Module 2: Woman-centred midwifery care during labour and birth

Introduction

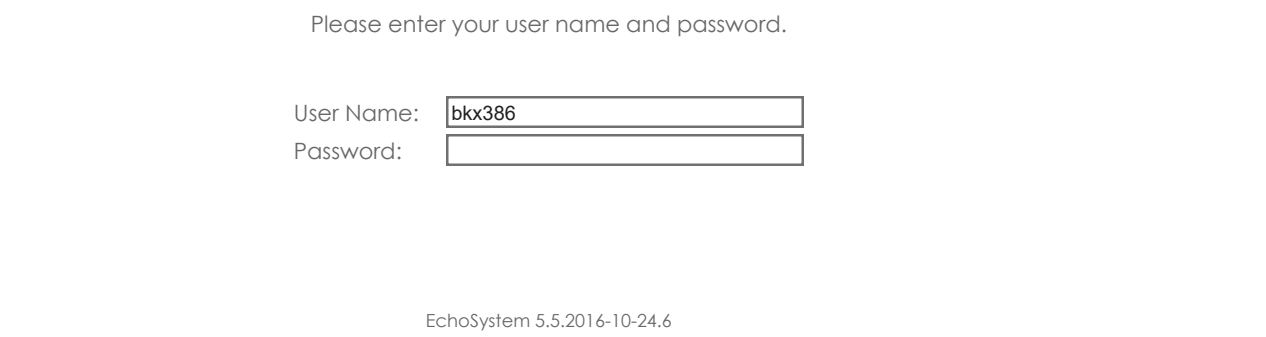
Learning outcomes

On completion of this module and your midwifery practice, you should be able to:

- Demonstrate knowledge of the anatomical, physiological, emotional, social and relationship changes that occur during labour and birth;
- Apply knowledge, evidence, skills and attitudes to enable woman-centred care;
- Apply theoretical understanding to woman-led midwifery assessment and practice during normal labour and birth;
- Demonstrate knowledge of over-the-counter pharmacological substances which are safe during labour and birth;
- Utilise your knowledge of the normal to recognise any deviations from the normal during labour and birth;
- Advocate for the primacy of choice and control for the woman;
- Apply the principles of primary health care to woman-led midwifery care.

Video:

Watch this topic introduction video.



Discussion Board

Use the Topic Discussion Board to discuss your thoughts and questions relating to this topic. You may also like to share current issues found in the media or an experience you have had in your midwifery practice. If sharing experiences from the clinical world, please be mindful of confidentiality.

Topic 1: Keeping birth normal

The Graduate Diploma of Midwifery, Master of Midwifery, MID441 and this module focuses on the concept *of Enquiry Based Learning*. That is, as you work with women, especially those in your continuity of care experience (CCE), you are encouraged to retrieve, read and critique information that is related to their needs, enquiries and experiences.

As a midwife it is essential that your understanding of the normal experience of labour and birth is complete. This will assist you as you support labouring and birthing women and enable you to promote the understanding that childbirth is a normal, physiological process and a significant life event for women (ANMC Competency of the Midwife).

The midwife is in an honoured and unique position in that they are able to provide care for the mother and her baby and be able to be involved in the birth of the child. Each birth is a unique experience and midwives need to be aware that it is an important life event for the mother and her family. The midwife should listen to and respect the woman's wishes for her labour and birth and be aware of the woman having ownership of this experience. The midwife is there to assist and support the woman, not to control or manage the process.

Understanding the physiology of labour helps ensure the midwife will provide care and support which is most likely to bring about best health outcomes for the woman and her newborn.

Read

Textbook: Leap. (2015). Promoting physiological birth. In *Midwifery: Preparation for practice* (3rd ed., chap. 19, pp. 443-457).

Textbook: Baddock. (2015). Physiological changes during labour. In *Midwifery: Preparation for practice* (3rd ed., chap. 24, pp. 607-625).

Powerpoint: Revisiting normal birth physiology *Revisiting normal birth physiology WCFL2.pptx*

Buckley, J. (2015). Hormonal physiology of childbearing: Evidence and implications for women, babies, and maternity care. *Childbirth Connection.* Retrieved from http://transform.childbirthconnection.org/reports/physiology/

3Centres Collaboration. (2012). *Labour and birth clinical practice guidelines.* Retrieved from http://3centres.com.au/library/uploads/guideline/Labour_and_Birth_Guideline.pdf

These readings have given you an overview of the normal labour and birth process and the physiological effects of labour on the woman. Midwifery is a fascinating profession and you will see that support provided in pregnancy and labour all contribute, for better or worse, to the outcome.

It is very important then that you have a clear understanding of the normal labour and birth experience so that you can provide optimum support for the labouring woman and understand the signs that may indicate a woman's labour and birth is becoming complex.

The psychological preparation for labour begins early in the antenatal period. It does not matter whether the woman is a public or private 'patient', whether she is in hospital, a birth centre or in her own home, she must know and have confidence in those who are caring for her. As a midwife then, your responsibility is to provide all aspects of care for the woman (remembering that by definition, woman-centred care includes whoever the woman identifies as being significant to her).

Women have fought to gain control of the childbirth process and it is essential that the woman can experience a childbirth where she is in charge, and is respected and cared for by midwives who will listen to her. She should not be restricted by the environment, either physical or emotional.

