

Rises in rates of cesarean section births



**ASSIGN
BUSTER**

In recent history, advancements in medical technology have resulted in an increase in labour and birth interventions. This has in turn, greatly increased caesarean section rates. Birth was once a natural, normal event in a woman's life, however this has been replaced by a maternity system where intervention is routine and interferes with the normal physiological birth process, putting women and their babies at risk unnecessarily (Romano & Lothian, 2008). Normal birth is associated with the best emotional and physical outcomes for women and their babies (New Zealand College of Midwives, 2009). However women have lost confidence in their own ability to give birth without the assistance of technological interventions. Where midwives previously spent their time supporting and comforting labouring women they now spend their time managing technology (Romano & Lothian, 2008). This essay will discuss factors which promote or adversely affect the normal physiology of birth and how we can promote the normal physiology of birth within a public maternity hospital setting. Environmental factors which may negatively or positively affect the normal physiology of labour will also be explored.

Normal physiological birth follows a natural sequence. Regular painful contractions of the uterus, stimulate and progress the cervix to efface and dilate along with foetal descent. This results in the spontaneous vaginal delivery of the baby and the placenta without complication to either mother or baby (Page & McCandlish, 2006).

It can be difficult to facilitate normal physiological birth within an environment dominated by a medical approach, where technology and medical expertise are highly valued. The midwife leaders need to show

strong leadership to support all midwives. Midwives need to be well educated and competent in the facilitation of normal birth to increase the rate of normal physiological birth (Midwives experience of facilitating normal birth in an obstetric-led unit: a feminist perspective, 2009).

Many of the factors that promote normal physiology are environmental in nature. When women are in labour they are extremely sensitive to feeling observed, disrupted or disturbed, this disrupts the natural hormone responses and progress of labour. Women generally find a warm environment preferable so that they feel comfortable to take off their clothing if they wish to do so. When women labour in a calm and quiet environment they feel a change in consciousness to a more primitive brain where birth instincts take over. Privacy and a home like environment also help to facilitate normal birth (Sara Wickham – Midwifery: Best practice, volume 5, 2008). Migrant women have reported that privacy is of particular importance to them (Hennegan, Redshaw & Miller, 2014). Women benefit from freedom of movement during labour (Thies-Lagergren, Hildingsson, Christensson & Kvist, 2013) and if given the opportunity will instinctively choose a variety of movements to help them cope with labour including walking, swaying, standing, leaning and the hands and knees position. Allowing freedom of movement benefits the mother in a number of ways including comfort, shortening labour, increased uterine contractions and less need for pharmacologic pain relief. It can also correct poor progress, malposition and sometimes foetal heart rate anomalies (Romano & Lothian, 2008). When women push spontaneously without being coached they are less likely to require suturing from trauma and have less pelvic floor

dysfunction than women who are coached to push (Romano & Lothian, 2008). The AWHONN (2013) recommends women should not push until they feel the urge to push and should do so spontaneously without direction. Women's experiences of control during labour and birth are overwhelmingly associated with their involvement in the decision making process (Christiaens, 2010). The process of writing a birth plan also increases a woman's feelings of control as it gives her the opportunity to think about possible scenarios and plan her responses and choices (Kuo, Hsu, Yang, Chang, Tsao & Lin, 2010). Freedom to move around, scream out or make decisions about who enters the birthing space contributes further to the perception of control (Ford, 2009). Women also feel more in control if they have access to information during labour (Tiedje & Price, 2008). Health care providers can help to facilitate a woman's access to information by answering any questions she may have allowing her to make informed choices. When women feel a sense of personal security, derived from feeling respected, trusted and supported by the health care provider who is looking after them, they will experience less fear and an increased feeling of control (Meyer, 2012). Continuous support for women in labour from a female with specialised training is thought to reduce anxiety and stress hormones known to cause vasoconstriction and lower uterine blood flow, which may slow down progress and potentially harm the foetus. Continuous support is said to increase the chance of a spontaneous vaginal birth, lower the use of analgesia, epidural, risk of caesarean and instrumental delivery (Sosa, Crozier & Robinson, 2012; Romano & Lothian, 2008). These are all important factors in the facilitation and promotion of normal birth and positively affect the woman's labour and birth environment.

There are also many factors that adversely affect the normal physiology of birth, including induction of labour which increases a women's need for analgesia or epidural and puts her baby at an increased risk of needing neonatal resuscitation. Induction of labour also increases a woman's risk of caesarean section, instrumental birth, shoulder dystocia, intrapartum fever, low birthweight babies and admission to neonatal intensive care (Tracey et al, 2007). Augmentation of labour can be a tempting option to speed up labour, however amniotomy and oxytocin administration are not without risk. Options such as changing position and talking to women about their emotions, which are low or not risk options, can be as effective and more pleasant for labouring women (Romano & Lothian, 2008). Amniotomy can increase the risk of infection, may cause pressure injuries or ruptured placental veins or arteries resulting in significant foetal blood loss. It is also associated with cord prolapse (Cohain, 2013). If amniotomy is carried out early in pregnancy it can set off a cascade of intervention and increase the risk of caesarean section. If labour is still not progressing oxytocin is usually administered and makes contractions stronger and more difficult to cope with as it is exogenous and does not cross the blood-brain barrier, so endorphins are not released to decrease pain perception (Romano & Lothian, 2008). Oxytocin administration also puts women at risk of hyperstimulation (Selin, Almstrom, Wallin & Berg, 2009). Other interventions such as intravenous cannula and electronic foetal monitoring are also used in this intervention and there is an increase in other interventions such as epidural which all have added risks. Amniotomy should only be used if progress is truly abnormal while oxytocin augmentation should only be used if labour is truly prolonged with sluggish uterine activity (Romano & Lothian, 2008).

