Effects Of Preterm Birth

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About ten percent of infants born in the United States each year are born prematurely (McCabe, Carrino, Russel, & Howse, 2014). Infants born at less than 37 weeks gestation are considered to be preterm, and infants born at less than 32 weeks gestation are considered to be very preterm (Whittingham, Boyd, Sanders, & Colditz, 2014). Preterm birth is a large-scale unresolved problem for modern day obstetrics, and it is the focal point of much research (Stewart & Graham, 2010). Despite the improvements in neonatal care, preterm birth is still the leading underlying cause of infant morbidity and mortality (Stewart & Graham, 2010). It has a major impact on the affected infant and family, as well as on society as a whole. From 1980 to 2006 there was a steady increase in preterm births in the United States with a spike in 2006, in which 12.8% of infants were born preterm (McCabe et al., 2014).

Infants born preterm are more likely to have disabilities than those who are born full-term (McCabe et al, 2014). Many have chronic respiratory problems such as asthma, feeding complications, as well as vision and hearing loss (Stewart & Graham, 2010). As many as 50% of children who were born very preterm will have developmental and behavioral problems, intellectual and educational difficulties, and hyperactivity (Whittingham et al., 2014). As many as 16-28% will develop cerebral palsy (Stewart & Graham, 2010). One study done on preschool aged children demonstrated that those who had been born very preterm had a tendency to receive lower test scores (Pitchford, Johnson, Scerif, & Marlow, 2011). According to Feldman, Weller, Eidelman, and Sirotai, (2002) there is also a greater risk of attention deficit, as well as a decrease in cognitive and motor skills later in childhood. One study indicated that the greater the number of invasive procedures done on the preterm infant, the lower the IQ was at age 7 (Vinal et al., 2014). Some of these problems may be caused from the preterm birth itself, but the lower
quality of parenting that the preterm infant often receives is likely involved as well (Feldman et al., 2002).

The quality of parenting plays a vital role in the development of the preterm infant, affecting many aspects such as academic achievement, and language and social development (Whittingham et al., 2014). However, research indicates that there are many aspects involved in parenting a very preterm infant that are not conducive to high quality parenting (Brecht, Shaw, St. John, & Horwitz, 2012). Many parents feel that the hospitalization period for their preterm infant was very stressful and traumatic (Whittingham et al., 2014). According to Whittingham et al., (2014) many feel a sense of guilt and are hesitant to bond with their baby because they fear that the baby will not survive. Due to unavoidable life saving medical procedures that sometimes follow the birth of a preterm infant, parents are not immediately able to hold their baby, which could also delay bonding (Whittingham et al., 2014). Whittingham et al., (2014) points out that once the parents do take their baby home, many end up feeling isolated and overprotective. Many parents have expressed that they would have liked to have had extra support during this transition, such as access to a social worker or psychologist (Whittingham et al., 2014).

Premature birth is not only a problem for the infant and parents involved, but is most likely an economic burden on society as well (Petrou, Sach, and Davidson, 2001). According to Petrou, et al., (2001) the high cost of a NICU stay is well known, but the cost does not stop there. Preterm infants are more likely to be re-hospitalized, have more doctor and specialist visits, as well as an increased need for special education once they are in school (Petrou et al., 2001). It is also more likely that they will have to repeat a grade or drop out of school (Petrou et al., 2001).
In order to care for their preterm baby, many mothers are not able to return to full-time work, which often results in a reduction in family income (Petrou et al., 2001).

Many studies have been done on the causes of premature labor. The cause is not always known, but maternal risk factors for preterm delivery include smoking, a shorter than usual cervix, infection, a history of preterm birth, and being African American (Stewart & Graham, 2010). According to research, progesterone therapy in pregnancy may reduce the incidence of preterm birth (Stewart & Graham, 2010).

Studies have been done on formulating interventions for families such as skin to skin contact between the parent and the infant known as Kangaroo Care. According to Feldman et al., (2002), Kangaroo Care has significant long term benefits to both the mother and the infant. Mothers were found to be less depressed, and were able to provide a more sensitive, warm, positive, and stimulating environment for their baby (Feldman et al., 2002 ). It may also play a role in the psychological process of maternal attachment (Feldman et al., 2002). According to Whitelaw, (1990) mothers who practiced Kangaroo Care were more confident in breastfeeding and had a stronger desire to take their baby home from the hospital. Benefits to the infant may include being more alert, reduced crying, and a better ability to maintain body temperature (Whitelaw, 1990). Kangaroo Care has also been associated with higher scores on The Bayley Scale of Infant Development in the mental and motor areas of the test (Feldman et al., 2002).