Traditionally labour has been defined in terms of stages and phases. However, there are arguments against using arbitrary stages of labour because they increase intervention and predispose the woman to unnecessary vaginal examinations. Please keep this critique in mind, but for the purposes of learning, much of this module will refer to the stages of labour.

As stated above, one of the competencies of the registered midwife is that they promote the understanding that childbirth is a normal, physiological process and a significant life experience for the woman. You will also recall from residential school that promoting normal birth is part of the international definition of the midwife (ICM 2011).

Activity

Labour is defined as the process by which the fetus, placenta and membranes are expelled through the vagina (what a horrible definition – where is the woman???). With this caveat in mind, define the process of normal labour.

Why, in your opinion is there so much difficulty defining 'normal labour' and 'normal birth'?

How would you define normal labour?

How would you define normal birth?

Topic 2: Onset of labour

Your own maternity unit will have policies, procedures and guidelines for the midwife to follow in order to admit a woman who has commenced labour. If a woman is being admitted to a birth centre she will have been informed of procedures and protocols by the midwives who will be supporting her throughout the labour and birth.

However, for most women the onset of labour has started many hours before they arrive at their choice of birth place, unless of course, they are planning a homebirth. For some women, this earliest phase of labour can last for days before labour becomes established.

The birth story to follow is included in its entirety and is used with permission. It is used here for the purposes of learning about the latent or prodromal phase of labour, prior to the onset of established labour. You will learn more from this woman's story about pre-established labour than from any textbook. Notice how this woman's labour commenced and went on for days (not nights) before her labour became established:

> *I was always a sick child, had numerous surgeries and have been on more antibiotics than I can count. Hospitals were my second home and my doctors, my second parents. My entire life, I have always put my trust in them. When I was 15, I had surgery on my ovaries. Due to a large tumor, 90% of my left one was removed, as well as a small percentage of my right. During recovery, a student OB said to me "think of it this way, at least you'll never have to worry about having children, you can party all you want". I had never been kissed. I was saving myself for marriage. I wanted children some day. The doctors stuck me on birth control pills to help regulate my periods. I never questioned this move. Eleven years later, I married my husband; we wanted kids. Four years after our wedding, I felt my body clock "ticking". Without consulting a doctor, I took myself off of birth control, just to see how my body would react. Less than one year after this, I was pregnant with my first. Not only did my body function better without the birth control pills, we had no problems getting pregnant at all- here I was prepared to struggle with getting pregnant. I had morning noon and night sickness for more than nine months. But I was never happier.*
>
> *Until I got pregnant, I had never really talked with my mother-in-law about her career. It wasn't until I said to her early in my pregnancy, "I don't think we have midwives in America; I have no idea what you do" that she not only set me straight, she opened my eyes to a new way of thinking about pregnancy and birth. I am truly blessed to have her, and the fact that she is an Associate Professor in Midwifery and has her*

PhD in women's health is an added bonus! So many questions were answered. I then spoke with my own mom about her births, all of us were natural. Her first was a 45 minute, pretty easy labor; but he was so premature he had to have surgery and was on life saving equipment. My next brother was born breech, though my Mom didn't know (which was probably a good thing). After some pain relieving drugs, he was born vaginally and perfectly healthy; sadly breech delivery is a skill that has been lost over the years. I was a 10+ pounder, late, but a healthy delivery, when my mom told the doctor she wanted drugs for my birth, his response was "we don't drug our babies". Denied! She had no interventions what so ever with me. Maybe this is why I am so passionate about natural birth!

After early preparation and a meeting with my already established OB at the private hospital, my mind was made up. I was sold on midwifery care. He was a very well respected OB and told me his views on midwifery care. Unlike what happens to many women, I didn't have a fight on my hands. He told me that his "ideal birth is you with a midwife and me out on the golf course" (I later found out he doesn't play golf, but he was serious about me being with a midwife); he said "you were a very sickly child, but you are a perfectly healthy woman. I am confident that you could give birth hanging from a chandelier!"

The only problem was, midwives are highly in demand in Australia, and one has to book in 9 months before one gets pregnant! So, I got some names from 'Mum' and started making phone calls. They were lovely home-birth midwives; but, although I had read nothing about home-birth, I thought it was both a bit "cooky" and a bit dangerous (little did I know that statistically it is just as safe, if not safer than hospital birth!) So, I called the public hospital and signed up for the "midwifery group practice"- a midwifery run floor of the hospital; with OB's and operating rooms on the floor above. Although I was on put on a waiting list, I was called a few weeks later, Praise God! I saw a couple of different midwives before I was assigned to Michele, who reminded me of one of my very best friends back in Ohio. I loved her instantly. I was so happy; then I got the call. Her boss wanted to see me, as he "had some questions" (he didn't think I qualified for midwifery care - at his hospital at least). (Doom doom doom). As I waited to see this OB, I got more and more nervous. For the first and only time in my pregnancy, my blood pressure was suddenly too high- (not off to a good start here). He came in, very professional, not very personable. Examined me, then started questioning my scar. Although I am sure he didn't mean for his reactions to come across this way, I felt as though he thought I was lying every time he asked me a question. This was indeed my first pregnancy, and I indeed did not have a previous C-section (it was as though I was planning a VBAC without telling my caregivers!) I was told "for the kind of surgery you (say you) had, the scar is vertical, not horizontal!" I explained a conversation about my scar that I had had with my OB 16 years earlier. She had been very courteous by giving me a scar that could be hidden if I were to wear a bikini; I was a child and she didn't want to leave me with an "unsightly scar". Finally, he approved me. So, I was happy once more. Much preparation, numerous books and articles read, questions answered, and classes attended; calm breathing, calm surroundings, no stress. This is what I was preparing for.

