

## Workshop Mindfetalness 2 November 2017 Adelaide

### Presentation

I am a nurse midwife, and during the last 20 years I've been doing research, mainly focused on how to improve care after a stillbirth. I hold a position as professor at Sophiahemmet University; you can see my workplace down to the right in this picture.

I would like to give you a short background to my research within the field fetal movements. When I was a PhD student I performed a large data collection for my thesis. I did a follow up study in 1994, where I asked all the women who had given birth to a stillborn baby in Sweden in 1991, to fill out a questionnaire. 314 women are included in this study and the main focus was to investigate if the care given were associated with long term psychological complications. We found a strong association between the care the woman received and later psychological health. For example the women who had spent as much time as they wanted with their baby after birth and those who had tokens of remembrance, had a better outcome than those who had no memories of their baby and stated that they had spent too little time with their baby after birth. In the questionnaire we also asked if the women had had any feeling that the baby could have been dead before the diagnose was made. One fourth of the women stated they had a very strong feeling that the baby could be dead.

### 12 mothers with stillbirth

Some years later, I once again came in contact with this question. This time in a small qualitative study including 12 women with stillbirths. They reported having a feeling that something was not right before they were told that their baby had died in utero. But their feelings were difficult to convey to other including to health care professionals.

### Staircase of insight

In an another interview study with 26 mothers we got a deeper understanding about how mothers to stillborn babies handled their feelings that something might be wrong and we were able to describe this with a theoretical model that we named *The staircase of insight*. The women experienced losing contact with their unborn baby when the fetus began to move less or even to not move all. However, they were reassured and calmed by others or telling themselves that this was normal at the end of pregnancy that the fetus moves less. There was often a delay before they sought care. When they then did seek care it was done in order to get assurance that the baby was well; for many it was impossible to take in and understand that a baby can die before birth. A myth that the fetal movements decrease in the third trimester have been established in many years it seemed very difficult to get rid of that myth.

We now that there is a connection between reduced fetal movements and stillbirth, Further, we know that sometimes women wait rather long before the seek health care when they have concerns due to the fetal movement pattern. We also know that pregnant women have varying degrees of awareness of their unborn baby's movements. A challenge for midwives is to strengthen awareness and use the information from the unborn baby's mother to increase the possibility for a healthy baby to be born.

### Today's questions

So, if we can give all pregnant women evidence based information about fetal movements pattern and when to seek care if they have concerns about the movements, what can we do more to strengthening women's ability to be aware of fetal movements? Further, should we support structured observation of fetal movements?

## Mindfetalness

I will later on present an ongoing large randomized study where we want to investigate if information about a method for systematic observation of fetal movements called *Mindfetalness* can be a help for women to be aware of fetal movements and if the method has any effect on perinatal outcome. But let me first describe the method and also present two pilot studies we have performed before we started the randomized controlled trial.

Mindfetalness is what most women do, but within the concept *Mindfetalness* we ask them to be aware in a more structured way. We encourage women in late pregnancy to devote 15 minutes daily from gestational week 28 until birth, in an effort to focus on how their baby is moving. The period during which the mother should practice *Mindfetalness* should be when their baby is wakeful and when the woman is not feeling stressed. Further, we encourage her to lie down on her left side when she practicing *Mindfetalness*. If this is done every day in third trimester, then the mother will develop a good grasp of her unborn baby's fetal movement pattern.

## Cross over study

We have tested *Mindfetalness* in a cross over study where 40 pregnant women participated. The inclusion criteria for participation in this study were: women in an uncomplicated, singleton and full-term pregnancy. The first 20 participants began the first session by using the self-assessment method "Count-to-ten" they measured the time it took until they felt 10 movements from their baby and their second session one day after they used the method "*Mindfetalness*". Participants 21 to 40 carried out the self-assessment methods in the reverse order. The same observer carried out all 80 observations. After each observation session the women received a questionnaire.

### Methods suitable for women

The time elapsed for the women to count 10 movements in the method "Count to ten" varied from one and a half minute up to 21 minutes. The average was nine minutes and 52 seconds.

