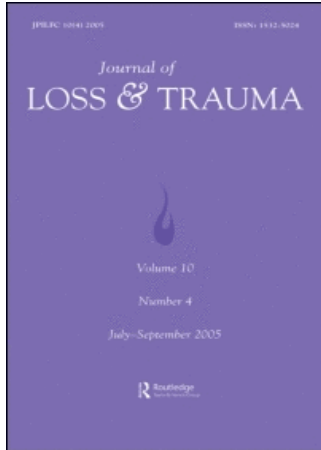


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THE TRAUMA OF ULTRASOUND DURING A PREGNANCY FOLLOWING PERINATAL LOSS

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This article explores how grief and symptoms of posttraumatic stress disorder (PTSD) are relived during the ultrasound examination following perinatal loss. The research and testimonials of both mothers and fathers show how it is imperative that health care providers consider PTSD symptoms a normal phenomenon under these circumstances. Moreover, it is critical that parents be prepared for memories to resurface during this time. Staying in the present while being mindful of past trauma helps the focus remain on the current pregnancy and lessens the risk of PTSD.

Posttraumatic stress disorder (PTSD) is a psychological condition resulting from exposure to a traumatic or extremely psychologically distressing event. Over the years, it has become accepted that women can develop PTSD following difficult childbirths (Bailham & Joseph, 2003; Creedy, Shochert, & Horsfall, 2000). Birth trauma involves physically or emotionally painful experiences that occur during any phase of childbearing. A history of a long or complicated labor, traumatic birth, and conflict with health care personnel can all become triggers for symptoms of PTSD (Ballard, Stanley, & Brockington, 1995; Reynolds, 1997; Spiegelberg-Gardner, 2003). Actual or threatened serious injury or death to the mother or her infant may also be the cause. Mothers relive their past labor experiences through dreams or flashbacks and have reported extreme distress triggered by reminders of

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unrelieved pain (Reynolds, 1997). Some investigators have suggested that this is a syndrome similar to the posttraumatic stress experienced by veterans of the Vietnam War (Blake, as cited in Gold-Beck-Wood, 1996) and report a prevalence of 1.5% to 6% following childbirth (Ayers & Pickering, 2001; Beck, 2004). To date, the literature has addressed this phenomenon only in relationship to the mother, but it has been observed in clinical practice for partners as well (O'Leary, 2004b; Weaver, 1997). One father described the birth experience as leaving him "feeling emasculated and ashamed" (Church & Scanlan, 2002). This suggests that issues of trauma around childbirth continue to be unrecognized and are underreported for both parents (Blake, as cited in Weaver, 1997).

Still more complicated and complex than a difficult birth is a pregnancy that ends in the loss of a baby. This tragic phenomenon forever changes parents' perceptions of pregnancy, often resulting in symptoms of PTSD that may not appear until a subsequent pregnancy. This article focuses on how the traumatic loss of their previous baby resurfaces for both mothers and fathers during the ultrasound examination for their new baby in the subsequent pregnancy. Rather than providing reassurance, the ultrasound was shown to elicit traumatic memories, resulting in behaviors similar to what has been found in people who experience PTSD. Data were drawn from a larger descriptive phenomenological study that explored the meaning of parenting during a pregnancy that followed a perinatal loss (O'Leary, 2002).

Relationship of Subsequent Pregnancy to Trauma and Symptoms of PTSD

When a baby dies, the mental schema containing everything a person assumes to be true about the world and the self from previous experience also dies (Rando, 2000). It is the most distressing psychological event that parents face, leaving them feeling vulnerable, insecure, unworthy, and unprotected (Janoff-Bulman, 1992; Leon, 1990; Weiss, 2000). Infant loss involves intense fear, helplessness, and horror that a child has died, and, furthermore, predeceased the parent. These feelings can follow into the subsequent pregnancy for both women and men (Chez, 1995; Cote-Arsenault & Morrison-Beedy, 2001, O'Leary, Parker, & Thorwick, 1998; O'Leary, 2004a). The subsequent pregnancy has been described

as a complex developmental process encompassing diverse and shifting feelings (Cote-Arsenault, Bidlack, & Humm, 2000). Because much of what happens at the time of delivery when loss occurs is remembered (Chez, 1995), it is impossible to repeat the experience of prenatal care, labor, and the birthing process without stimulating painful past memories. Rather than being a time of joy, expectation, and a new beginning, the subsequent pregnancy can become a reactivation of the previous event, causing fear and anxiety that death can happen again (Armstrong, 2001; Cote-Arsenault & Mahlangu, 1998; Cusinier, Janssen, de Graauw, Bakker, & Hoogduin, 1996; Hughes, Turton, & Evans, 1999; Janssen, Cusinier, Hoogduin, & de Graauw, 1996; O'Leary & Thorwick, 1997; Ryding, 1991; Statham & Green, 1994; Theut, Pederson, Zaslow, & Rabinovich, 1988). Additionally, previous loss has been found to be a predictor of medical risk in the next pregnancy (Goldenberg, Mayberry, Copper, Dubard, & Hauth, 1993), including a higher incidence of cesarean birth (Crowther 1995).

Turton, Hughes, Evans, and Fainman (2001) found that women pregnant after the loss of a stillborn child were more vulnerable to case-level symptoms of PTSD, suffering the dual psychological burden of trauma and bereavement. PTSD symptoms have been found by others in women who have suffered miscarriage (Helzer, Robins, & McEvoy, 1987) and stillbirth or have delivered an infant with disabilities (Bydlowski & Raoul-Duval, as cited in Reynolds, 1997). Others have associated PTSD with a mother's feeling of fear for herself and for her baby (Bailham & Joseph, 2003; Peterson, 1994; Wijma, Soderquist, & Wijma, 1997; Ryding, 1993), sometimes interfering with attachment to the subsequent child (Hughes, Turton, Hopper, McGauley, & Fonagy, 2000; O'Leary, 2004a).