Based on some blood tests, my GP had given me a due date of October 23. The ultra sound said I was due on October 7th; so this is the date they used. On October 8th, we went on a picnic with my mom, and my in-laws who were all visiting from out of town. My mom had flown into Australia from Texas to be with me for the birth. My in-laws were just in town on holidays. We all went back to my in-laws hotel overlooking the Sydney harbor. Suddenly I felt at peace, something started happening. I went into labor that night (well, so we thought). Deep down I wanted my in-laws, and specifically my mother-in-law to be there for the birth, so my body- and baby- started the work. Mum observed me told Nathan that she thought it might be the real thing. There was something about the harbor that made me feel safe, watching the waves helped me through the "waves" (contractions) I was experiencing. I wanted to sing out to the opera house, a place I had always dreamed of performing in. The sound of the train reminded me of the sound of the baby's heart beat. Constant, fast, quiet. The sound of children's laughter and happy screams coming from Luna Park reminded me of the blessing that I was going to meet soon. I didn't want to leave the hotel, so we checked in for the night, I fell asleep- for 9 hours. The next day my contractions were closer together and much more intense, so we went to see Michele. It was discovered that the baby was still posterior and that I was 2 centimeters dilated, but labor wasn't yet established. We checked in for another night. I slept for another 9 hours. This went on for days and days, each day the contractions were more intense and closer together, each night, I fell asleep. It was exhausting. My in-laws had to leave, and I was so sad that they might miss the birth of their first grandchild (they lived 6 hours away). I was assured that I was not making this up, and that it happens to some women. In fact, Mum herself experienced pre-labor for over a week with my sister-in-law. I was also told it was good practice. Women who don't have pre-labor often have a harder time in established labor. I figured the baby and I were just being good actors, rehearsing before our show. My mind was put at ease (for a while).

I breathed, I prayed, I danced, I sang, we went to church, we went to the cafe, we went to the beach, we went to the park over-looking the harbor, where Nathan had proposed to me many years before. I got some worried looks, Nathan got some dreadful looks. Each day I had closer more intense contractions, each day we tried to stay busy. Each night we returned to our beautiful hotel room, and I slept. I didn't want to go back to our apartment, I didn't feel comfortable there. We had a neighbor who had been harassing us and roaches that just wouldn't leave. Hardly a place to have a calm labor. Finally after nine days, my dreamy state whilst watching the harbor had turned into a nightmare. The stress of the pre-labor and tight quarters was getting to everyone. Nathan and I had a fight, one of about 3 in our entire marriage. We realized that we had just spent nearly $2,000 staying at a hotel that was 10 minutes from our home. This was not a good thing. Our home should have been my safe haven, I should have wanted to be there. By this point, I was "over due"; not only that, the baby was still posterior. The "boss" wanted to induce me if this kept up. My midwife fought for me, "one more day, one more day". We finally had a date, October 22nd at noon, I was to be induced (the day before my original due date!) I locked myself in the hotel closet and cried, I wanted to be away from everything and everyone. I wanted to build a cocoon around myself and have the baby alone. After at least an hour, I opened the closet door slightly and asked Nathan for a glass of water and a pen and paper. I was in the closet for another hour or two and wrote the baby an eight page letter, I breathed, I prayed I meditated. I finally told Nathan I was ready to go back to our apartment, and was ready to trust the Lord. Nathan and Mom left me alone for hours while they cleaned our already clean apartment, just to make sure there were no roach germs. I had finally accepted that everything is God's will and if I had to be induced, it wasn't the end of the world. If I had to go back to our apartment, it was also not the end of the world.

I said goodbye to the breathtaking view, and the beautiful hotel with the soaps I had fallen in love with. Surprisingly, I found comfort being in my own bed with my own things. We continued the pre labor for a few more days, going to the beach, Mom and I went to my women's Bible study, and we even went out for dinner a few times. I went back to my pre-natal yoga class and we did an "eviction dance" (they formed a circle of pregnant women around me and we all did a belly dance). Although I was still suffering from morning sickness, and having pretty intense contractions, this was one of the most fun things I had done the entire two weeks. I had a doula/massage therapist visit me a few times (both at the hotel and at home). She not only gave me the massages I needed, she also gave me words of encouragement, wisdom and brought me calm. Little did we know that she and "baby" were going to share a birthday just a few days later! I had acupuncture, and tried nearly everything in the book for natural induction. For 15 days I had been asking Nathan to take me to the zoo, he refused, after all, what kind of responsible man would take his laboring wife to the zoo! Finally on October 21st, he agreed. We got on the public bus and walked around to find a place to eat. Although I had not been wanting heavy meals for the majority of the pregnancy, there was something about that day that had me craving a big, fatty American meal - so off to Tony Roma's we went. I had onion rings, I had salad, I had ribs, I had steak, I think I even had dessert. I felt great. We went to the Sydney Wildlife Ranch and I spent the day taking photos of the animals. I felt like I was back with nature. A place I've always loved. I watched the koalas for hours, I didn't want to leave. We got on the bus and a man told Nathan I was going to have the baby that night and asked him why in the world did he have me on a bus! We assured the man it was my idea.

