Watching & Worrying: Early Pregnancy after Loss Experiences

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Côté-Arsenault, D., Donato, K, & Earl, S.S. (2006). Watching and worrying: Early pregnancy after loss experiences. *MCN The American Journal of Maternal Child Nursing, 31,* 356-363.

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Abstract:

Purpose- To describe women's early pregnancy after loss experiences (up to 25 weeks gestation), to document the timing and frequency of their common discomforts and events, and to explore changes in these over time.
Study Design: Longitudinal, qualitative descriptive, and triangulated (data, methods, analyses).
Methods- Qualitative data were collected from 82 women pregnant after a past perinatal loss, who were followed through their 25th week gestation. Field notes were taken on all women; 75 women recorded events of their pregnancy through text and stickers on an investigator-supplied calendar. Thematic analysis was done from field notes and hand-written calendar entries; content analysis was conducted on sticker-entered events and symptoms.
Results- Themes identified in the data were Growing Confident, Fluctuating Worry, Interpreting Signs, Managing Pregnancy, and Having Dreams. The first four themes comprise the see-saw nature of these pregnancies. Managing Pregnancy includes the subthemes of Being Hypervigilant, Seeking Reassurance, and Relying on Internal Beliefs. The theme of Having Dreams was a serendipitous finding, in the sense that women reported their dreams without prompting, but the data did not reach saturation. Future research in this area is suggested. Calendar stickers indicate that fatigue and headaches are the most commonly reported discomforts. Fetal movement, felt by all the women by 25 weeks gestation, was very reassuring.
Clinical Implications- Nurses should understand that women who have experienced a previous pregnancy loss have omnipresent worry and anxiety during a subsequent pregnancy, and seek reassurance that their pregnancy and baby are okay. Therefore, the frequent calls and visits to healthcare providers from these women represent their most common and comforting way of coping with their worry.

Article:

Undertaking a new pregnancy when your history includes a pregnancy loss elicits a myriad of responses. Maintaining hope amid fears is not easy, as related by the following journal excerpt of S., a woman with a history of a 16-week loss (pseudonyms are used throughout.)

> “Week 11: Ordered Doppler after hearing heart beat at doctor's. Can't stop smiling 'cause [it] arrived! Tried it immediately. Makes baby feel more ‘real’ to hear … heartbeat at my own home.
>
> Week 12: I feel safe hearing the heartbeat … now. Had a … nightmare this morning: was going to pee, but saw the stain of … fresh, wet blood in my jeans … it was as if I had gone back to the worst hemorrhaging day before the D&C. Large clots spilled from my body … I woke screaming for Joe. In reality I did go pee but no spotting … restrained myself from listening … for heartbeat. … [Later] we heard it. Whew! I felt … I was perhaps being punished for letting my guard down.
>
> Week 13: Feel really good today … wore front-panel jeans - other pants can't be zipped anymore!
>
> Week 14: Today is my previous EDD [due date]. Very, very surreal and difficult. I feel sad … I wish there were only joyful thoughts in my head but today there is a lingering feeling of loss - of what should have been … Today is the first day I have felt or said, I love this baby.
>
> Week 15: Doctor said she would feel better once I get to 20 weeks because there was no cause for last loss.… I plan on sharing the ‘news’ with 3 more friends … tonight.
>
> Week 16: Looking at next week. I have never been 17 weeks before. I sort of feel like it may be borrowed time. Will I be okay? Able to relax more?
>
> Week 19: anatomy sonogram; amazing, sucking, swallowing, kicking…some swelling and retention of fluid noted in the ureters … trying not to worry …
>
> Week 22: looking forward to the next sono to get the ‘all clear’ on the kidneys. I am excited and scared; but I do think this child will be born alive. I am waffling between feeling scared that we could lose this baby and feeling terrified of life with a newborn.”

This quote illustrates the events and themes characteristic of the fluctuating thoughts, emotions, and coping strategies women experience across their pregnancies after previous perinatal loss. Such women are known to be more anxious about their pregnancies than women without a loss history (Côté-Arsenault, 2003); however, there are no published prospective, longitudinal studies to date documenting their experiences of dealing with their worries and concerns.