Relatively few studies have examined the role of fathers in a subsequent pregnancy. It has been suggested that the full range of men's grief reactions may not be tapped because most measurements of grief tend to focus more on feminine emotions of loss (Dyregrov & Dyregrov, 1999; Stinson, Lasker, Lohmann, & Toedter, 1992). Additionally, fathers in a subsequent pregnancy have reported keeping feelings of worry and stress level from their partner in order to stay strong for the rest of the family (O'Leary, 2004b). Fathers also report worrying about having a child with disabilities and have been shown to have higher trait anxiety scores

than fathers who have not suffered a loss (Armstrong & Hutti, 1998; Grout & Romanoff, 2000). Armstrong (2001) found that fathers expressed a greater sense of loss and were more invested in the subsequent pregnancy and baby if they had seen their previous baby on ultrasound and/or heard the heart beat. Others have found that the trauma of infant loss and the subsequent pregnancy profoundly affects fathers, who report a need to be recognized as equally important as the mothers by health care providers (O'Leary, 2004b; Worth, 1997; Samuelsson, Radestad, & Segestern, 2001). These studies give support to Condon's (1985) speculation that the intensity and quality of men's affective experience during pregnancy may not differ from that of women.

While PTSD entails fear of a traumatic event being reexperienced (Prigerson, Shear, Jacobs, et al., 1999), trauma related to grief is the absence of the deceased as the source of distress. Infant loss encompasses both the traumatic experience of birthing a dead baby and the overwhelming grief parents undergo, many times without recognition. Regardless of the gestational length of a previous loss or pregnancy trauma, women and their partners are at risk for developing PTSD in the subsequent pregnancy (Creedy et al., 2000; Engelhard, van den Hout & Arntz, 2001; O'Leary, 2002).

Trauma and the Ultrasound Exam

The ultrasound examination is a diagnostic tool that has been a key part of antenatal care in Canada, the United States, and Europe, with one or two ultrasound scans per pregnancy common (Mitchell, 2004). It is a unique and specific experience that engages all of the perceptual senses: lived body, lived time, lived space, and lived relations. Lived space is largely preverbal, but it affects the very way we feel (Van Manen, 1997). Ultrasound is regarded as a source of reassurance rather than a potential source of bad news and is associated with seeing the baby, getting a picture, and parental bonding with the baby (Mitchell, 2004). It is an important diagnostic tool for women in high-risk pregnancies to assess and monitor fetal well-being. But the psychological processes and preparation of parents before an ultrasound examination appear to be conflicting with little research available on the effects on women's responses (let alone fathers) to unexpected outcome findings (Mitchell, 2004). Verry (1992) has described the procedure as

dehumanizing and harmful because it has the potential to affect the psychological state of the pregnant woman. Others view ultrasound as causing more angst than relief or joy because of its potential to expose women to the risk of false diagnoses of malformation (Filly, 2000; Mitchell, 2004). Baillie and colleagues (2000) reported that women with false-positive results were unprepared for the possibility of detecting a problem, with two thirds continuing to feel anxious even after a normal result was obtained. Others have reported increased anxiety among those who had a previous experience of problems in ultrasound (Eurenius, Axelsson, Gallstedt-Fransson, & Sjoden, 1997) and among women in current high-risk pregnancies (Tsoi et al., 1987; Hunter et al., 1987). Yet, Ayers and Pickering (2001), summarizing a body of research regarding PTSD and ultrasound in pregnancy, concluded that routine ultrasound has very few negative effects and that these effects are largely mild and transient.

But this is not the case for families pregnant after perinatal loss when the death was diagnosed by an ultrasound examination. Although done for reassurance of fetal well-being in the subsequent pregnancy, the sensorial picture of the trauma of the ultrasound from the earlier pregnancy is imprinted on parents' minds. Trauma memories are organized on a perceptual level and include visual images; olfactory, auditory, and kinesthetic sensations; and waves of feelings that, taken together, evoke emotional, cognitive, and behavioral fear responses (Veronen & Kilpatrick, 1983). They represent a sensorial blow to the human brain, evoking a physical and emotional reaction for the sake of adaptation to threat, fear, hopelessness, helplessness, and terror. The more traumatized individuals are, the more likely they are to develop anxiety and depression problems and maladaptive coping strategies; moreover, they are at greater risk for long-term mental health challenges (Malicoat, 2001). Events that symbolize the trauma may be particularly difficult for those who are both traumatized and grieving (Nader, 1997).

The literature on PTSD after obstetric procedures suggests that, rather than an objective measure of trauma, it is the *subjective perception* of trauma that appears to be more important in the development of symptoms of PTSD (Menage, 1993; Ballard et al., 1995). While not diminishing other types of child loss that might affect a subsequent pregnancy, validation of a baby's death through visual technology

suggests that an ultrasound examination in a subsequent pregnancy would be a uniquely different experience. Because human behavior tends to be conceptualized in either psychological or sociological terms—explained through assumptions rather than testimony to the complexities of “lived experience” (Thompson, 2001)—it is important to understand the meaning behind descriptions. In order to provide appropriate interventions to lessen or prevent traumatic memories and symptoms of PTSD during an ultrasound in the subsequent pregnancy, health care professionals need to understand how the examination is perceived by the parents.

Method

Descriptive phenomenology was the research method utilized. This method does not look for theories to explain meaning or compare one type of experience with another; rather, it seeks to provide a deeper understanding of what certain kinds of experiences are like for individual participants (Polkinghorne, 1989). It is an attempt to find truth in everyday lived experiences in a systematic and methodical way (Giorgi, 1997) and to help make sense, in psychological and human terms, of some of the findings of traditional research (Polkinghorne, 1989). Dahlberg, Drew, and Nystrom (2001) believe that “as humans we live as subjects in and through our bodies. All understanding, our memory, perception, emotional and cognitive relations to the world, is embodied” (p. 54). Also, although each experience becomes part of one’s whole, it is not necessarily on a conscious level. Phenomenology is a process of discovery between the researcher and participant designed to gain insight into the lives of people and groups one wants to help (Halling, 2002).

In descriptive phenomenology, past knowledge about a phenomenon is bracketed or put aside by the researcher, allowing the phenomenon to be seen “precisely as it presents itself” (Giorgi, as cited in Dahlberg et al., 2001). It is one thing to discern a pattern, but it is another to grasp its meaning. Although this author has attended many ultrasounds with parents in subsequent pregnancies, what the experience meant to the parents was not known. Therefore, it was important that the parents described the experience as they lived it in order to discover meaning without interpretation.

