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PRE-TERM BABIES

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A few months ago my daughter arrived very early. I was due on February 2, 2006, and before I had a chance to enjoy my last trimester, I was rushed to the hospital to have-- an emergency caesarean section at twenty-nine weeks gestation. Before this experience, I would have never thought of having a pre-term delivery because my other two pregnancies went full-term. During the month my daughter was in the neonatal intensive care unit, I encountered numerous women who had pre-term deliveries or births before the end of the thirty-seventh week. In fact, there has been a rise in the number of pre-term births in the United States. Many of these pre-term births happened among women who never expected to have any complications during their pregnancy. Some of these women have risk factors and/or have some complications, but never imagined having a pre-term delivery. They like me just assumed they would go full-term. My experience and the experiences of the other mothers' that I met led me to ask the general question for this research which is: What are the factors that place some women at greater risk for a pre-term delivery? In order to address this question there are a few related questions that I must consider. For example, what are some of the factors mentioned frequently in the research literature? Are physicians able to predict those who are candidates for pre-term versus full term births?

In the United States, we now have more than 476,000 infants who are born prematurely each year (Woolston, 2005a). The rate of pre-term births has increased significantly over the past twenty-five years to a point where they now are approximately one out of every eight births (Woolston, 2005a). The United States is not the only country that has experienced an increase in the rate of

pre-term births. Reports from Denmark and the United Kingdom confirm that these countries have had an increase in pre-term births from 1995-2004 (BBC, 2006; Jones, 2006).

These early deliveries can come several weeks or months before their due date. These children will be the ones who will have more sicknesses and impairments. According to a report published by the British Broadcasting News as many as one in four children born with fewer than 25-week gestation have severe mental or physical disability. Even beyond 32 weeks, one in three children has educational or other developmental problems by the age of seven (BBC, 2006; Jones, 2006).

These infants are often born small in size, ranging from three pounds or less, and are not fully developed (Woolston, 2005b). Because of low-birth weight and other complications, preterm infants frequently have more extended stays in the hospital and have high medical costs. The average cost of a premature baby's hospital stay is about $58,000, compared to $4,300 for a typical newborn (Woolston, 2005b). The costs increase significantly when a child is born 13 weeks early or more (State Legislature, 2006).

Pre-term children are at risk for death. In 2002, sixty-five percent of infants who died prior to their first birthday were preterm births (Lister, 2006; Jones 2006). In fact, "Premature birth is now the leading cause of death and long-term disability among newborns" in the United States (Woolston, 2005a; Lister, 2006). In the United Kingdom about seventy-five per cent of neonatal deaths and most of the neonatal intensive care unit cases are related to pre-term deliveries (Jones, 2006).

What Are The Factors That Place Some Women At Greater Risk For A Pre-Term Delivery?

Over the years there has been an increasing amount of research in pre-term births. Some research suggests that some African-American women may be at greater risk for pre-term births. In an article entitled, "Born Too Soon," published in Essence Magazine, Tamara Jeffries (2005) offers the example of an African-

American woman who appeared to be having a normal pregnancy until she gave birth at twenty-eight weeks to her son, due to an elevation in her blood pressure. According to Jeffries, she was not aware of her condition, which was a symptom of pre-eclampsia. There were no previously diagnosed risk factors. A few years later when this mother was pregnant with her second child, her doctors monitored her carefully; however, her second child was also a pre-term baby.

The underlying question is clearly, are certain groups of women at higher risk and this article speaks to a group that is considered at higher risk? In an article published in one of the leading medical journals, Lancet, Slattery (2002) stated that the chances that a black woman will deliver early are almost two times higher than for a Caucasian woman, regardless of socioeconomic class. This conclusion was reached after reviewing many studies and data on pre-term births.

Race is not the only factor that places some women at greater risk for an early delivery. As stated by Lister, "There has been an alarming rise in the number of women giving birth prematurely risks overloading the NHS and may be linked to increases in obese and older mothers, according to doctors" (2006). Many women are deciding to postpone having children in order to complete their education, start a career, or perhaps simply because they feel that they do not want to have children immediately after they get married. "Concerns have been raised by many gynecologists and obstetricians about the health impacts of the rapid rise of career women becoming pregnant later in life. Fertility problems increase after 35, and greatly so for women over 40" (Lister, 2006). A study of more than 600,000 births over the past decade found that the number of deliveries occurring before nine months of pregnancy had increased by almost a quarter. Women over 35 had the faster-growing birthrates. Women in over the age of forty were having babies at twice the rate that they were having children just ten years earlier. It is fairly easy to see that maternal age is one of the risk factors for pre-term births. In addition to the reasons cited above, some of the research implies that order women who develop preeclampsia may do so more severely. Older moth-

ers may also be at greater risk for developing gestational diabetes (Bradford, 2003).

In the previous paragraph we implied that being overweight increased the chances of having a pre-term birth. Some studies have suggested that the rising rates of maternal obesity may be contributing to the increase in early deliveries. Being extremely overweight or obese can cause serious health problems and complications, such as increased risk for a miscarriage, unrecognized and/or gestational diabetes, and extreme hypertension, and may force an expectant mother to be hospitalized; for babies, it can cause premature birth, serious birth defects, or other major health problems (Woolston, 2005a; Goetzl and Harford, 2005).

