between women who use pads and women who use tampons. In this study, only two women used pads exclusively, and the differences were not investigated. Another comparative variable could be income level. For example, do economically poor women integrate any differently as a result of constraints that make purchasing supplies difficult?

Since day of flow is a significant and reliable predictor of menstrual flow, research to explicate how women come to know their own flow patterns would be useful. Particularly helpful would be the identification of critical experiences that shaped this knowledge. Additionally, how women detect and reconceptualize changes in flow patterns would merit investigation.

Finally, the questions posed by scientists can serve to perpetuate and also create values. As noted in the literature review, research surrounding menstrual experiences has centered on negative effect and physical symptomatology. One of the goals of this research was to examine menstruation from a nonpathological perspective, a perspective emanating from the daily lives of healthy women. Further research, originating from a nonpathological perspective, could serve to identify other dimensions of the menstrual experience. Anne Frank's beautifully balanced view of menstruation exemplifies these varied dimensions of the menstrual experience:

> Each time I have a period—and that has only been three times—I have the feeling that in spite of all the pain, unpleasantness, and nastiness, I have a sweet secret, and that is why, although it is nothing but a nuisance to me in a way, I always long for the time I shall feel that secret within me again.
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> Wednesday, January 5, 1944[29(p143)]

REFERENCES

1. *Tampax Report.* Lake Success, NY, Tampax Inc, 1981.
2. Taylor WC: *A Physician's Counsels to Woman in Health and Disease.* Springfield, WJ Holland, 1871.
3. Bullough VL, Vought M: Women, menstruation, and nineteenth century medicine. *Bull Hist Med* 1973;47:66-82.
4. Delaney J, Lupton MJ, Toth E: *The Curse.* New York, EP Dutton, 1976.
5. Stubbs ML: Period piece. *Adolescence* 1982;17:45-55.
6. Orem DE: Application of theory in education and service. Paper presented at the Second National Nurse Educator Conference, New York City, NY, Dec, 4, 1978.
7. Orem DE: *Nursing: Concepts of Practice,* ed 2. New York, McGraw-Hill, 1980.
8. Diers D: *Research in Nursing Practice.* Philadelphia, Lippincott, 1979.
9. Glaser GB, Strauss AL: *The Discovery of Grounded Theory.* Chicago, Aldine, 1967.
10. Glaser BG: *Theoretical Sensitivity.* Mill Valley, Calif, Sociology Press, 1978.
11. Benoliel JQ: Self as critical variable in sensitive research in women's health, in Oleson V (ed): *Women and Their Health: Research Implications for a New Era.* US Dept of Health, Education, and Welfare publication No. (HRA) 77-3138. Rockville, Md, Health Resources Administration, 1975.

12. Gilligan C: *In a Different Voice.* Cambridge, Mass, Harvard Univ Press, 1982.
13. Miller JB: *Toward a New Psychology of Women.* Boston, Beacon Press, 1976.
14. Oakley A: Interviewing women: A contradiction in terms, in Roberts H (ed): *Doing Feminist Research.* Boston, Routledge & Kegan Paul, 1981, pp 30-61.
15. Reinharz S: *On Becoming a Social Scientist.* San Francisco, Jossey-Bass, 1979.
16. Stanley L, Wise S: *Breaking Out: Feminist Consciousness and Feminist Research.* Boston, Routledge & Kegan Paul, 1983.
17. Dickson GL, Lee-Villasenor H: Nursing theory and practice: A self-care approach. *Adv Nurs Sci* 1982;5:29-40.
18. Hutchison SA: Survival practices among rescue workers: Hidden dimensions of watchful readiness. Washington, DC, University Press of America, 1983.
19. O'Brien ME: Pragmatic survivalism: Behavior patterns affecting low level wellness among minority group members. *Adv Nurs Sci* 1982;4:13-26.
20. Pyles SH, Stern PN: Discovery of nursing gestalt in critical care nursing: The importance of the gray gorilla syndrome. *Image* 1983;15:51-57.
21. Simms L: The grounded theory approach in nursing research. *Nurs Res* 1981;30:356-359.
22. Stern PN: Stepfather families: Integration around child discipline. *Issues Ment Health Nurs* 1978;1(2):50-56.
23. Stern PN: Grounded theory methodology: Its uses and processes. *Image* 1980;12:20-23.
24. Wilson HS: Limiting intrusion—social control of outsiders in a healing community. *Nurs Res* 1977;26:103-111.
25. Frank LK: Cultural control and physiological autonomy, in Kluckholn C, Murray HA (eds): *Personality in Nature, Society, and Culture.* New York, Knopf, 1950, pp 113-116.
26. Orem DE (ed): *Concept Formalization in Nursing,* ed 2. Boston, Little, Brown, 1979.
27. Rosengren WR, DeVault SL: The sociology of time and space in an obstetrical hospital, in Proshansky HM, Ittelson WH, Rivlin CG (eds): *Environmental Psychology: Man and His Physical Setting.* New York, Holt, Rinehart & Winston, 1970, pp 439-453.
28. Osterholm MT: An overview of the design and performance of menstrual hygiene products. Paper presented at a Conference on Menstruation, University of Medicine and Dentistry of New Jersey-Rutgers Medical School, Atlantic City, NJ, April, 1983.
29. Frank A: *The Diary of a Young Girl.* Garden City, NY, Doubleday, 1952.