Recruitment

Parents invited to participate in the study were currently pregnant after a previous perinatal loss and were recruited via a bereavement newsletter, from other parents aware of the study, and by providers at a high-risk perinatal clinic. Ethical and human subject approval was obtained from the researcher's university and hospital institution. Twelve mothers and nine fathers agreed to participate (see Table 1). Participants were between 22 and 34 weeks gestation in the current pregnancy. All of the previous babies had died within the past year with the exception of one family, who had experienced the loss of a full-term baby 4 years in the past, followed by a miscarriage in the last year. This family had one living child born before the loss of their full-term baby. Another family had suffered the loss of two full-term babies: a daughter born still at 40 weeks gestation and a son who died of a heart defect in the previous year at 8 weeks

TABLE 1 Characteristics of Study Participants

Participant/age	No. of losses	Children prior to loss	Weeks pregnant at interview
Rita, 37	3 (17 wks., 16.5 wks., 18 wks.)	5 & 3½ yrs.	24
Joy, 35	2 (9 wks. and 20 wks.)	8 yrs.	35
Karen, 33, & Tom, 34	2 (stillborn at 41 wks. & baby 8 wks. after birth with heart defect)	None	24
Annie, 31, & John, 32	1 (stillborn at 38 wks.)	None	34
Sharon, 32	2 (8 wks. & stillborn at 36 wks.)	6 yrs.	32
Martha, 36, & Terry, 38	1 (20 wks.)	3½ yrs.	33
Michelle, 28, & Rob, 33	1 (stillborn at 32 wks.)	2½ yrs.	32
Kate, 29, & Mark, 59	3 (8 wks., 7 wks., 12 wks.)	None	23
Susan, 30, & Bob, 28	1 (stillborn at 24 wks.)	4 yrs.	23
Doris, 31, & B. J., 30	3 (8 wks., stillborn at 38 wks., another miscarriage at 9 wks.)	3 yrs.	30
Alice, 29, & Matt, 30	3 (7 wks., 5 wks., & baby born at 30 wks. gestation who died at 31 wks. of sepsis)	None	24
Tina, 34, & Dick, 36	1 (stillborn at 37 wks.)	6 & 3 yrs.	30

postpartum. This family had no living children. Audiotaped interviews were conducted individually with the mothers and fathers, lasting approximately 1 to 1.5 hours. In phenomenological research, it is the description of the experience that is important, not comparing how the experience of the mothers may be different from that of the fathers. To protect privacy, all participant names are pseudonyms.

Data Analysis

The interviews were coded line by line and analyzed within and between interviews in order to find common descriptions of what a pregnancy after the loss of a baby is like. As parents described their fear and anxiety, statements given by the mothers and fathers regarding the ultrasound experience emerged within the data. For all families, confirmation of their previous baby's death had been done by ultrasound. This led to deeper dialogue and understanding of the meaning of the ultrasound for them in the current pregnancy. Regardless of the gestation of the previous loss or whether they had other living children, the trauma around the ultrasound examination surfaced as one of the essential themes for these participants in their subsequent pregnancy. In the data described subsequently regarding parents' descriptions of their ultrasound two themes emerged: "Trauma memories became conscious" and "Flashbacks triggered PTSD symptoms."

Findings

Trauma Memories

For families who have never suffered loss, ultrasound scanning is usually a time of great anticipation and joy, as parents "see" their baby for the first time. Reassurance of well-being is easily believed. There is little reason not to trust that all will be well. But for families in a subsequent pregnancy, scanning evokes an embodied memory that did not differ for the mother or father. Parents described being unable to initially focus on the current baby because the scan created conflicting feelings: Parents needed to see that the baby was safe, but the past traumatic memory of their previous baby caused fear they would see death again. "The last

time I saw an ultrasound was when [my baby] died” is a representative comment. Parents were understandably wary and were unprepared for the memories of the previous baby, re-created in the space and evoked by the familiar smells, sights, feelings, and sounds of the ultrasound room. Rather than feeling reassured upon hearing good news, their sense of impending doom was exacerbated. They did not trust that all would be well.

Doris reacted at every ultrasound: “I was hysterical. I thought it would look the same. Every time I went I thought [the baby] would be dead, every single time.” Matt, too, waited for bad news even as he tried to stay positive: “We’ve done a lot of ultrasounds through the different pregnancies. You’re always waiting for the bad news. We feel like good things are going to happen. But it doesn’t matter. You can’t stop those things, you’re always kind of like, ‘Okay, what’s going to be wrong.’”

Karen’s first child was stillborn, and her second child died of a heart defect at 8 weeks postpartum, undetected during the pregnancy. In both pregnancies, she was told her babies were healthy during an ultrasound examination. She began to cry as she vividly described her ultrasound experiences in the current pregnancy.

Upsetting. Yeah. Every ultrasound I’ve had—I had one with Ashley at 18 weeks. I had another ultrasound with Ashley after she died [when her death was confirmed]. And I suppose it was the thought of seeing—we could see that there was no movement, no heartbeat. The thought of the ultrasounds being like that is what I fear when I have an ultrasound.

Her senses reacted to the space of the room:

So it’s just something that I fear and I get upset. Because lying in the darkened room, on the bed and they’re going to do an ultrasound, just brings back the memories of Ashley’s last ultrasound. I just get upset and crying. Then I see the baby and the heart going. It can calm me down a bit, but it’s just the thought that there might not be a heartbeat. With Cameron [her second child, who died of a heart defect at 8 weeks postpartum], there still was a heartbeat and he was moving, and the heart thing wasn’t picked up until later. And so it was just scared, I suppose. Scared and getting upset before you can get the reassurance.

Both mothers and fathers described needing to see the movements and heartbeat of the baby. “I’ve had some anxiety. Until

they put the probe on the stomach and you actually see it move, then I'm relaxed." John's words attest to the anxiety of the experience:

[I was] scared to death. That's the worst part. Waiting to see her [the baby] move or hearing the doctor say it's okay. They don't say anything at 8 weeks postpartum *forever*, it seems like, looking at her. It's pretty stressful, that first couple of minutes. That's how we found out Mary had died. We went to that Level II, and she had [pause] we saw there's no heartbeat. So that's why I'm so scared of ultrasounds.