That night, I told my Mom and Nathan that they should have showers and go to bed early. Instead, they watched a movie (after all, they had been hearing this for the last 15 days.) I was exhausted, so I had a shower and went to bed. A few hours later, I woke up with more intense labor than ever. I ripped off my clothes and cried out for Nathan. I felt like I was yelling for him to come help me for hours, but in reality it was just a few minutes. I remember looking at the clock, it was 11:45PM. He called Mum and told her what was happening. She said she was getting in the car right then and that it was real. But Nathan said, "no, it could still be a false alarm, don't worry about coming yet". Thank God Mum didn't listen to us, after all, she is the one who is an expert! She had a 6 hour drive ahead of her and she was not about to miss the birth. Nathan then called the hospital, Michele wasn't on duty yet so one of the other midwives told him to give me a Tylenol and have me try to go back to bed. I threw it up (along with my huge meal) and couldn't lie down. So, Nathan and Mom tried to get some clothes on me to take me to the hospital. I refused. I tore off everything and threw every article of clothing on the floor. Clothes felt horrible to me. Finally they got

me in a shirt and a skirt - don't even touch me with those undergarments!!! I grabbed some plastic bags for the car, as I was slowly dripping clear fluids everywhere. They finally got me in the car and it was the most uncomfortable place to be. I couldn't and didn't want to sit, I was sure I would sit on the baby's head! I couldn't talk, otherwise I would have told Nathan to stop saying "we're in Neutral Bay, we're in Neutral Bay, we're in Neutral Bay" this was driving me up a wall! I knew where we were and every time we got closer to the hospital, he would chant our location.

We got to the hospital and there was a calmness about the midwifery floor you just don't see in hospitals; and certainly not in the movies. I remember a couple of midwives just smiled at me and went about their work. Interestedly, when we got there, I felt like I had stopped laboring. This happens often to laboring women when they switch locations. The midwife who examined me told Nathan I was still only 2 centimeters and as we didn't think the waters had broken yet, I should probably go home. Just then, the waters gushed out along with some blood. I remember the look on her face. She said, "never mind" and admitted me to a room with a huge tub. Michele came, turned on my music, set up my collage of my circle of women in my life and put some oils in the burner. She labored with me for the next 5 1/2 hours. I was on all fours for the majority of the time, trying to get the baby to move from his or her posterior position. My Mom was in charge of the TENS machine and Nathan helped me breath, whispered words of encouragement in my ear and rubbed my back. I kept chanting "baby, baby, baby", and somehow all this got me through. After about 5 hours, I started thinking to myself "I can't do it anymore, I just want a C-section". I must have said something because everyone assured me I could and was doing it. I had no idea that 5 hours had passed, I thought it was just minutes. I remember looking out the window and seeing the sun come up. I thought that was very odd for midnight! I looked at the clock (which we had forgotten to cover) and it was indeed time for the sun to come up. However, I still didn't believe it, I was sure that both the sun and the clock were wrong; it was midnight!!! Michele said "do you want a bath now?" I said "no". Seconds later I said "yes". As soon as I got in the bath, the pain was much less severe. After being in the bath for just a little while, I started pushing. Michele could tell I was in that next stage, but it was so early she asked me if she could do an exam. After the exam (which I didn't even feel), she said "do you want a water birth, because this baby is about to be born." (Never did anyone tell me how many centimeters I was). I had not planned for this, in fact, I thought it was a little "cooky". But right away I said "yes". She only gave me two rules, one, I had to keep my hips under the water and two, if she told me to get out, I had to listen to her. "OK", I said, and a few short minutes later, I had the strong urge to push. The feelings I was having went from pain to pleasure as my baby came out. The music that was playing was a song about the magnificent ocean "hallelujah" I remember hearing and started singing along. Hallelujah indeed! The baby was placed on my chest and I was holding "baby", kissing "baby" and singing to "baby" minutes before Michele said "do you want to check the sex"? We had forgotten to even check. I didn't care if the baby was a boy or a girl, I didn't care if the baby had 10 fingers or 10 toes. All I knew was the intense ecstasy I was feeling. I held up "baby" and we all saw she was a girl. A beautiful perfect little girl. After holding her for a while, I started feeling the "waves" again, though they were not as intense. All of a sudden, the placenta was born. It was such a wonderful feeling both physically and mentally. My "love hormones" were truly working in my favor; they were doing a hormonal dance. Mum arrived about 20 minutes after Lilianna was born, but she was just as happy had she of been there. I never swore, I was never mean, only a couple of things annoyed me, Nathan's chanting early on, the TENS machine, the fact that I couldn't wail around in the tub because my mom was holding my head up- (probably a good thing, as this likely prevented my hips from going above the water) and that the second midwife was standing in front of the video camera (she was just doing her job)! My hormones and my body were working in everyone's favor, everyone was happy. Michele said it was an "amazing birth". I agree.

The first hour, Nathan and I held Lilianna, I breastfed her and kissed her. Both grandmothers were holding her within an hour. It was only after this crucial bonding time that she was weighed and given her tests. Even then, we were still right next to her side. She never left our sight. I was walking around happy and healthy as can be and we went home a few short hours later. (After all, we had a nurse Mum staying with us!) Oops, I forgot to cancel my induction!