Thirty nine of the 40 women (98%) said that one or both of the methods were suitable for them. Only one woman indicated none of the methods was suitable for her. Of the 20 women who preferred one of the methods, 15 preferred Mindfetalness and five preferred "Count-to-ten".

### Mentally present

In the 80 self-assessment sessions the women indicated that "During the assessment they felt": 1) calm, 2) relaxed, 3) mentally present, 4) focused".

### Conclusions

We concluded that structured observation of fetal movements was a positive experience for the women.

### Pilot study

In this pilot study 105 pregnant women got information about the Mindfetalness from their antenatal midwife.

We found that 94 of them gave positive response concerning the method. Those who used the method daily said:

"I feel that I build a relation to my baby"

"I get to know my baby better"

"A good support and useful tool"

"I feel safe and are not so worried anymore"

The compliance to the method was high.

### Not for all

However, 11 of 105 gave negative response to the method, usually they stated

they had: Lack of time or no need for a method. One woman did not like structured way to observe fetal movements and one woman thought the method create more concerns for her.

### Midwives positive to Mindfetalness

We also asked the midwives what they thought about giving the information about the method: They were all very positive and said:

"The woman gets to know her unborn baby better"

"It is a good method for stressed women so they take time on daily basis to their unborn baby

"I have become better to talk about fetal movements with the woman and in a more structured way now"

### Aim main study

Now I would like to talk about an ongoing RCT with the main aim to study if stillbirths can be reduced. Further we want to investigate if *Mindfetalness* increases or decreases the number of women who unnecessarily (from a medical perspective) seek health care due to decreased fetal movements. We have randomized about 40 000 women to receive information about *Mindfetalness* from her midwife or to routine care.

### Map

In practice, we have randomized all 64 antenatal birth clinics in Stockholm; half of them give the women a brochure about the method and information about a web site with information on how to practice *Mindfetalness*. The other antenatal clinics do not give information about the method. The study has been on-going since September 2016 and we will stop the implementation in January 2018. After that we will from register study if there are any differences concerning Apgar score among the babies born by mothers who received information about *Mindfetalness* and those who did not, as well as women's seeking behavioral for

decrease fetal movements in each group.

### Brochures

The information is given in several languages; I have some with me if some one of you is interested. You can also go to the web site [www.mindfetalnes.com](http://www.mindfetalnes.com)

### Today's questions

So, once again what can we do more to strengthening women's ability to be aware of fetal movements? Further, should we support structured observation of fetal movements?

### Decrease fetal movements a risk

We know that women who experience reduced and weaker fetal movements are at increased risk of adverse pregnancy outcomes. Different methods for systematic measurement of the frequency of fetal movements have been used to predict birth outcomes. However, a wide variation from one fetus to another in how often the fetus moves makes it difficult to specify what number that should trigger alarm. Further researcher has argued that there is no evidence that a specific limit for what is to be viewed as decreased fetal movement is any better than the belief on the part of the mother that a decrease in fetal movement has occurred as concerns to detect a fetal compromise.

### Awareness

Mindfetalness can be a tool for women in late pregnancy to more carefully follow the movement patterns of their unborn baby. Mindfetalness may be described as an awareness of the fitness of the unborn baby, a mindfulness based focus on fetal movements. The mother-to-be taking note of strength and frequency of the unborn baby's movements.

A simple way to follow the mother's mindfetalness might be for the midwife to ask about the baby's movement pattern.

### Inwards

Mindfetalness is directed inwards in order to strengthen the feeling of motherhood during pregnancy. Mindfetalness can also give health-care professionals better tools for information and communication about fetal movements in clinical practice. In our role as midwives we can support and encourage women to rely on their own intuition and urge them to make immediate contact with antenatal care providers if their baby is moving less frequent or weaker than usual.

If the mother does not react to a decrease in strength and frequency and if she waits too long before contacting healthcare professionals, the window of opportunity to save the baby's life may be closed. If we can strengthen the mother's ability to practice mindfetalness the result may be that the mother can seek care more quickly and we can save the baby's life.

Thank you!