One of the frequently mentioned factors related to pre-term births is a mother's lifestyle choice. For example, Jeffries (2005) and Woolston (2006a) suggested that smoking or alcohol abuse might be risk factors for pre-term births. These factors were also mentioned as risk factors in the Medical Algorithms Project (2006). Yet according to a very elaborate research study conducted in England, smoking and alcohol use were not significantly related to early births (Peacock, Bland, and Anderson, 1995). The authors also reported that neither caffeine consumption nor alcohol increased a mother's risk for a pre-term delivery.

While these studies offer contradictory assessments about smoking and alcohol they point to other factors that are relevant for this discussion. One of the important differences between two of the articles is that one focuses exclusively on African-American women (Jeffries, 2005) and the other was based on a study that included white women only (Peacock, Bland, and Anderson, 1995). Pre-term deliveries seem to occur more frequently among less educated women, African-American women and single women (Peacock, Bland, and Anderson, 1995; The Medical Algorithms Project, 2006). Some of these social circumstances may create an adverse environment for an expectant mother. We know that people with insufficient incomes often do not get adequate health care, so that could be among the reasons why there is so much emphasis on prenatal care for these women (Jeffries, 2005; The Medical Algorithms Project, 2006). We also know that stress increases the

risk that an expectant mother will experience pre-term labor and possibly a pre-term birth.

Are Physicians Able To Predict Who Are Candidates for Pre-Term Versus Full-Term Birth?

The article entitled "Assessment of Risk Factors for Pre-Term Birth," published in the National Guideline Clearinghouse (2004) suggests that there are still unanswered questions about pre-term births. This article was written for health care providers and focused on some of the ways that we could determine the risks for a pre-term delivery. One of their observations was that obtaining a good medical history from a pregnant woman is one of the best ways to determine if a woman is at risk for a pre-term birth. For example, knowing that a woman has had either a spontaneous pre-term birth or a spontaneous pre-term abortion may help assess her risks for a pre-term birth (The Medical Algorithms Project, 2006).

Some researchers suggest that there are two others elements of a woman's medical history that might be important when trying to determine whether a woman is a risk for pre-term labor and a pre-term birth. In a small scale study of the family histories of 220 women in Utah all of whom had at least one pre-term birth they found that several of these women had at least five close relatives who also had pre-term births (Reuters, 2005). Although this study was not conclusive, it suggested some women who give birth prematurely might have a relative who had either pre-term labor or a pre-term birth. The assumption is that there may be a genetic link among some women who have pre-term births. The other part of a woman's medical history that is important to know is whether there have there been other pregnancies. The critical issue here is "when the gap between births is short (less than 15 months) or longer than five years," the mother is at much greater risk of having a pre-term birth (Lister, 2006; The Associated Press, 2006).

Although we have learned a lot from the many sources of information concerning pre-term births, there is still more research that must be done and there are still inconsistencies on determining what are the risk factors that place some women at a greater risk for a pre-term delivery. Physicians are not always able to predict accurately which mothers are candidates for pre-term versus full-term deliveries.

"There's no way to guarantee a healthy, full-term baby," says Charles Lockwood M.D., the chair of obstetrics and gynecology at the Yale University School of Medicine. "Rates of premature delivery are high even among women even among women who do everything just right," he says. Still, he believes every woman should do what she can to give her baby the best possible state." (Woolston, 2005b)

What Are Some of The Ways To Educate Women About The Risks of Premature Births?

Although there are no guarantees that every pregnancy will end with a full-term, healthy delivery, we know that it is what most women want for their children. Given the increase in pre-term deliveries it is important for women to become more familiar with the factors that might place them at risk. The March of Dimes is in the midst of a $75 million effort to inform and educate women about some of the things they can do to prevent pre-term births (Woolston, 2005b). One of the first steps of any campaign or activity might be to encourage women and their partners to meet with a health care provider to discuss their plans for having a family. Family planning sounds idealistic but it would be an opportunity to discuss family history, personal health history, lifestyle and career expectations and other issues that could affect the conception, child bearing and child rearing process. In some instances these discussions could discourage some from having children or at least en-

courage them to be realistic about their ideas.

Second to family planning, one of the best ways to educate women about the risks of premature births would be through the provision of good pre-natal care. The pre-natal care would obviously deal with the medical conditions that might increase the possibility that a woman would have a pre-term delivery. It would also address some of the genetic, social and environmental risk factors. Finally, I would encourage prospective mothers to get more information, ask questions, and read about ways to maintain a healthy pregnancy.

Conclusion

Technology has helped us improve the quality of our lives in many areas. Improvements in medical technology are probably one of the foremost reasons we are seeing the growth in premature births. Because of the improvements in medical care we have the means by which to care for premature babies who would have died twenty years ago. Many are now surviving and are going on to have a good quality of life (Jones, 2006).

From personal experience, there are many children who are in situations similar to my daughter's, and in some cases worse, that are born pre-term or full-term with various medical conditions. Thankfully, with new technology these children can grow up to be very healthy individuals even though they arrived ahead of schedule. "While this is good news, we need to make sure that we have made resources available in the health care system to cope with the increasing demands" (BBC, 2006). The cost of caring for pre-term babies is astonishing. My personal health insurance has helped, but additional subsidies were required.

Pregnancy should be one of the happiest parts of a woman's life. Women must, however, learn, teach, and be weary of all the obstacles and challenges that they may face and know that self–education is the best resource. This self-education must go hand in hand with quality pre-natal and neo-natal care that is directed toward helping the child live a full and healthy life.

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