The memory of the last experience remained as John recalled the loss of his daughter. Each ultrasound brings back the fear of seeing another dead baby. He cannot imagine having to relive his most painful experience.

The day we found out we lost Mary, the technician had the ultrasound on her stomach, and right away I can pick up the heartbeat, and I didn't see it. Something just told me it wasn't right. And after the technician scanned a few more things he said, "I'll be right back." Our minds just went zing. What's wrong, what's wrong, what's wrong! I want to know what's wrong. And I'd say pretty much the rest of it is a blur. He put a phone call in to [my wife's] doctor and she broke the news to us. You're kind of in a state of shock. Disbelief. You don't want to believe it's happening or it has happened. Especially when you think about that, I meant what you call a D & C. They tell you, you have to deliver this baby. Having to deliver a—a dead baby.

Although the events of a previous pregnancy may be tangibly removed from the present, the past was internalized within these parents. Both the mothers and fathers were unprepared for the traumatic memories of their previous baby that resurfaced in the ultrasound examination. They moved back into that same space of seeing death, remembering the feelings and words of the people around them. Contrary to other studies suggesting that anxiety decreases once reassurance of wellness is provided (Michelacci et al., 1988; Ayers & Pickering, 2001), these families continued to be anxious and wary until giving birth to a live baby. The descriptions these families provided, during what health care providers view as a "routine ultrasound exam," give meaning to why others have found symptoms of PTSD in families pregnant after a loss (Turton et al., 2001).

Flashbacks

Reminders of events from the past can appear when least expected, sometimes in the form of flashbacks. Flashbacks are traumatic events that come unexpectedly and catch people off guard. All defenses are torn away, leaving a person feeling raw and vulnerable. This can be especially difficult when someone has tried intentionally and consciously to stay “normal” in a subsequent pregnancy. While important to respect coping defenses, the following case study exemplifies the need to understand the significance in processing the past with parents so they can have some control and be fully present in the future.

Sara was in her third pregnancy. She had purposefully changed doctors, hoping to find someone who would treat her more normally, wanting to believe their previous loss wasn't going to affect the current pregnancy. In this lengthy transcription, she illustrated (a) a flashback episode; (b) denial, trying to cope by putting her past experience out of her mind; and (c) difficulty differentiating and separating the pregnancies and babies.

When we lost Emily, we were devastated. The way that we lost her was so sudden and so out of the blue. We were at the doctor's office, lying on an ultrasound table. She was checking the ultrasound. My husband was standing behind me. My daughter was 2, sitting on my legs. “My sister, my sister,” pointing at the screen. We were laughing. And the ultrasound tech just never said a word. [Then] she said, “I'll be right back.” We were looking. “Oh, she [the baby] must be low.” We can't see anything. And then my doctor came in and I said, “Are we having this baby?” And he said, “Yes, but not the way you want to.” [The baby had died.]

Now, 31 weeks into her subsequent pregnancy, she and her husband were at another routine ultrasound, excited to see another baby girl as predicted by an earlier ultrasound. They had been planning for a girl, had chosen a name, and were preparing the older sister to share her bedroom. While those around her were not aware of what was happening, Sara was unwittingly being swept back to their previous pregnancy.

We were lying on the ultrasound table last week. And the ultrasound tech was doing the ultrasound, and my husband laughs and says, “Well, if you can see my girl, I'd really like to see. It'd be nice to know for a fact it's a girl.” And the

tech says, "Yeah, I'll find your girl." And she's looking on the screen and we're laughing and joking and talking and all of the sudden she goes, "You aren't going to have a girl." And she was trying to be funny and she had this real grave voice. She said, "I'm sorry. You are not going to have a girl." And I instantly broke into tears. Like, "Oh my God! Oh my God!" It was just this, "Oh my God this is happening all over again. This is it." My husband grabbed my hand and said, "What do you mean?" [He also had panicked.] The lady didn't catch my reaction for what it was. She thought I knew and was just overwhelmed. And she goes, "That is definitely a boy." She starts to laugh and my husband starts to laugh and I just couldn't grasp it. I had—just in that split second I had relived that entire—just *deja vu*, almost of, "Oh my God. I lost a girl again, I lost a girl." And in that split second I completely relived—I went back four years. And I lost it. I just couldn't stop crying and the lady [was] like, "The baby's healthy," and she's trying so hard to make me feel better. I'm like, "Just don't even try because you don't understand, you just don't understand." She left the room to get the doctor. And my husband—he grabbed my hand and he said, "What is the problem? You can't be this upset that it's a boy." And I just couldn't even articulate, I couldn't tell him. I felt guilty instantly because I was ruining his joy. We found out that everything's great and it's a boy. I couldn't even concentrate on the fact that the baby was fine. After three days in the hospital [being monitored], that should have been my first reaction and I couldn't have cared less. All I knew was that I had just relost our daughter. And I cried and I cried.

And I just felt I was lying in the doctor's office four years ago. I couldn't grasp where I was. And now they [say], "Okay, you guys can go." Go where? Where am I going to go? I was in this just limbo. I couldn't think. I couldn't concentrate on where we were. My husband's trying to talk to me and it was coming from afar. I just couldn't bring myself back to the present. And I almost felt like I was having a flashback.

My husband helped me off the table and into a wheelchair. We started going out into the hospital and I just kept thinking, why am I—I'm not holding anything, I'm not carrying anybody. The last time I did this I was wheeled out to the car with nothing but my duffel bag and I just kept reliving it over and over and over.

Her experience describes two of the *DSM* criteria for PTSD: (a) "acting or feeling as if the traumatic event were recurring (including a sense of reliving the experience, illusions. . . and a dissociative flashback episode)" and (b) intense psychological distress at exposure to internal or external cues resembling an aspect of the trauma (Simpson, 1997, p. 11). She essentially became emotionally paralyzed and was briefly unable to bring herself to the present.

The trauma continued after her discharge from the hospital. She remained angry even though she knew the baby was healthy. The medical episode, viewed by the care providers and her

husband as reassuring, had pushed her back into the experience of her daughter's death. In the following section, she shows how she has confused the babies. In her mind she is losing not only another girl, but the same little girl all over again.