My body worked. Despite my medical history, despite what I've learned from movies, TV and society in general. Despite all the temptations of medical interventions that are offered to women now days. I know had it not been for the knowledge that I was blessed with I would have ended up with a very different birth. I truly believe that the fact that I healed so quickly, breastfeeding was established fairly easily and that Lilianna was, and is, so strong and healthy because not only were we blessed with a healthy birth, I didn't give in. Lilianna was crawling up my chest within a day, holding her head up to look at me within a week and rolling both front to back within a month. I really think this is because she didn't have any exposure to drugs whilst in labor. I think that doctors, hospitals and interventions of any kind need to be for women who really need it. Not the majority of healthy women who just want to have their babies in peace.

I no longer think that home birth or water birth are "cooky" or "dangerous". In fact, I would argue to say they are very safe and very natural; world wide statistics have proven this, so has common sense. I am looking forward to my upcoming home-birth. I am prepared if there is an emergency (though true emergencies are very rare). There is a hospital and back up doctor very close by. Interestingly, it takes about 20 minutes to set up the OR, and to get the doctors ready. This is the same 20 minutes if you are on your way to the hospital with your loving midwife and support people as it is if you are sitting on a cold hospital bed with panic all around. Yep, definitely looking forward to our home-birth, letting my hormones dance once more; singing the birth song and dancing the birth dance. (Cathy, used with permission)

What Cathy has so beautifully described in the days before the birth of Lilianna is often defined as 'spurious labour'. That is, painful contractions before the onset of labour that are not accompanied by cervical dilation or uterine retraction. The term 'false labour' is also sometimes used for this phenomenon with potentially very harmful emotional consequences for the woman.

Activity

Consider the use of language and the impact of referring to Cathy's experience as 'false labour' may have had on her and her birth experience.

Activity

What will indicate to the woman that her labour is about to start/has begun?

What will indicate to the midwife that a woman's labour has started?

Midwives and women often discuss having a 'show' as one of the earliest signs that labour will soon start (if it hasn't already). How would you describe the 'show' to women and how does it occur?

Topic 3: Labouring and birthing environments

Optimising the birthing environment is a midwifery led strategy

Read

Textbook: Walsh. (2011). Care in the first stage of labour. In *Mayes midwifery* (14th ed., chap. 36, pp. 483-507). Focus on (pp. 489-492) which discusses the birth environment.

Textbook: Walsh, D. (2012). Birth setting and the environment. In *evidence and skills for normal labour and birth.* (2nd ed., chapter 3, pp. 23-38).

Read: Jenkinson, B., Josey, N., Kruskey, S. (2014). *BirthSpace: An evidence-based guide to birth environment design*. Retrieved from https://espace.library.uq.edu.au/view/UQ:339451/UQ339451_fulltext.pdf

Activity

Consider how you might make the birthing environment in your unit conducive to women birthing physiologically.

Topic 4: First stage rhythms

The first stage of labour is from the establishment of regular, rhythmic and painful contractions that cause cervical dilatation and completes when the cervix is fully dilated. However, the difficulty with this definition is its focus on cervical dilation which predisposes the woman to unnecessary and potentially harmful vaginal examinations. As you observe women and midwives, read your textbooks and readings, consider how you might assess the progress of labour without reverting to a vaginal examination.

Read

Textbook: Thorpe & Anderson (Supporting women in labour and birth, p.626 - 655); Leap (Working with pain in labour, p.656 - 670) and Maude & Caplice (Using water for labour and birth, p.671 - 692). (2015). *Midwifery: Preparation for practice* (3rd ed., chaps. 25, 26 & 27, pp. 626-692).

Textbook: Walsh, D. (2012). Rhythms in the first stage of labour. In *Evidence and Skills for Normal Labour and Birth: A guide for midwives.* (2nd ed., chap. 4). London: Routledge.

Textbook: Walsh, D. (2012). Fetal heart rate monitoring in labour. In *Evidence and Skills for Normal Labour and Birth: A guide for midwives.* (2nd ed., chap. 5). London: Routledge.

Textbook: Walsh, D. (2012). Mobility and posture in labour. In *Evidence and Skills for Normal Labour and Birth: A guide for midwives.* (2nd ed., chap. 6). London: Routledge.

Textbook: Walsh, D. (2012). Pain and labour. In *Evidence and Skills for Normal Labour and Birth: A guide for midwives.* (2nd ed., chap. 7). London: Routledge.

Blog post: Reed, R. (2011). *The assessment of progress*. Retrieved from **https://midwifethinking.com/2011/09/14/the-assessment-of-progress/**

Activity

Uterine contraction and retraction in the first stage of labour lead to cervical effacement, dilation and descent of the fetus. What is the retraction ring?

Vaginal examinations are used to monitor cervical effacement and dilation. What is cervical effacement?

What is cervical dilation?

Descent of the fetal presenting part is assessed as part of the vaginal examination. Define ‘station’ in this context.

What is moulding and why might it make accurate assessment of the station difficult?

Define the concepts of forewaters and hindwaters.

Why should routine vaginal examinations be avoided?

What is a partogram?

What are the advantages and disadvantages of partogram use?

How can midwives encourage/support women to adopt physiological birthing positions?

What are the advantages of maternal upright positions and mobility in labour?

Reflect on your own attitudes, biases and values in regard to women experiencing pain in labour.