It is necessary that more research be done in order to address the issues that are not conducive to long term quality parenting, and to formulate more interventions that will help strengthen the parent-baby relationship (Brecht et al., 2012). Some NICU’s have implemented a family centered approach to care, which involves the parents in daily tasks such as diaper
changes or baths (Pal, Alpay, Steenbrugge, & Detmar, 2014). Pal et al., (2014) also indicated that parents were happier when they had more control over decision making when it came to their baby’s care. According to research, it is important for medical professionals to be sensitive to the parents feelings and provide a sense of normalcy during such a traumatic time (Whittingham et al., 2014).

The reason that this topic has had a major impact on my life is because my second child was born twelve weeks premature. She was considered to be very preterm at just 28 weeks gestation (Whittingham et al., 2014).

I personally feel that modern medicine does not have all of the answers as to what causes premature delivery. This has been very frustrating for me because I did not have any of the known risk factors such as a history of preterm birth, a short cervix, an infection, nor have I ever smoked (Stewart & Graham, 2010).

I definitely agree with the research that stated that the hospitalization period was extremely traumatic for the parents (Whittingham et al., 2014). It was a time of great distress for me. As a parent going through that situation, I felt extremely helpless. I also initially felt guilty, wondering if I had done something wrong (Whittingham et al., 2014). I was in my twenties, took care of myself, and went to all of my prenatal check up appointments. How could that have happened to me?

I immediately noticed the initial lack of bonding that has been discussed in some of my research (Whittingham et al., 2014). With my first child who was born full-term, I was immediately able to hold him and begin bonding. I was able to start breastfeeding him the day he was born. With my preterm daughter however, it was completely different. The delivery
room was full of people, including a team of health care professionals waiting to save her life. The moment she was born, she was whisked away to the NICU. I was not even able to lay eyes on her until hours later. Due to her fragile condition, I was unable to hold her until the next day. When I did hold her I had to be very cautious of all the medical equipment and tubes that were keeping her alive. I had to go home without my baby, and although I did pump my breastmilk, I was unable to breastfeed her for weeks.

Just as research has indicated, I was very fearful that she would not survive and did not know what to expect (Whittingham et al., 2014). My daughter spent eleven weeks in the NICU, and at times it was touch and go. My emotions were up and down like a roller coaster ride. There were times of sadness, joy, fear, and a lot of disappointment. There were many times that just when I would start to think that she was doing better, she would have another set back. Some were major temporary set backs, like when she developed sepsis and had to go back on the ventilator.

I am grateful to the researchers who have indicated that parents going through such a difficult situation would prefer to have understanding and normalization from the medical professionals involved (Whittingham et al., 2014). That is exactly what was done by most of the professionals that cared for my daughter, and looking back it was very helpful.

The NICU my daughter was in implemented family centered care (Pal et al., 2014). My husband and I were able to take our daughter’s temperature, change her diapers, and once she was more stable, assist in her baths. I believe that this played a very important role in our bonding with her. Kangaroo Care was also a part of our daily routine with her. Looking back now, I can see how this probably helped more than I ever knew at the time. It is probably why I
had an easier time with breastfeeding and possibly contributed to my daughter’s positive outcome (Whitelaw, 1990).

Although there is a higher risk for disabilities associated with preterm birth as reported by McCabe et al., (2014), we are fortunate that my daughter does not have any. However, her first year was full of doctor and specialist visits, and there were many scares along the way.

Despite our decent income, because of my daughter’s extremely low birth weight, we qualified for government assistance during her hospital stay. As with many mothers of a very preterm baby, I was not immediately able to go back to work (Petrou et al., 2001).

I am very grateful for the research that has contributed to the advanced care of preterm babies. If not for modern day medicine, my daughter may not have survived. Although my daughter is now ten years old and seems to be like any other healthy ten year old, I often still think about her time in the NICU. I still wonder why I went into labor at 28 weeks gestation. For that I have never gotten any answers. It was a very traumatic experience for me. I felt isolated from friends and family, and I felt that nobody understood what I was going through (Whittingham et al., 2014). I feel that it is crucial that research in this area is continued in order to help prevent other families from having to go through what we went through, and to possibly someday give parents like me answers about why it happened in the first place. I also feel that support programs that could result from more research would be extremely beneficial for families going through such an incredibly difficult time.
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