I was storming around the house, slamming cupboard doors, and he says, "You're still on bed rest. You have to go lie down." And I sat here and I just started to cry. And he said, "You have to explain this to me." And I say, "I can't believe I lost my girl!" And he took it the wrong way. "You're mad that it's a boy?" And I just finally explained to him, "YOU didn't CARRY this child. You didn't put your hand there every night and felt it kick. You didn't carry this child and then have to give birth to this child and LOSE that." I explained to him the way [the ultrasound technician] said that. . . [it] just took me RIGHT back there. And he remembered. It was when I told him how I felt—we were walking out of the hospital. That was SO HARD. That was SO HARD for me to leave that hospital without that baby. And he remembered that. And then he started to cry. And he's like, "I don't want you to have to leave the hospital like that ever again."

In the crisis of this flashback, she came to terms with separating her pregnancies and her babies. "This isn't the same as the one we lost. This is NOT Emily. This is NOT September 1997. You know, this is NOT that pregnancy. This is a totally new baby." As she explained reliving the loss of her daughter all over again, her husband began to understand. Together, they began to grieve the past experience and come back to the present, preparing for the new baby—a boy.

He kind of brought me back. He sat on the couch and he says, "That's why we're doing all this. So that we don't have to go through that again." And [that] kind of brought me out of that [mindset] back to NOW. Okay, that's why we [do] the monitors, that's why people are coming out here, so that we don't have to do that again. That IS the past. That is a grief thing. So he kind of grieved with me for a couple of days. And in our own way, I think we spent a couple of days re-grieving, and when we were able to sit down and—I think we finally kind of, it almost forced us to accept the fact that this is NOT the same pregnancy.

Persistent avoidance of stimuli associated with a traumatic event is one of the defining criteria for the diagnosis of PTSD (American Psychiatric Association, 2000). Schrodtt and Tasman (1999) described denial as interfering with one's awareness of potential psychological danger. Sara's use of denial, *and* not being forewarned that memories of her previous experience might

resurface, caused the ultrasound examination to be very traumatic. Unfortunately, she delivered within a week of her interview, so her husband was not able to be interviewed. One might speculate that his tension and fear at the time of the ultrasound, also thinking they had suffered another loss, was masked by his joviality with the technician. When they were finally able to process what happen, he cried too.

Sara and her husband had worked hard to feel normal in this pregnancy, not wanting to believe that her previous loss would change their view of pregnancy. Because of this, they were unprepared for how the ultrasound exam would affect them. More importantly, Sara had not separated her pregnancies or babies.

I think it was such a shock because [throughout] this whole pregnancy I really hadn't, so I thought I guess a whole lot of grief, other than the medical issues that we were afraid of. We really hadn't been real emotional about it. Once in a while, you know, lying in bed at night, you'd kind of hold hands. "This one's going to be okay, right?" "Yep, this one's going to be okay." "All right. I just needed to hear that." Then you'd smile and go back to sleep. But there really hadn't been any breakdowns or [any] crying, I can't believe we're doing this again. But that [the ultrasound experience] really set it off for the two of us. I think the first half of this pregnancy we wanted it just to be brand new. It was fresh, none of the old fears. Nothing was going to stand in our way. And then when things started to happen it just brought everything back and I think a part of us—we were just reliving [our last pregnancy] through this pregnancy as if they were the same one. We didn't need to ignore the last pregnancy to make this a fresh start. This is a new baby and regardless of all the precautions and all the paranoia, it IS STILL a fresh start. And that was something I think we both avoided accepting.

Although traumatic at the time, the flashback memories and reliving the trauma of her loss helped her differentiate the babies and be more fully in the present. She and her husband were able to mindfully prepare for the birth of a son. They both stopped pretending the loss wasn't affecting the current pregnancy. This process may also have helped prevent attachment concerns with the new baby, an outcome found in other studies of parents in subsequent pregnancies (Hughes et al., 2001). Ironically, none of the health care providers were aware of her experience during the ultrasound examination or that she was confusing the pregnancies. One can only imagine the energy other families may use to "look normal" for their health care provider in a subsequent pregnancy.

Implications for Practice

Despite the small sample in this study, the descriptions from these mothers and fathers illustrate and provide an understanding of why symptoms of PTSD are found in families in a pregnancy that follows a previous loss and their need for supportive intervention. From health care providers' perspective, medical procedures—such as the ultrasound examination—are done to ensure the best possible outcome for mother and baby and to “do no harm.” For families pregnant after a loss an ultrasound examination, a diagnostic test routinely performed to assess fetal well-being, requires additional measures by health care providers. The parents described embodied memories that evoked fear and anxiety, catching both mothers and fathers completely off guard. Rather than providing reassurance of wellness, the ultrasound exam symbolized the previous trauma, eliciting traumatic grief, absence of the deceased as the source of distress, and fear that the traumatic event was going to be reexperienced, behaviors found in PTSD (Nader, 1997; Prigerson et al., 1999). The parents' descriptions support the findings of others who have examined trauma around childbirth (Creddy et al., 2000; Turton et al., 2001) and being unprepared for what might happen in the ultrasound examination (Mitchell, 2004).

The fathers described being just as fearful of another bad outcome and were equally as traumatized as their partners during the ultrasounds. Although sex differences regarding grieving after a perinatal loss have been found in other studies (Hutti, 1992; Johnson & Puddifoot, 1996), one explanation for this finding may be that these fathers were affected by the physical space and imprinted trauma memory of seeing their baby dead through the ultrasound examination, just like the mothers. This also supports Armstrong's (2001) observation that fathers were more affected by loss if they had seen their baby who died on the ultrasound. The literature suggesting that men are delayed in their grief reactions, sometimes displaying more grief than their partner 12 years after the loss (Dyregrov & Dyregrov, 1999), and the finding that the fathers in this study had reactions similar to the mothers' support the importance of processing with fathers at the time of their loss and in the subsequent pregnancy. These fathers also provide support to Condon's (1985) speculation that the intensity and quality of men's affective experience during pregnancy may not

differ from that of women. The fathers in this study self-selected, but because few descriptive studies have been conducted with men around their feelings during pregnancy, there are no data to suggest that the responses of these fathers are unusual or unique. Fathers may be as deeply affected by loss but are rarely asked. One father in this study gave words to the need for further research: "If they would have asked me, I would have talked."

