Prenatal Opportunities for Parenting: The “POP” Ultrasound

The Problem: The outcomes of pregnancy are still sub-optimal. This is especially so among minorities and socio-economically disadvantaged populations. There is evidence to indicate these poor outcomes are highly related to sub-optimal prenatal – perinatal parenting. Historically, the emphasis on prenatal parenting has focused on the mother; while generally ignoring the importance of the father at this crucial developmental time in the life of a child.

An Answer: Medical providers need to encourage optimal maternal and paternal parenting. Ideally, such efforts need to begin pre-pregnancy, but most certainly -prenatally. While we recognize that the prenatal ultrasound is a diagnostic exam, we believe that we could and should use the occasion as a ‘teachable moment’ in order to better serve our families. The inspirational dimension of these sonograms should be directed at both the mom and the dad. We are encouraging the involvement of the father in these sonograms based on anecdotal and intuitive evidence that paternal involvement at the prenatal ultrasound could lead to a greater sense of attachment and ultimately better outcomes for babies and mothers. While not the entire solution, the prenatal ultrasound can be a valuable tool to encourage optimal prenatal parenting.

Why the “POP” Sono?

POP stands for Prenatal Opportunities for Parenting Ultrasound. It seems apparent that people can love better that which they can see. The literature identified in the review for this project supports the idea that prenatal ultrasounds are an opportunity for teaching and drawing the parents into an involvement with their unborn child. The mother can more easily bond to the fetus as she perceives the motion of the fetus in utero. This bonding is further supported by the visual impact from the sonogram.

The attachment of fathers may be especially impacted by the prenatal ultrasound. Prior to ultrasound imaging, mothers acted as a gateway for access of the father to the unborn child. Fathers were able to interact with the fetus solely through a mother-mediated activity – explanations of the changes occurring within her body, a description of fetal movement or feeling the movements on the mother’s abdomen. The image of the fetus by ultrasound offers fathers more direct access to their child. The ultrasound has therefore expanded upon the mother’s sensorial or experimental knowledge, to include visual knowledge of both father and mother as an important means to ‘know’ the baby.

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Repeatedly in the literature, sonography is differentiated from any other screening or diagnostic technique by its ability to offer direct access to the fetus, facilitating relational reactions. Sandelowski (1994) went further and suggested that most expectant couples do not view the ultrasound as a diagnostic exam but rather as an interaction with their baby – it was viewed like a movie, as an occasion for parental appraisal.

Some evidence suggests that men, being more visually driven, are more wholly drawn into the experience of pregnancy via ultrasound images than by even feeling the baby move. It allows fathers to see what mothers may have been describing they feel. It provides concrete evidence that yes, there really is a baby in there and it looks like a baby and responds like a baby. The ultrasound makes the baby ‘real.’ The reality of the fetus can also be further demonstrated by showing the parents life-sized models of the fetus. The fetal models and brochure (enclosed) created for the “POP” ultrasound also supports this idea. Providing a tactile and visual representation of the size and human-like features of the developing fetus, as well as, an explanation of the fetal developmental milestones engages the parents and aids them in relating to the growing fetus as a baby. The ultrasound thus aids men during the pregnancy as they begin to identify as fathers. After all, if the fetus/baby is ‘real,’ then they are going to be ‘real’ fathers.

Draper (2002) also suggests that the ultrasound is important to fathers. She reported that fathers interviewed indicated that the ultrasound was the most significant event in the pregnancy for them. Interestingly, the prenatal ultrasound is one of the few culturally sanctioned events during pregnancy for which the father may miss work or school. The visual knowledge gained during the sonogram was many of the men’s most vivid memories. It may not have solely created the bond the men felt for their child but it helped to intensify their attachment.

Garcia, et al. (2002), West (1995), Lumley(1990), and Reading, et al. (1982) looked at parental bonding related to the prenatal ultrasound and suggest that high levels of feedback from the sonographer are vital to this intervention. Obstetrical sonographers can provide information and descriptions of the fetal image as they are performing the scan. Enhanced attachment to the fetus was best accomplished when the sonographer emphasized normal physiological and developmental attributes of the fetus.

How to’s:

- Use language level appropriate for couple.
- Answer questions as capable.
- Give informational brochure detailing fetal capabilities at various gestational ages (See attached).
- Consider using fetal models to further illustrate the human-ness (and loveable-ness) of the fetus. Models are available to order through various sources. The least expensive source we identified was:

  **Childbirth Graphics**
  WRS Group, LTD.
  P.O. Box 21207
  Waco, TX 76702-1207
  **Phone:** 800-299-3366, ext. 287
  Or (254) 776-6461, ext. 287
  **Fax:** 888-977-7653
  **Website:** [www.childbirthgraphics.com](http://www.childbirthgraphics.com)
  **Email:** childbirthgraphics@wrsgroup.com

  The model sets available through Childbirth graphics range in price from ~$150-$650 (depending on the type of set chosen).

Status of “POP” Ultrasound:

Currently the “POP” sono is in the conceptual/sharing/ and trial phase. We believe that if implemented correctly, it is likely to help foster early and optimal parenting. We are seeking further input as it enters the critical trial phase. We, the Center for Maternal and Child Health of Upstate Medical University, are available to provide the necessary in-service programming for interested sonographers. In addition, we recognize the need to keep within professional standards and the need to avoid commercialization.

Eventually, we will need research to clarify the impact of this protocol. Meanwhile, we fully expect that mothers, fathers, babies and families will greatly benefit.