Perinatal losses in the first 20 weeks of gestation (miscarriage) occur in nearly 25% of all conceptions. Later losses (stillbirth) occur in about 8% of the conceptions, and newborn deaths account for about 7% of live births (Gemma & Arnold, 2002). Women's responses to these losses range from acceptance to disappointment or anguish, and are often followed by an extended period of grieving (Gemma & Arnold). Becoming pregnant again, which occurs frequently, is like returning to the site of a past trauma where dreams were shattered. Unlike earlier pregnancies where excitement and anticipation were common, pregnancies that occur after a

previous loss are characterized by anxiety and worry about another loss, comparisons with past pregnancies, and holding back attachment to this pregnancy and baby (Armstrong & Hutti, 1998; Côté-Arsenault & Marshall, 2000). In addition, evidence of altered parenting with children subsequent to a loss has been described by Heller and Zeanah (1999) and by Hughes, Turton, Hopper, McGauley, & Fonagy (2001), both of whom found infant attachment at 12 months to be less secure (i.e., more disorganized) in infants after stillbirth when compared with infants of parents without perinatal loss. The authors causally link attachment and parenting, that is, reduced attachment leads to changed parenting.

Descriptions of women's pregnancy after loss experiences reveal a "constellation of concerns and contrasting emotions" related to the pregnancy, self-image, relationships, and loss (Côté-Arsenault, Bidlack, & Humm, 2001, p. 128). Qualitative and cross-sectional studies have shown that pregnancy anxiety fluctuates in response to pregnancy symptoms and prenatal assessments. However, women's experiences, emotions, concerns, and coping methods across pregnancy have not been examined. The purpose of the study, therefore, was to describe women's early pregnancies after loss (PAL) experiences (up to 25 weeks gestation), to document the timing and frequency of their common discomforts and events, and to explore changes in these phenomena over time.

The investigation was guided by Lazarus and Folkman's (1984) cognitive appraisal theory.

METHODS

Design

This was the qualitative component of a multiple-triangulated longitudinal study, that is, one that combined two or more types of triangulation: methods, data sources, and analyses (Burns & Grove, 2005). As it has been proposed that stresses in pregnancy have negative consequences on the mother, the fetus, and the subsequent parent-child relationship (Mulder et. al., 2002; O'Connor, Heron, Golding, Beveridge, & Glover, 2002), and qualitative studies of PAL substantiate that women experience many emotional ups and downs (Côté-Arsenault & Marshall, 2000), this study sought to capture day-to-day and week-to-week fluctuations. In order to do this, pregnancy calendars were given to the women to chronicle their personal experience, supplementing the 10-week quantitative data collection.

This was a qualitative descriptive design (Sandelowski, 2000) with multiple triangulations. Within-method triangulation was achieved through data collected from two perspectives: investigator-gathered field notes and participant-selected stickers, notes, and narratives. Triangulated analysis included thematic analysis (Morse & Field, 1995) and content analysis of data (Weber, 1990). [Analysis is described under "Trustworthiness."]

Sample

Eighty-two women participated in a larger study of threat appraisal, coping, and emotions across PAL. Concurrent with completing quantitative instruments at 10-week intervals, researchers recorded field notes, and the women recorded events and thoughts during their pregnancy on a calendar. Qualitative data consisted of field notes and entries on the self-completed calendars (provided stickers and hand-written notes) through 25 weeks gestation. This endpoint coincides with fetal viability and the second data collection point for the larger study.

Through convenience and snowball sampling, pregnant women were recruited through community canvassing, public and private obstetrical practices in central New York, and internet pregnancy loss support groups in the United States. All women met the inclusion criteria of English fluency, previous spontaneous pregnancy loss, and not yet feeling fetal movement. From 2002 to 2004, 82 women, 20–42 years of age, entered the study between 10 and 17 weeks gestation. The women were of low to high obstetrical risk and had histories of one to seven losses per woman ($M = 2.1$; $SD = 1.3$) ranging from 3.5 to 40.5 weeks gestation, yielding a total of 171 perinatal losses in the sample (82.4% miscarriages, 4.7% ectopics, 8.2% stillbirths, 4.7% neonatal deaths). In addition, there was a history of 15 elective abortions. The majority of women (69%) had one to five living children; 30.9% had no living children. The socioeconomic status of the sample was varied: education ranged from 10 to 21 years, 72.3% of the women were married, family income ranged from 0 to more than $120,000 (mode = $60,000–79,000). Most were Caucasian (86.7%), 7.2% were African American, and 6% were of other races or ethnicities.