Many women and midwives consider the time between first and second stages of labour, from around 8–10 cms cervical dilation to be the most difficult for women to cope with. What is this part of labour called?

Topic 5: Second stage rhythms

Read

Textbook: Downe. (2011). Care in the second stage of labour. In *Mayes midwifery* (14th ed., chap. 37, pp. 509-530).

Textbook: Walsh, D. (2012). Rhythms in the second stage of labour. In *Evidence and Skills for Normal Labour and Birth: A guide for midwives* (2nd ed., chapter 8, pp.101-116.).

Activity

As part of a midwife's understanding of normal labour and birth, it is important that they understand and promote the physiology involved. What is the Ferguson's Reflex?

Very briefly describe the mechanisms of normal labour in the order they occur.

As a midwife what are the signs you may notice that would indicate that a woman has reached second stage of labour?

Describe best practice when supporting the woman during the expulsive phase of labour.

Describe best practice when supporting the woman during the expulsive phase of labour when the woman has an epidural.

Traditionally, the second stage of labour is from full dilatation of the cervix and completes with the birth of the baby.

How might this definition impact the woman's labour and frequency of unnecessary vaginal examination?

Midwives are committed to maintaining perineal integrity during second stage.

Read

Textbook: Walsh, D. (2012). Rhythms in the second stage of labour. In *Evidence and skills for normal labour and birth: A guide for midwives* (2nd ed., chap. 8., pp. 116-130). London: Routledge.

Textbook: Walsh, D. (2012). Water immersion and waterbirth. In *Evidence and skills for normal labour and birth: A guide for midwives* (2nd ed., chap. 11., pp. 143-151). London: Routledge.

Activity

Is any one midwifery strategy, e.g. warm compresses on the perineum, massage or 'no touch' of the perineum more effective than another in reducing perineal trauma? Provide reasons for your answer.

What options are available for the midwife when a nuchal cord is detected (also refer again to page 518 in your *Mayes midwifery* for information on the Somersault Manoeuvre (Downe, 2011).

List the therapeutic, physiological and psychosocial benefits of water immersion and water birth.

What practical skills does the midwife require when being with a woman who is immersed in water and wishes to have a waterbirth?

Topic 6: Third stage labour

The third stage of labour is the stage of delivery of the placenta and membranes. It commences after the birth of the baby and is completed after delivery of the placenta and the membranes. The woman's physiology ensures optimal and not excessive blood loss in the third stage of labour.

Read

Textbook: Harris. (2011). Care in the thirdstage of labour. In *Mayes midwifery* (14th ed., chap 39).

Textbook: Walsh, D. (2012). Rhythms in the third stage of labour. In *Evidence and skills for normal labour and birth: A guide for midwives* (2nd ed., chap. 10, pp. 131-142). London: Routledge.

Activity

What are the signs of placental separation?

Very briefly describe the midwives role during a physiological third stage.

Describe active management of third stage.

Describe the process and what are you looking for when you examine the placenta and membranes?

Topic 7: Fourth stage: Attachment

Read

Textbook: Gunn, Davies & Baddock (2015). Supporting the newborn. In *Midwifery: Preparation for practice* (3rd ed., chap. 32, pp. 764-800).

The assessment of the progress of labour is vital in your care of the woman. The way this assessment is performed is dependent on the stage of labour. Once the birth is completed the infant is usually safest and warmest with their mother skin – to- skin. The infant should be assessed by the

Apgar score and both woman and newborn covered together to maintain warmth. Many babies like to nuzzle the breast/feed soon after birth and this is encouraged.

Activity

Describe the physiological changes that take place in the neonate at birth.

From observations you have made, which practices enhance fetal to newborn transition and which inhibit the transition.

The time immediately following birth is so important in establishing the mother-infant relationship and some would argue sacred. They are moments, minutes and hours that can never be repeated.

Read

Textbook: Pincombe, Reibel & Catchlove. (2015). Transitions to motherhood. In *Midwifery: Preparation for practice* (3rd ed., ch. 31. pp. 751-763).

Activity

What steps can the midwife take to promote maternal-infant attachment?

Topic 8: Obstetric and midwifery interventions

The woman's labour and birth and especially obstetric interventions can impact on the mother's relationship with her newborn and also the establishment of breastfeeding.

One of the most common interventions, apart from looking at the clock is the use of Electronic Fetal Monitoring (EFM).

There is no evidence to support the practice of Electronic fetal monitoring for healthy women experiencing a normal labour. However, EFM (also referred to as CTG) has become a routine part of the labours of most women admitted to a maternity unit in Australia with consequent increase in caesarean surgery but no improvement in perinatal mortality or long term morbidity.

Most State health departments have a policy related to fetal monitoring in labour. Locate and review your own State's policy. If there is no policy in your state, refer to the NSW Health Policy below.

Read

Policy: Your own State policy/hospital policy on fetal monitoring or the NSW Health policy directive - Maternity - Fetal Heart Rate Monitoring, retrieved from http://www0.health.nsw.gov.au/policies/gl/2016/GL2016_001.html

Textbook: Walsh, D. (2012). Fetal heart monitoring in labour. In *Evidence and skills for normal labour and birth: A guide for midwives* (2nd ed., chap. 5, pp.56-65). London: Routledge.