Epidural analgesia relaxes the pelvic floor muscles making foetal descent and rotation difficult (Al-Metwalli, Mostafa & Mousa, 2012). The absence of pain in labour can interfere with the natural oxytocin release. There is also a risk of hypotension so electronic foetal monitoring is used along with an intravenous cannula. Women who use this type of pain relief are less likely to have a vaginal birth and at a higher risk of instrumental delivery, prolonged labour and fever. Their babies are more likely to have infection (Romano & Lothian, 2008). All of these interventions carry risks to mother and baby and adversely impact upon the normal physiological birth process.

Some of the environmental factors that adversely affect the normal progress of labour include restriction of eating and drinking which began in the 1940's when general anaesthetic was commonly used in obstetrics to reduce the chance of aspiration. General anaesthetic is now rare in obstetrics as is aspiration due to the use of airway protection. Women prefer to have the choice to eat and drink during labour and there is no benefit in restricting them to do so (Singata, Tranmer & Gyte, 2013). When women are prevented from eating or drinking they are hydrated with iv fluids, this is also used to access a vein in case of an emergency. Although emergencies do happen there is no evidence to suggest iv access in low risk labouring women improves outcomes. Women with Intravenous lines are not free to move around, may have increased stress levels, may result in fluid overload in both mother and foetus and does not adequately hydrate or provide nutrients. Continuous foetal monitoring has been found to reduce neonatal seizures when babies have been exposed to high doses of oxytocin but has not been linked to positive long term outcomes. It does however increase the

risk of caesarean section and instrumental delivery without a clear benefit to the baby and reduces the mother's ability to mobilise (Alfirevic, Devane & Gyte, 2013). These environmental factors have a negative affect on a woman's normal progress in labour and should be avoided if possible.

A midwife-led continuity of care model has been found to benefit women and their babies in a number of ways when compared with medical and shared models of care. Benefits include decreased use of epidural, less episiotomies and instrumental births and less preterm birth or loss of baby prior to 24 weeks gestation. Women also had more chance of having a spontaneous vaginal delivery. As a result a midwife-led continuity of care model gives women the best chance of having a normal physiological birth (Sandall, Soltani, Gates, Shennan & Devane, 2013).

For a midwife to promote the normal physiological birth process and give effective and appropriate care, she needs to establish a relationship with women antenatally. It is important for the midwife to get to know each woman and her wishes and dreams for her impending birth (New Zealand College of Midwives, 2009). This allows a partnership of trust and respect and helps to alleviate any fears or anxieties and share appropriate and correct information before the birth. When women talk about their fears with the midwife, she will be better informed and able to provide woman centred care (Pairman, Tracy, Thorogood & Pincombe, 2010). Midwives need to use evidenced based practice staying within their scope of practice. Whenever a midwife interacts with a woman, she needs to support normal physiological birth and the natural cascade of normal labour. Every interaction she has with a woman affects this cascade either positively or negatively (New

Zealand College of Midwives, 2009). When women are in labour midwives need to consider the woman's birth plan while maintaining a private warm room. It is also important to encourage her to find a comfortable position with appropriate comforts such as pillows and beanbags. Encouraging partners to support women by providing drinks, cool washers, and other physical support is an important midwifery role (Pairman, Tracy, Thorogood & Pincombe, 2010). Midwives need to be unobtrusive and well prepared with safety equipment. When women are in the second stage of labour midwives need to encourage position changes to help decent where appropriate. Soothing hot compresses can be used on the perineum and vulva while the midwife gives clear and calm reassurance until the baby is born and given to the mother for skin to skin contact. These factors will help midwives to facilitate the normal physiological birth process (Pairman, Tracy, Thorogood & Pincombe, 2010). Midwives need to practice cultural safety by reflecting on their own cultural values and identity in an effort to recognise the impact their own culture has on their practice. It is important for midwives to understand their position of power within the healthcare system (Page & McCandlish, 2006).

It is in most women's best interest to have a normal physiological labour and birth as it provides the best physical and emotional outcomes for both mothers and their babies. It is the midwife's role to ensure birth proceeds as normally as possible and interventions are only used when absolutely necessary. To achieve this, midwives need to understand the factors that promote and adversely affect the normal physiological birth process and any environmental factors that may negatively or positively impact on a woman's

labour and birth. There are a number of different models of care available to pregnant women, however it has been found that a midwife-led continuity of care model gives the best possible chance for a normal physiological birth and labour. Midwives need to create a calm, quiet, culturally safe, supportive environment where women feel safe and secure to use their natural birthing instincts and encourage position changes where appropriate. The environment needs to be well equipped with comforts such as pillows and beanbags and any safety equipment that may be needed. Although it can be difficult to facilitate a normal physiological labour and birth within a medically dominated environment, if midwives have strong leadership and are well educated to facilitate normal physiological birth they are more likely to increase the rates of normal birth.