The study was approved by all the Institutional Review Boards at involved institutions. Written informed consent was received from each participant. Ten dollars were paid for participation at each 10-week data collection point.

Data Collection

Potential subjects gave permission for contact through their care provider or called us directly. Initial contact was made by telephone, and then a face-to-face or telephone contact was arranged with each participant. Meetings took place at the location of their choice: home, provider office, the research office, or a public place. Those living outside the geographical region were mailed their materials, and phone appointments were made to complete quantitative instruments; completed calendar pages were mailed in. After answering all questions, we obtained informed consent, recorded stories, took field notes, and completed the first set of quantitative instruments. The goal of the first appointment was to orient each woman to the study, the instruments, the pregnancy calendar, and the researchers. Women generally introduced themselves and their families, shared their past pregnancies and loss stories, and asked questions about the study. A second appointment for data collection was made between 20 and 25 weeks gestation. Again, field notes were made and pregnancy calendars were copied.

Interactions with each woman were described in hand-written field notes. Main topics, significant quotes, and contextual data were noted during or immediately following the appointment. Comments were shared by the women regarding events in pregnancy (EiP), especially stresses, prenatal tests, and prenatal visits. Some women contacted us between data collection points, and significant comments or events were reported in the field notes.

Events in Pregnancy Calendar. As women mark their pregnancies by weeks of gestation, the use of calendars for individual documentation was deemed natural. Calendar use also reduced the need for recall, leading to more accurate information (Burns & Groves, 2005).

Calendars were designed to record significant events in the pregnancy as they occurred. Participants were provided a 9 × 11" blank calendar, with two pages per month and space

labeled “Other Thoughts or Events” on the back. Stickers were designed to give participants ideas of what they were being asked to record: for example, common pregnancy-related discomforts, prenatal visits, stressful events, and phone calls to provider (see Table 1). This sticker and brief description format was chosen so the women would record but not necessarily analyze events.

The EiP calendar was pilot tested with nine pregnant women, at 17.5–41 weeks gestation, all with at least a high-school education. All felt it was a good idea that was helpful to track their pregnancies, and very understandable. Additional sticker suggestions were incorporated into the final version.

Reminders to write on EiP calendars were sent to women by mail, e-mail, or telephone (their preference) every 1–4 weeks. The women kept their original calendars.

Trustworthiness and Data Analysis

Lincoln and Guba's (1985) four criteria of trustworthiness for qualitative studies (dependability, confirmability, credibility, and transferability) served as standards for this work. Use of a research team (the principal investigator [PI], a research assistant who was an advance practice nurse on the clinical faculty, and two students) increased the study trustworthiness, particularly the data analysis. Impressions about the data, memos, and coding were noted individually, and then discussed and agreed upon at team meetings. The credibility of the study (truth value) stems from the large sample size and prolonged engagement with participants. Data were gathered by the PI, her assistant, and participants, adding multiple perspectives. Credibility was further enhanced through triangulated analyses.

Sticker use was analyzed using content analysis (Weber, 1990): that is, tallying the number of times used, noting the gestational week of use, and collapsing related stickers into like categories (e.g., “felt cramping” and “felt contractions” were grouped together). Sticker use was examined separately and then in relation to the rest of the data. Calendars were examined individually, and then compared and contrasted with other women's calendars and field notes.

A summary of the overall impressions and themes was sent for review and feedback (“member checks”) to 10 willing participants with varying pregnancy experiences. The nine (90%) responses provided overwhelmingly positive feedback, establishing confirmability. The thick description of the research process serves as an audit trail to facilitate transferability of findings.

RESULTS

Demographic, obstetrical, and loss data were entered and analyzed in SPSS Version 12.0. These variables were examined in relation to calendar use; no significant differences were found.