Any new ultrasound experience may risk activation of threatening memories and may elicit memories of the previous baby when a pregnancy follows a loss. These families had neither warning nor awareness that past feelings might surface, giving them virtually no control of their feelings. The meaning of the ultrasound image can be deeply shaped by the sonographer's word choices and behaviors (Mitchell, 2004). One helpful strategy is for the sonographer or physician to prepare parents that memories of their previous baby may re-surface before an exam begins and reassure them that flashbacks and memories of the previous baby are common in the subsequent pregnancy and should be viewed as such. Debriefing may help identify and devitalize many of the symptoms of PTSD described, avoid the shock of unexpected painful memories, and spare parents additional trauma. This may help prevent psychological problems or upsets, bring the feelings to a conscious level, and give parents some control of the experience (see Table 2).

Involved in the process of debriefing is educating both the mother and father by explaining the nature of PTSD and responses to stress (Davidson, 2001). Even when a sufficient explanation is assumed from the previous loss, repetition of information may

TABLE 2 Helpful Interventions Before an Ultrasound Exam

-
- Be sensitive to the fact that the last time parents had an ultrasound was "seeing" their previous baby dead
 - Debriefing may help identify and devitalize many of the symptoms of PTSD
 - Show the heartbeat first and explain what will happen during the ultrasound examination
 - Reassure parents that flashbacks and memories of the previous baby are common in the subsequent pregnancy and should be viewed as such
 - Acknowledge they are parents to this baby and to the baby who died, concurrently linking and establishing the babies as siblings
 - Be aware that fathers/partners are fearful too; direct questions to them and assess their needs as well
-

be necessary before parents can fully comprehend what may have happened in the last experience. Stress impairs one's ability to hear, remember, and learn; therefore, health care providers need to be prepared to revisit unanswered questions relating to previous loss. Begin the exam by showing parents the beating heart first. Be aware of how both parents are coping. Ask about their previous baby and whether they are comfortable if you use the baby's name during the exam. Acknowledge that they are parents to this baby and to the baby who died, concurrently linking and establishing the babies as siblings. Give specific details showing why you know the current baby is healthy today. At the same time, admit, as one doctor did to a mother in this study, "You really won't believe [any of this] until the baby is in your arms." Relieving fear, anxiety, and the struggle for parents to mentally differentiate their babies in the ultrasound room is a worthwhile objective.

Debriefing to prevent PTSD is a process used and supported by others working with people exposed to trauma (Bailham & Joseph, 2003; Hembree & Foa, 2000; Lyons, 1991; Spiegelberg-Gardner, 2003; Yehuda, 2002). Nader (1997) suggests that bereavement may become pathological when trauma issues and symptoms are inadequately addressed. Emotional engagement with the trauma memory, organization of the trauma story, and correction of dysfunctional thoughts that are commonly found following trauma have been found to be essential factors for the successful processing of traumatic events (Bailham & Joseph, 2003; Davidson, 2001; Hembree & Foa, 2000; Lyons, 1991; Parker & O'Leary, 1989) and will help prevent psychological problems (Gamble, Creddey, Webster, & Moyle, 2002). Additionally, others propose that treatment of traumatic stress symptoms might improve pregnancy morbidity and maternal mental health (Seng et al., 2001).

Conclusion

This study provides insight into the difficulty of the ultrasound experience for parents, evoking symptoms of PTSD resulting from the trauma of their previous loss, and represents a beginning effort in understanding the complexities of the subsequent pregnancy among both mothers and fathers. Although the number of participants in this study was small and the group was self-selected, their stories indicate that all parents would benefit from

educational support to alleviate PTSD symptoms that could surface when a previous pregnancy has been traumatic. The parents' descriptions highlight the need for health care providers to be sensitive to the realization that both mothers *and* fathers retain vivid memories of the diagnosis of their baby's death and may fear the same news in a subsequent pregnancy. While not every parent will exhibit symptoms of PTSD in subsequent pregnancies, properly preparing families for medical procedures may help to alleviate further trauma and keep the focus in the present, on the current baby and pregnancy. Future research is needed in order to provide a better understanding of how these pregnancies are perceived by the parents. This will guide the type of education and support that families may need during a pregnancy that follows a loss and into the postpartum period.

References

- American Psychiatric Association (2000). *Diagnosis and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.
- Armstrong, D. (2001). Exploring fathers' experiences of pregnancy after a prior perinatal loss. *Maternal Child Nursing, 26*, 147–153.
- Armstrong, D. & Hutti, M. (1998). Pregnancy after perinatal loss: The relationship between anxiety and prenatal attachment. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 27*(2), 183–189.
- Ayers, S. & Pickering, A. D. (2001). Do women get posttraumatic stress disorder as a result of childbirth? A prospective study of incidence. *Birth, 28*(2), 11–18.
- Bailham, D. & Joseph, S. (2003). Post-traumatic stress following childbirth: A review of the emerging literature and directions for research and practice. *Psychology, Health, and Medicine, 8*, 159–168.
- Baillie, C., Smith, J., Hewison, J., & Mason, G. (2000). Ultrasound screening for chromosomal abnormality: Women's reactions to false positive results. *British Journal of Health and Psychology, 5*, 377–394.
- Ballard, C. G., Stanley, A. K., & Brockington, I. F. (1995). Post-traumatic stress disorder (PTSD) after childbirth. *Journal of Psychiatry, 166*, 525–528.
- Beck, C. T. (2004). Birth trauma: In the eye of the beholder. *Nursing Research, 53*, 28–35.
- Chez, R. (1995). After hours. *Obstetrics & Gynecology, 85*, 1059–1061.
- Church, S. & Scanlan, M. (2002). Post-traumatic stress disorder after childbirth: Do midwives have a preventive role? *The Practicing Midwife, 5*(6), 10–13.
- Condon, J. (1985). The parental-fetal relationship: A comparison of male and female expectant parents. *Journal of Psychosomatic Obstetrics and Gynaecology, 4*, 271–284.