Electronic Fetal Monitoring (EFM)
EFM was introduced into Western maternity units in the 1970s, under the untested assumption that more extensive, accurate information about fetal heart rates in labour would improve perinatal outcomes and in particular reduce the incidence of neonatal death and cerebral palsy (McCormick, 2009). The hypothesis has now been extensively and rigorously tested using the meta-analysis of multiple randomised controlled trials and it has been clearly demonstrated that EFM does not improve perinatal outcomes (Alfirevic, Devane & Gyte 2013).

However, with total disregard of the evidence dating back 33 years in some instances but not refuted, EFM continues to be used routinely in many Australian maternity units. EFM, even when combined with fetal blood sampling does not reduce perinatal mortality in either low or high risk situations (Haverkamp et al. 1976; as an example). EFM does increase the Caesarean Section rate but with no articulated advantage (Alfirevic, Devane & Gyte 2013). EFM was expected to reduce the incidence of cerebral palsy but it does not. The only advantage to EFM is the small reduction in neonatal seizures in full term babies whose labour has been induced or augmented with Syntocinon. However, there is no longer term associated neurological deficits or any other pathological sequelae in these babies EFM does not reduce the number of babies born with low or very low APGAR scores nor the need to be admitted to a Neonatal Intensive Care Unit (Alfirevic, Devane & Gyte 2013).

As the above evidence indicates, EFM is more accurate in determining when a fetus is coping well with the demands of labour but less able to accurately predict when a fetus is compromised. However, one the EFM trace indicates that the fetus is possibly compromised, the health care giver is duty bound to respond, usually with obstetric intervention as EFM accuracy in determining fetal compromise is unreliable).

References

Alfirevic, Z., Devance, D., & Gyte, G. (2013). Comparing continuous electronic fetal monitoring in labour with intermittent listening. *Cochrane Database of Systematic Reviews*, Published online May 31, 2013.

Haverkamp, A., Thompson, H., McFee, J. et al. (1976). The evaluation of continuous fetal heart rate monitoring in high risk pregnancy. *American Journal of Obstetrics and Gynecology, 125*(3), 310–320.

McCormick, C. (2009). Active first stage of labour. In D. Fraser & M. Cooper (Eds.), *Myles textbook for midwives* (15th ed., pp. 477-491). Edinburgh: Churchill Livingstone Elsevier.

Activity

Is a routine admission CTG trace evidence based?

How might CTG admission trace impact on a woman's labour and her psyche?

Why are midwives likely to perform the CTG admission trace when there is no evidence to support its use for healthy women?

Why are fetal heart rate accelerations on a CTG trace significant?

What alternate methods of assessment of fetal well-being would you recommend?

List the signs of fetal compromise you would look for during labour.

As previously stated, EFM does not improve mortality, nor long-term maternal or newborn morbidity but it does increase the likelihood of a woman having a caesarean section.
EFM is but one of many obstetric interventions used. Your next subject, MID442 focuses on midwifery care of the woman and her baby when the situation has become complex and many of the obstetric interventions will be explored in this context.

In the interim and in the context of normal labour and birth, I strongly encourage you to access the link to the NSW Health policy directive*: Maternity, towards normal birth in NSW (2010)*, retrieved from http://www0.health.nsw.gov.au/policies/pd/2010/pdf/PD2010_045.pdf

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Topic 9: VBAC and breech birth

Read

Textbook: Thorogood & Donaldson. (2015). Breech presentation. In *Midwifery: Preparation for practice* (3rd Ed. pp. 1000 - 1007).

Textbook: Thorogood & Donaldson. (2015). Uterine rupture after a previous caesarean section. In *Midwifery: Preparation for practice* (3rd Ed. pp. 1013-1015).

Textbook: Tracy & Hartz. (2015). Caearean section following previous C section. In *Midwifery: Preparation for practice* (3rd Ed. pp.1076-1077).

Consider the reasons why the risk of vaginal birth after caesarean are usually given emphasis over the risks of repeat caesarean.

One reason (but there are many!) why caesarean section is increasing is the response to the term breech trial (Hannah, et al., 2000). The report to follow was written by Dr. Elaine Diestch as part of her own explorations relating to the tragic death of Rebecca Murray, a healthy, young woman who died after having a caesarean section for a breech presentation at term (Milovanovich, 2009).

In some countries breech birth once was and still is considered a variation of normal, albeit a variation that requires careful selection of women suited for a vaginal breech birth (Kotaska, 2009). However, following the infamous 'Term Breech Trial' (Hannah, et al., 2000) and hereafter referred to as TBT, breech presentations at term became an obstetric emergency overnight necessitating caesarean section in almost all Western maternity services. Demonstrating the influence of the TBT, the incidence of vaginal breech birth in one hospital dropped from 60–80% in the late 1980s to 12% in 1998 to less than 2% in 1999, following the release of preliminary findings from the TBT (Mohd.Nordin, 2007). Kotaska (2004) and Fahy (2011) criticise the TBT (Hannah, et al., 2000) for breaching the limits of evidence based medicine through dictating a new standard of care, that is delivery by caesarean section for all infants presenting breech at term. They argue the consequence has been that experienced caregivers are no longer able to trust their own judgement to discern low risk situations, because all women with a breech presentation have been assigned a similar risk status by a randomised controlled trial.

Critique of the TBT caused others to reach the conclusion that it was not vaginal birth of a breech infant that led to increased neonatal morbidity and mortality, but rather poor standards of care and caregiver lack of experience in facilitating vaginal breech births (Fahy, 2011).