Field notes were made on every participant, averaging two pages per woman. Calendars were turned in by 73 of the 82 (89%) participants. Of the nine missing calendars, six of the subjects' pregnancies ended unsuccessfully before 25 weeks; three did not use their calendars. Eight women used only stickers (no narrative); some added only a few comments (n = 18), but most wrote extensively about their emotions now and then (n = 28) or every week (n = 15). Some even added events and thoughts from the period before entering the study. A few women (n = 4) only

used stickers and wrote about personal problems that clearly took precedence over pregnancy concerns.

Stickers

Sticker use, timing, and frequency are summarized in Table 1. The most common stickers across all weeks were “felt tired” and “difficulty sleeping”; the “headache” sticker was a close third. The sticker “think I felt the baby move” was first used at 9 weeks, with the majority reporting this event at 15–19 weeks; the movements were definite between 12 and 25 weeks (modal weeks: 16–20). All women were sure of fetal movement by 25 weeks. Prenatal visits every 2–4 weeks, dictated by provider and patient (no clear pattern), were more frequent than the routine protocol of every 4 weeks. Only eight women reported the alpha fetoprotein screening and only four chose an amniocentesis, likely because of increased risk of miscarriage.

Table 1: Calendar Sticker Content and Usage

Sticker Content	**Usage**	
	Weeks Gestation	**Number of Subjects**
Felt Tired	5-25	58
Difficulty Sleeping	6-25	51
Felt Like or Did Throw Up	3-25	44
Had Heartburn	9-14, 16-25	31
Swollen/Tender Breasts	4-23	30
Not Hungry	7-25	18
Always Hungry	7-25	29
Varicose Veins/Hemorrhoids	10, 14, 17-24	9
Felt Constipated	10-25	22
Trouble Breathing	12, 14, 15, 18-25	16
Wet Pants	11, 13-22, 25	14
Felt Pain	10-25	23
Bleeding/Spotting	6-25	15
Felt Cramping/Contractions	10-25	30
Had Headache	10-25	49
Cerclage	14-16	5
Sonogram Done	4-25 (mode = 1)	56
Alpha Feto Protein	7, 14, 16, 19	8
Amniocentesis	15-18	4
Think Felt Baby Move	9-24	50
Sure Felt Baby Move	12-25 (mode = 16-20	59
On Bedrest	8, 12, 14-24	10
Prenatal Visits	2, 4-25 (every 1-4 weeks)	73
Phone Calls to Provider	4-7, 10-19, 21-25	33

Field Notes and Notes on Calendars

Field notes and calendars provided impressions of the women's reactions to past losses that varied from disappointment to relief and acceptance, to extensive grief and bereavement. Expressions of worry about the pregnancy and baby dominated these early weeks of gestation, but all reported attentively “watching” their current pregnancies, regardless of loss history. Past experiences, personalities, levels of religious faith, and other individual traits affected their responses to their pregnancy after perinatal loss. Many women spoke of their spousal and family relationships. The primary means of dealing with their pregnancy worries were recorded.

Five themes emerged from the textual data. Four were interrelated in ways resembling a see-saw: Fluctuating Worry, Growing Confident, Interpreting Signs, and Managing Pregnancy (see Figure 1). A fifth theme, Having Dreams, emerged from 15 (18%) women's reports of pregnancy and baby dreams but did not reach saturation. [Note: weeks of gestation are embedded in quotes

as a number in parentheses (14); if a specific day is important, the day is added after a hyphen (14–5).]

Fluctuating Worry

Most women in this study had worries, concerns, and anxieties about their pregnancies and the outcomes. A few questioned the appropriateness of being included because they stated they were "not worried at all." Women's emotional states were often volatile and labile, like a roller coaster. D., with a history of one miscarriage at 12 weeks, reports this variety of emotions:

> "Emotions all over the place—happy one minute and sad the next (17). Today I am happy and anxious for my Wed. sonogram (18–1). Sonogram was great. Wonderful! Elated! Relieved (18–3). Nervous about pregnancy—want to buy a Doppler (19); I keep thinking about how excited I am but nervous that something could go wrong (24-4)."

Worries and anxieties increased or decreased due to specific areas of concern associated with a past pregnancy or events occurring in this pregnancy. As a woman with a history of one elective abortion and one miscarriage wrote: "Day I miscarried last time—makes me nervous" (14).