- Cote-Arsenault, D., Bidlack, D., & Humm, A. (2001). Women's emotions and concerns during pregnancy following perinatal loss. *Maternal Child Nursing, 26*(3), 128-134.
- Cote-Arsenault, D. & Mahlangu, N. (1998). Impact of perinatal loss on the subsequent pregnancy and self: Women's experiences. *Journal of Psychosomatics in Obstetric and Gynecologic & Neonatal Nursing, 28*, 274-282.
- Cote-Arsenault, D. & Morrison-Beedy, D. (2001). Women's emotions and concerns during pregnancy following perinatal loss. *Maternal Child Nursing, 26*, 239-244.
- Creedy, D., Shochert, I., & Horsfall, J. (2000). Childbirth and the development of acute trauma symptoms: Incidence and contributing factors. *Birth, 27*(2), 104-111.
- Crowther, M. (1995). Perinatal death: Worse obstetric and neonatal outcome in a subsequent pregnancy. *Journal of the Royal Army Medical Corps, 141*, 92-97.
- Cuisinier, M., Janssen, H., de Graauw, C., Bakker, S., & Hoogduin, C. (1996). Pregnancy following miscarriage: Course of grief and some determining factors. *Journal of Psychosomatics in Obstetrics and Gynecology, 17*, 168-174.
- Dahlberg, K., Drew, N., & Nystrom, M. (2001). *Reflective lifeworld research*. Sweden: Studentlitteratur, Lund.
- Davidson, J. (2001). Recognition and treatment of posttraumatic stress disorder. *Journal of the American Medical Association, 286*, 584-588.
- Dyregrov, A. & Dyregrov, K. (1999). Long-term impact of sudden infant death: A 12-15 year follow-up. *Death Studies, 24*, 93-113.
- Engelhard, I., van den Hout, M., & Arntz, A. (2001). Posttraumatic stress disorder after pregnancy loss. *General Hospital Psychiatry, 23*, 62-66.
- Eurenius, K., Axelsson, O., Gallstedt-Fransson, I., & Sjoden, P. O. (1997). Perception of information, expectations and experiences among women and their partners attending a second-trimester routine ultrasound scan. *Ultrasound in Obstetrics and Gynecology, 9*, 86-90.
- Filly, J. (2000). Obstetrical sonography: The best way to terrify a pregnant woman. *Journal of Ultrasound Medicine, 19*, 1-5.
- Fonagy, P. (2000). *The development of psychopathology from infancy to adulthood: The mysterious unfolding of disturbance in time*. Paper presented at the World Association of Infant Mental Health Conference, Montreal.
- Gamble, J., Creedy, D., Webster, J., & Moyle, W. (2002). A review of the literature on debriefing or non-directive counseling to prevent postpartum emotional distress. *Midwifery, 18*(1), 72-79.
- Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology, 28*, 235-260.
- Gold-Beck-Wood, S. (1996). Post-traumatic stress disorder may follow childbirth. *British Medical Journal, 313*(7060), 774.
- Goldenberg, R. L., Mayberry, S. K., Copper, R. L., Dubard, M. B., & Hauth, J. C. (1993). Pregnancy outcome following a second-trimester loss. *Obstetrics & Gynecology, 81*, 444-446.
- Halling, S. (2002). Making phenomenology accessible to a wider audience. *Journal of Phenomenological Psychology, 33*, 19-38.

- Helzer, J. E., Robins, L. N., & McEvoy, L. (1987). Post traumatic stress disorder in the general population: Findings of the Epidemiologic Catchment Area Survey. *New England Journal of Medicine*, *317*, 1630–1634.
- Hembree, E. & Foa E. (2000). Posttraumatic stress disorder: Psychological factors and psychosocial interventions. *Journal of Clinical Psychiatry*, *61*(Suppl. 7), 33–39.
- Hughes, P. M., Turton, P., & Evans, C. D. H. (1999). Stillbirth as risk factor for depression and anxiety in the subsequent pregnancy: Cohort study. *British Medical Journal*, *318*, 1721–1724.
- Hughes, P., Turton, P., Hopper, E., & Evans, C. D. H. (2002). Assessment of guidelines for good practice in psychosocial care of mothers after stillbirth: A cohort study. *Lancet*, *360*, 114–118.
- Hughes, P., Turton, P., Hopper, E., McGauley, G. A., & Fonagy, P. (2001). Disorganized attachment behavior among infants born subsequent to stillbirth. *Journal of Child Psychology and Psychiatry*, *42*, 791–801.
- Hunter, M. S., Tsoi, M. M., Pearce, M., Chudleigh, P., & Campbell, S. (1987). Ultrasound scanning in women with raised serum alpha fetoprotein: Long term psychological effects. *Journal of Psychosomatic Obstetrics and Gynecology*, *6*, 25–31.
- Hutti, M. (1992). Parents' perception of the miscarriage experience. *Death Studies*, *16*, 401–415.
- Janoff-Bulman, R. (1992). *Shattered assumptions*. New York: Free Press.
- Janssen, H., Cuisinier, M., Hoogduin, K., & de Graauw, K. (1996). Controlled prospective study on the mental health of women following pregnancy loss. *American Journal of Psychiatry*, *153*, 226–230.
- Johnson, M. & Puddifoot, J. (1996). The grief response in partners of women who miscarry. *British Journal of Medical Psychology*, *69*, 313–327.
- Leon, I. (1990). *When a baby dies*. New Haven, CT: Yale University Press.
- Lyons, J. (1991). Strategies for assessing the potential for positive adjustment following trauma. *Journal of Traumatic Stress*, *4*, 93–111.
- Malicoat, T. (2001, May/June). Trauma work: Folly or future? *The Forum, Education and Counseling*, pp. 7–8.
- Menage, J. (1993). Post-traumatic stress disorder in woman who have undergone obstetric and/or gynecological procedures. *Journal of Reproductive and Infant Psychology*, *11*, 221–228.
- Michelacci, L., Fava, G. A., Grandi, S., Bovicelli, I., Orlandi, C., & Trombinii, G. (1988). Psychological reactions to ultrasound examination during pregnancy. *Psychotherapy and Psychosomatics*, *50*, 1–4.
- Mitchell, L. (2004). Women's experience of unexpected ultrasound findings. *Journal of Midwifery and Womens Health*, *49*(3), 228–234.
- Nader, K. (1997). Childhood traumatic loss: The interaction of trauma and grief. In C. Figley, B. Bride, & N. Mazza (Eds.), *Death and trauma: The traumatology of grieving* (pp. 17–41). New York: Taylor & Francis.
- O'Leary, J. (2002). *The meaning of parenting during pregnancy after the loss of a previous baby*. Unpublished doctoral dissertation, University of Minnesota.
- O'Leary, J. (2004a). Grief and its impact on prenatal attachment in the subsequent pregnancy. *Archives of Women's Mental Health*, *7*(1), 7–18.