A further criticism is that the TBT only followed mothers and babies until three months postpartum (Kotaska, 2007; Liu, et al., 2007 as examples). The same researchers who conducted the TBT attended a follow-up, 2 years later (Whyte, et al., 2004). The results of this study showed no increased risk of death or abnormal neurodevelopment when breech born (vaginal or C/S) infants were followed up two years later.

Caesarean section increases the risk for mother and baby in both the current and future pregnancies (Kotaska, et al., 2009). In their Canadian study, Liu et al. (2007) argue that there is an increased risk of severe morbidity and maternal mortality for women having a Caesarean Section when their fetus is breech. The risk of maternal mortality for elective Caesarean Section for breech presentation is significantly higher than for women experiencing a vaginal breech birth (Schutte, et al., 2007). Schutte et al. (2007, p. 1) concluded that, *Elective Caesarean Section does not guarantee the improved outcome of the child, but may increase risks for the mother, compared to vaginal delivery*.

After the term breech trial elective caesarean sections for breech presentations at term became almost universal practice in Australia. However, this trend has been gradually changing with many countries re-establishing vaginal breech birth as a mainstream choice. The RCOG (2006) states, *If a unit is unable to offer the choice of a planned vaginal breech birth, women who wish to choose this option should be referred to a unit where this option is available.*

In the instance described in Mrs Murray's Inquest Report, possible signs of fetal compromise coupled with the breech presentation demanded a surgical response. Only in retrospect could it be determined the EFM diagnosis was a false positive and *"Eight minutes later, a healthy baby girl was delivered".*

Carefully selected women should be offered the option of vaginal breech birth with skilled and experienced caregivers. However, since the TBT many previously experienced obstetricians, general practitioners and midwives have retired, many others have not had the opportunity to work with women experiencing a vaginal breech birth. It is therefore imperative that all future undergraduate and postgraduate medical, obstetric and midwifery students' training involve experience in vaginal breech birth (at least in a simulated setting), so that this skill is not lost completely. Australian women like their counterparts in the USA, UK, Europe and Canada deserve the opportunity to choose whether or not they have a vaginal breech birth. This was not an option for Mrs Rebecca Murray).

References

Alfirevic, Z., Devance, D., & Gyte, G. (2013). Comparing continuous electronic fetal monitoring (EFM) with intermittent listening. *Cochrane Database of Systematic Reviews,* published online 31st May, 2013

ACOG (American College of Obstetricians and Gynaecologists). (2006). ACOG Committee Opinion No. 340, Mode of Term Singleton Breech Delivery. *Obstetrics and Gynaecology,108*, 235-237.

Fahy, K. (2011). Do the findings of the Term Breech trial apply to spontaneous breech birth? *Women and birth, 24*(1), 1-2. doi:10.1016/j.wombi.2010.12.001 http://www.sciencedirect.com.ezproxy.csu.edu.au/science/article/pii/S1871519210000843

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Kotaska, A. (2007). Combating coercion: Breech birth, parturient choice, and the evolution of evidence-based maternity care. *Birth,34*(2), 176–180.

Kotaska, A., Menticoglou, S., Gagnon, R., Farine, D., Bosso, M., Bos, H., Delisle, M., Grabowska, K., Hudon, L., Mundle, W., Murphy-Kaulbeck, L., Quellat, A., Pressey. T., & Roggensack, A. (2009). Vaginal delivery of breech presentations. *Journal of Obstetrics and Gynaecology Canada,31*(6), 555–578.

McCormick, C. (2009). Active first stage of labour. In D. Fraser & M. Cooper (Eds.), *Myles textbook for midwives* (15th ed., pp. 477-491). Edinburgh: Churchill Livingstone Elsevier.

Milovanovich, C. (2009). Inquest into the death of Rebecca Murray. Coroners Court of NSW. File #: 615/2007.

RCOG (Royal College of Obstetricians and Gynaecologists) 2006. *RCOG Green Top Guidelines: The Management of Breech Presentation,* Guideline no. 20b: London: RCOG, Dec 2006.

Topic 10: Partners at birth

It is important to remember that the woman's partner or support person at birth is often but not necessarily the father of the baby.

Read

Textbook: Pincombe, Reibel & Catchlove. (2015). Transitions to motherhood. In *Midwifery: Preparation for practice* (3rd ed., ch. 31. pp. 751-763).

Activity

How can midwives work inclusively with partners during labour and birth?

Topic 11: Traumatic birth

A traumatic birth has implications for both the woman and her newborn.

Read

News article: Dahlen, H. & Tracy, K. (2014, May, 22). Birth intervention - and harm - more likely in private hospitals. *The Conversation*. Retrieved from http://theconversation.com/birth-intervention-and-harm-more-likely-in-private-hospitals-26801

Textbook: Smith & Kroeger (2010). Modifiable birth influences: Surgery and trauma in *Impact of birthing practices on breast feeding* (2nd ed., ch. 9, pp. 153-188).

Textbook: Smith & Kroeger (2010). Restoration and recovery in *Impact of birthing practices on breastfeeding* (2nd. ed., ch. 10, pp. 189-212).

Activity

What are some possible impacts of caesarean section on breastfeeding?

What are some possible impacts of epidural anaesthesia on breastfeeding?