This theme encompassed a continuum of emotions from relief to worry, from hopeful optimism to panic/anxiety attacks. In her sixth pregnancy, after four miscarriages and one stillbirth, M. wrote on three consecutive days: "I am ecstatic" (4–1). "This isn't happening. I am not ready. It will never last. I can't handle another loss" (4–2). "Well, maybe this one will work" (4–3). A mother of two healthy children and a stillborn at 28 weeks, K. recorded at 21 weeks:

> "I got a little scared this morning. After an active day for the baby yesterday (kicked & moved a lot), I didn't feel any movement for the 1st couple of hours…. It really scared me and automatically I thought something had gone wrong & I started crying. I talked to my baby & kept poking at my tummy; eventually I felt a little kick. I think I woke the baby up because he/she started moving a lot. All the emotions from my last pregnancy came back …, that's when I realized the next few months are going to be very nerve-wracking."

The fluctuating worry reflects the frequent emotional shifts experienced by the women as well as the longer term, overall nervousness about the pregnancy.

Growing Confident

In the very early weeks of the pregnancy, the women were often pessimistic about the chances for success, expressed little hope, and often delayed the announcement of pregnancy. Their confidence usually increased, however, as their pregnancies progressed.

This theme included the women's personal assessments about whether they were feeling better or worse about their chances for a successful pregnancy. Trust that the pregnancy might be successful was more evolutionary than situational. The level of confidence, though more stable than worry and anxiety, was fragile and easily shaken. On the opposite end of the see-saw from worry, confidence built slowly over time, in contrast wth the "fluctuating worry" that existed from the outset for these women. After having a 27-week stillbirth, a miscarriage due to a genetic

disorder, and two elective abortions when she was quite young, T. described herself as "expecting the worst but hoping for the best" (11). Roots of confidence are just beginning to form. As time progressed and more positive things occurred in the pregnancy (e.g., hearing the heartbeat regularly), the feeling of confidence grew. In her second pregnancy, S. wrote: "It blows me away that there is a live baby inside …. I wasn't convinced that I would get here—but now I feel more confident" (23).

V., who has one healthy child and two first trimester losses, reported that her "confidence builds with each passing day, PTL [Praise the Lord]!" (25). Some women were hesitant to express their growing self-assurance because they were afraid to jinx their pregnancies. Women with only early perinatal losses commented that their confidence increased as their gestation progressed past the time of previous losses; those who had stillbirths or neonatal deaths became less confident as the time of previous losses approached.

Interpreting Signs

The women in this study reported many physical changes and discomforts via calendar stickers and notes, and were hypervigilant and very knowledgeable about their symptoms. They also had many prenatal tests, particularly sonograms; they did not want to miss a thing. Details of every type were noted and interpreted: some signs were reassuring, some worrisome, and others were difficult to interpret, leaving the women unsure of what to think. When they noticed some symptom, they asked, "Is this OK? Is my pregnancy OK? My baby OK?" Their judgments were based on their gestational age, past experience, personality, amount of support they had, and their knowledge about a symptom or prenatal test. (See Table 1 for categories of physical discomfort stickers.) Many women used the stickers, and several described additional symptoms they felt. Women collected data daily to analyze whether their pregnancy and their baby were okay. Their interpretations of their signs, both positive and negative, influenced their emotions (Fluctuating Worry) and what to do next (Managing Pregnancy). The following quotes are illustrative.

B.'s past pregnancies ended with two miscarriages and one healthy baby after preterm labor. She said she "felt too fine in early weeks and that worried [her]." Finally at 7 weeks, she felt tired and that was reassuring. After three first trimester losses, a 40-week stillbirth, and a preterm but successful birth, C. interpreted her pregnancy symptoms positively: "Don't enjoy being nauseous, but feel that pregnancy must be 'strong' because of the high hormone levels" (8). Lastly F., in her second pregnancy, after a 10-week loss, valiantly tried to judge her situation:

> "Light brown spotting started—just like last time, only … later. This is my nightmare! I was really, really feeling doom and gloom. Did 1st HcG test (7). The radiologist said the ultrasound looked fine … She shouldn't have been so certain. She didn't prepare us well. Our chances [of Down's syndrome] went up. After some hysterical moments we decided to cling to the 96% chance of normality and just go forward … (13–4). Fluid levels in the high range of normal … this has me worried. I knew something wasn't good for them to increase my risk (14). First amnio results—All looks OK & it's a girl!! We're cautiously happy & relieved … Maybe now we can finally start enjoying this pregnancy (16–3)."