- O'Leary, J., Parker, L., & Thorwick, C. (1998). *After loss: Parenting in the next pregnancy. A manual for professionals working with families in pregnancy following loss*. Minneapolis, MN: Allina Health Systems.
- O'Leary, J. & Thorwick, C. (1997). Impact of pregnancy loss on the subsequent pregnancy. In Woods & Esposito-Woods (Eds.), *Loss during pregnancy or in the newborn period* (pp. 431–463). Pitman, NJ: Jannetti.
- O'Leary, J. & Thorwick, C. (2004). *Father's perspective during a pregnancy after a loss*. Submitted for publication.
- Parker, L. & O'Leary, J. (1989). Impact of prior prenatal loss upon subsequent pregnancy: The function of the childbirth class. *International Journal of Child-birth Educators*.
- Peterson, G. (1994). Chains of grief: The impact of prenatal loss on subsequent pregnancy. *Pre and Perinatal Psychology*, 9(2), 49–58.
- Polkinghorne, D. (1989). Phenomenological research methods. In R. S. Valle & S. Halling (Eds.), *Existential-phenomenological perspectives in psychology: Exploring the breadth of human experience*, (pp. 41–60). New York: Plenum Press.
- Prigerson, H. G., Shear, M. K., Jacobs, S. C., Reynolds J. L., Maciejewski, P. K., Davidson, J. R. T., et al. (1999). Consensus criteria for traumatic grief. *British Journal of Psychiatry*, 174, 67–73.
- Rando, T.A. (2000). Anticipatory mourning: A review and critique of literature. In Rando, T.A. (Ed), *Clinical dimensions of anticipatory mourning*. Research Press, Champaign, IL, pp. 17–30.
- Reynolds, J. L. (1997). Post-traumatic stress disorder after childbirth: The phenomenon of traumatic birth. *Canadian Medical Association Journal*, 156, 831–835.
- Ryding, E. L. (1991). Psychosocial indications for cesarean section: A retrospective study of 43 cases. *Acta Obstetric et Gynecologica Scandinavica*, 70, 47–49.
- Ryding, E. L. (1993). Investigation of 33 women who demanded a cesarean section for personal reasons. *Acta Obstetric et Gynecologica Scandinavica*, 77, 542–547.
- Samuelsson, M., Radestad, I., & Segestern, K. (2001). A waste of life: Fathers' experience of losing a child before birth. *Birth*, 28(2), 124–130.
- Schrodt, GR & Tasman, A. (1999). Behavioral Medicine. In Jonas, W. & Levin, J. (Eds.) *Essentials of complementary and alternative medicine*. Lippincott Williams & Wilkins, New York, NY., 444–458.
- Seng, J. S., Oakley, D. J., Sampselle, C. M., Killion, C., Graham-Bermann, S., & Liberzon, I. (2001). Posttraumatic stress disorder and pregnancy conditions. *Obstetrics & Gynecology*, 97, 17–22.
- Simpson, M. (1997). Traumatic bereavements and death-related PTSD. In C. Figley, B. Bride, & N. Mazza (Eds.), *Death and trauma: The traumatology of grieving* (pp. 3–16). New York: Taylor & Francis.
- Spiegelberg-Gardner, P. (2003). Previous traumatic birth: An impetus for requested cesarean birth. *Journal of Perinatal Education*, 12(1), 1–5.
- Satham, H. & Green, J. (1994). The effects of miscarriage and other “unsuccessful” pregnancy loss. *Journal of Reproductive and Infant Psychology*, 12, 45–54.

- Stinson, K., Lasker, J., Lohmann, J., & Toedter, L. (1992). Parental grief following pregnancy loss: A comparison of mothers and fathers. *Family Relations*, *41*, 218–223.
- Theut, S., Pedersen, E., Zaslow, M., & Rabinovich, B. (1988). *Pregnancy subsequent to perinatal loss: Parental anxiety and depression*. Paper presented at the annual meeting of the American Academy of Child and Adolescent Psychiatry, DC: Washington.
- Thompson, N. (2001). The ontology of masculinity: The roots of manhood. In D. A. Lund (Ed.), *Men coping with grief* (pp. 27–35). Amityville, NY: Baywood.
- Tsoi, M. M., Hunter, M., Pearce, M., Chudleigh, P., & Campbell, S. (1987). Ultrasound scanning in women with raised serum alpha fetoprotein: Short-term psychological effect. *Journal of Psychosomatic Research*, *31*, 35–39.
- Turton, P., Hughes, P., Evans, C. D., & Fainman, C. (2001). Incidence, correlates and predictors of post-traumatic stress disorders in the pregnancy after stillbirth. *British Journal of Psychiatry*, *178*, 556–560.
- Van Manen, M. (1997). *Researching lived experience*. London, Ontario, Canada: Althouse Press.
- Veronen, L. J. & Kilpatrick, D. G. (1983). Stress management for rape victims. In Meichenbaum, D. & Jaremko, M.E. (Eds.), *Stress reduction and prevention*, 341–374. New York, Plenum.
- Weaver, J. (1997). Childbirth: Preventing post-traumatic stress disorder. *Professional Care of Mother and Child*, *7*(1), 2–3.
- Weiss, R. (2001). Grief, bonds and relationships. In M. Stroebe, R. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research* (pp. 47–62). Washington, DC: American Psychological Association.
- Wijma, K., Soderquist, J., & Wijma, B. (1997). Posttraumatic stress disorder after childbirth: A cross sectional study. *Journal of Anxiety Disorders*, *11*, 587–597.
- Worth, N. (1997). Becoming a father to a stillborn child. *Clinical Nursing Research*, *6*(1), 71–89.
- Yehuda, R. (2002). *Treating trauma survivors with PTSD*. Washington, DC: American Psychiatric Association.

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