Let’s give it a try.
Parenting: What is going on?

Women have traditionally been the care providers for babies and young children. Until recently, the role of fathers and the possibility that fathers might impact the lives of their children was virtually unheard of in the literature. Not until the natural childbirth movement in the 1950’s did expectant fathers even begin to enter labor and delivery units.

Interest in fatherhood has increased steadily over the last twenty years, mirroring socio-cultural changes in society. Changes in demographics, changes in employment patterns, and changes in social policy have led to a division of domestic labor with an increase in paternal involvement in childcare. With these changing trends have come new questions about fatherhood and fathering.

Absent Fathers: A Demographic Shift

Separation, divorce, never married couples, and paternal incarceration increase the number of children growing up in homes without a father. You may be wondering why this is important... The facts point out that this is important because, the infant mortality rate for infants born to unmarried mothers is nearly twice that for married mothers, (Matthews et al., 2000). Infant mortality is increased by over 200% among children without a father’s name on their birth certificate, (Gaudino, et al., 1995).

Even when factors such as education level are taken into account – a factor that often distinguishes single from two parent families - unmarried women are less likely to obtain adequate prenatal care and are more likely to give birth to a low birth-weight baby, (U.S. Department of Health and Human Services, 1995).

Black unmarried mothers are nearly four times as likely to have received no prenatal care as black married mothers. White unmarried mothers are five times as likely to have received no prenatal care as white married mothers, (Eberstadt, 1991). Thus an involved father appears to be beneficial to the health of the fetus/newborn as well as the mother.

Becoming a Father:

Fathering should optimally begin before conception, but certainly before birth. This includes behaviors such as learning to care for an unborn baby, care for a pregnant partner, and preparing for the baby’s birth.

Caring for the unborn baby:

This is the concept of active parenting, with consideration and awareness of the unborn child. Fathers should be given information about the baby’s developmental progression through each trimester.

Babies are competent, capable people. Unborn babies can feel, see, hear and suck – similar to a newborn baby. Fathers can communicate directly with their babies through touch and talk. Some research suggests that babies can hear their father’s low-pitched male voices more easily than higher-pitched female voices, as amniotic fluid transmits lower-pitched sounds more readily.

Fathers can also communicate indirectly by taking care of the baby’s mother, allowing her to better care for the growing baby.

Caring for their pregnant partner:

Father’s should be encouraged to support their pregnant partner, both emotionally and physically, throughout the process of pregnancy. This would include encouraging healthy behaviors and avoidance of potentially dangerous ones on the part of the mother.

Caring for mothers is a valuable contribution to the well-being of babies. We all recognize the importance of a mother’s nutritional state as it relates to her growing baby. Rest and physical fitness are also key to a mother’s health and wellness. And it is certain that we are all committed to early and consistent prenatal care as well as the elimination of harmful substances from the mother’s system.

An often overlooked aspect of maternal care is the fact that a mother’s emotional state affects her baby’s emotional state through the hormonal communication network between them. When a mother is stressed or upset she releases stress hormones that may cross the placenta and affect her baby.

Fathers can care for their partners, and therefore their babies, by helping to create a stable and stress-less environment for mother and baby.

Preparing for Birth:

Fathers should be encouraged to attend prenatal care appointments, as well as prenatal parenting and birth preparation classes.

Prenatal care appointments are an opportunity for fathers to take an active role in the care and well-being of their unborn baby. At appointments fathers learn about the changes occurring in both their partner and their baby. They can also receive information and help encourage their partner to adhere to recommendations of the prenatal care provider.

Childbirth and parenting preparation classes offer just that, preparation for the jobs to come. They can also offer benefits to both parents. In classes, mothers and fathers learn about the physical and emotional changes going on within the pregnant woman. This knowledge allows the fathers to understand why the changes are occurring and how to be sensitive to them.

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The knowledge gained also aids fathers in playing an active and informed role in the decisions that pregnant couples make as they prepare for the birth of their baby.

Childbirth and parenting classes introduce expectant parents to other expectant couples who may be experiencing similar feelings and experiences. The ideas and support from peers can be beneficial to both parents.

Preparation classes help new fathers learn how to support their partners. It is helpful for expectant fathers to have an idea of what labor and delivery might be like and how their partner may react. Learning about the process and about newborns may prevent fathers from being intimidated by the hospital environment and allow them to play a more active role right from the start.

Labor and Delivery:

Birth is more than a medical event, it is a social one. It is an important milestone in the life of a couple, whether married, unmarried, together or separated.

Fathers can provide support and comfort as a laboring mother copes with the challenges of childbirth. It should not be expected that a father be the only support person for a women in labor. But a father can ideally provide love and caring, touch and words of encouragement in order to best support his partner.

Participation in the birth process enhances the paternal-infant bond. Early, frequent interactions between both parents and their newborn provides the groundwork for developing a strong relationship between the three. A relationship is an ongoing interaction and the sooner contact begins the more quickly a bond can form. Mother-baby attachment/bonding has gotten much press. The benefits of mother-baby contact have been well established. But the father-baby relationship is vital as well.

Dr. William Sears describes fathers’ engrossment with their newborns shortly after birth in *Becoming a Father*, 2003. “. . . Not only does a new baby become a large part of a father’s life, but fathers themselves feel they have suddenly grown: they feel bigger, stronger, older, and more powerful. The father feels an increase in his self-esteem and a stronger identity as a parent.”