Interpreting signs showed where they were on the pregnancy see-saw, and how to keep balanced.

Managing Pregnancy

Managing pregnancy served as the fulcrum (balancing point) of the pregnancy see-saw. The women in the study coped with events in their pregnancies in a variety of ways, categorized as subthemes: seeking reassurance from care providers, spouses, family and friends, support groups, and the baby; being hypervigilant; and relying on internal beliefs. Rather than being passive, these women actively pursued many avenues to gain control and cope with the ups and downs of their pregnancies. They engaged in activities to promote their health and that of their baby, including prenatal care, and routinely reported avoiding circumstances and things that might harm their pregnancy. Women sought information about pregnancy in general, and many were unrelenting in seeking evidence to confirm the health of their babies.

Seeking Reassurance. Women continually sought outside help to reassure themselves that everything was okay right now, in response to a physical symptom (or its absence) or anxiety attack. Reassurance included social support and concrete evidence that the pregnancy and baby were okay. The most proactive activities included renting a Doppler to check the fetal heartbeat, talking with their care provider, using online support groups, and seeking information. Women continued with providers they were pleased with and activities that had worked in the past.

B. first tried to deal with her concerns alone, but then called her care provider. She has one living child and two past miscarriages (8 and 16 weeks).

> "Yesterday I had a lot of moist discharge and got a little concerned. I figured it was because I worked out…. So I waited a day. Today it was still going on so I called the office; they had me come in …. I looked up amniotic fluid leaking on-line and got scared about PROM and losing the baby. After I saw the practitioner I was relieved (18)."

E., who had not been pregnant for several years and had had an elective abortion, 12-week loss, and one living son, reported: "I am feeling concern about [being] 39+ years old and wanting/needing reassurance that everything with pregnancy and baby is ok" (15). At 21 weeks, P. gained reassurance from her baby: "Feeling our baby almost all the time. I don't think s/he sleeps much! I love the reassurance that there is life in there!" When T. was unable to get the baby's heartbeat with her Doppler at 13 weeks, she turned to her online support group to help manage her panic, "our own little haven to keep each other sane." Seeking support from spouses, family, and friends was also reported to prevent or postpone calls to the care provider.

Being Hypervigilant. Hypervigilance is being ever watchful, controlling as much as possible, and avoiding things that could harm the pregnancy or baby. This theme is evident in the volume and frequency (often daily) of calendar entries, and in the 33 nonscheduled phone calls to providers between 2- and 4-week prenatal visits. Women were aware of their hypervigilance. N. wrote: "I think I called the doctor every week. I may be more aware than I should be" (14).

Being obsessed with every sign and symptom can take its toll because of anxiety about what each one means (fluctuating worry), but many women felt that they had missed things during their loss. An entry by G. illustrates the relationship between these two themes: "Starting my

20th week. I'm a little scared. I'm getting close to the time when I lost my first baby. I try to remember all the signs I had so I can keep my eye on them so it don't [sic] happen again."

Relying on Internal Beliefs. This subtheme includes reliance on God, the divine, or superstitions. Several women mentioned faith as a source of comfort and strength. "It is hard to feel excited sometimes because of previous losses but my faith in God tells me everything will be okay"(17). R. reported that "a friend [who lost her baby] agrees that God has a plan for all of us and if it was meant to be it would happen. We both have a lot of faith in God. I … know my baby is with my deceased family members and they are taking care of my baby!!" (19). Others mentioned superstitions that led to avoiding certain activities. L. said she "would love to get my hair highlighted but I am a bit superstitious. I never did it when I was pregnant with my first 2 children. I did get it highlighted while pregnant with the baby we lost" (11). All agreed that these views were probably silly, but they did not want to take any chances. They struggled with their lack of control over their outcomes, and internal beliefs helped them manage these pregnancies.

Interrelationships Among Themes

The four main themes of fluctuating worry, growing confidence, interpreting signs, and managing pregnancy are interrelated, resembling a see-saw balancing act. Women managed their emotions through vigilantly watching every sign and symptom, seeking reassurance from others about the pregnancy and baby, and relying on their belief systems. Anxieties were ubiquitous and fluctuated dramatically in reaction to their interpretation of pregnancy events, the key concern being the loss of another baby (Côté-Arsenault et al., 2001). As evidence mounted that the pregnancy was progressing, confidence grew. Reflections on symptoms, the timing of loss, and outcomes of previous pregnancies and prenatal tests were common in this sample.

DISCUSSION

The daily and weekly descriptions recorded by women in this study provide a story board of their early pregnancy after loss experiences, consistent with the cross-sectional descriptions gained previously (Armstrong & Hutti, 1998; Côté-Arsenault & Marshall, 2000). The stickers document the frequency of prenatal visits, minor discomforts, prenatal testing, milestones, and other events whereas the unscripted notes contribute their emotions, responses, and interpretations over time. Together the data provide a chart of PAL where events are noted, scrutinized, and interpreted as indicators of the health and viability of the pregnancy. Reports of quickening seem to be quite early in these pregnancies, and perhaps reflect wishful thinking. No recent studies compare pregnancy symptoms in women without loss history, but Côté-Arsenault (2003) noted greater requests for prenatal testing, a sense of being at high risk, and more frequent phone calls between scheduled office visits in the PAL group compared with a comparable no-loss group.

The calendars and stickers were generally well received. Women said they were easy to use, and some found it helpful to write down their thoughts and feelings in the free space. All liked knowing they could keep their calendars as a record of their pregnancies. Although the aim was not therapeutic, some women found the calendars beneficial: a place to express their fears and concerns, then put them aside. However, the study design precludes definitive conclusions about the efficacy of the calendars. Ullrich and Lutgendorf (2002) also found that journaling that focused on the processing of events was beneficial. Calendars or journals may be a low-cost intervention to be tested in the future. Longitudinal and multiple triangulation design of this

study strengthens the interpretation of the findings. Women provided great prospective detail about their pregnancies.

The varying degrees of calendar use limits the interpretation of the findings. Motivation is related to personality and circumstance, but these differences likely reflect those found among all pregnant women. The data we have can be interpreted conservatively as primary issues and thoughts in women's minds. There were no stickers with specific emotions on them; only the request to use “Stressful Events” stickers when appropriate. Although attempts were made to minimize therapeutic impact, there is no way to know if contact with an investigator influenced women's pregnancy experiences. Sticker use, notes on calendars, and field notes taken together, however, provide a credible natural account of these PAL experiences. Fathers’ perspectives of the pregnancy were not obtained although some women did include them in their own reports. Conclusions cannot be drawn regarding the role of dreams in these pregnancies, but prospective reports of dreams in pregnancy should be sought in future studies.

CLINICAL IMPLICATIONS

Clinicians need to recognize that women's PAL scrutinizing and worrying about the many documented symptoms and events is normal. Frequent calls and visits are their most common and comforting way to manage their pregnancy anxieties. Nurses should understand that women pregnant after loss do not want to be seen as crazy or overzealous, so they may underplay their worries and emotions. These women felt they had not been vigilant enough and missed signs of trouble when a past pregnancy ended in loss, so now they are hypervigilant. An absence of questions or statements of feigned calm may be indicators of coping mechanisms rather than actual feelings. Therefore, increased frequency of visits and an open invitation to come in for reassurance about fetal well being should be offered.

Women with previous perinatal loss want to know every detail about their pregnancy so they can interpret these signs. Assistance by nurses may be time consuming, but is very helpful. PAL women and their partners have great concerns and anxieties as they proceed cautiously through their pregnancies. Their fears are real, based on a distrust of pregnancy rather than a distrust of healthcare professionals. Sensitive, responsive caregiving may help them keep their emotions more stable and more positive.

ACKNOWLEDGMENTS

Many thanks to our research assistants, Marie Recano-Dunham, NNP, RNC, MS, Marcie Harvey MS, RN, APN, Nancy Bailey, BS, RN, and all of the families and practitioners who contributed in a variety of ways to this study. Additional acknowledgment to Renée C. Arsenault for the see-saw graphic.

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