

As I discussed last month, our ideas relating to the assessment of cervical dilation in labour may be rooted in assumptions and traditions rather than based on research evidence or careful observation and reflection upon what we actually see and feel. One of the key issues is that, while textbooks may tell us that full dilation equals ten centimetres, many midwives understand that real women exhibit variation in this area. For example, Robbie Davis-Floyd (2004) shared the experience of Sandi, who realised that she had unintentionally conveyed this erroneous linkage to a student when she observed the student telling a woman who Sandi knew was not yet in second stage that she was ready to push.

“It’s not about ten centimetres!’ Sandi exclaimed. ‘When I checked the mother her cervix was ten centimetres dilated, but I could still feel the cervical lip.” (xi)

While Sandi may have understood that full dilation does not always equal ten centimetres, however, this issue is barely discussed in the literature. Moreover, our relative disregard of individual variability may be exacerbated by the way that we use vaginal examination to measure dilation in labouring women.

The Os or the Edge...

I have come to realise by talking to midwives over the years that, while we might all have slightly different techniques that we use when undertaking vaginal examination and measurement of dilation, there are some key similarities that many of us share. One of these is that many midwives take different approaches depending on the stage of labour. When we find a cervix that is, say, two or three centimetres dilated, we tend to measure the os, as Nizard et al (2009) describe:

“Cervical dilation ... is obtained traditionally by the insertion of 2 fingers through the vagina into the cervix, which is then spread apart until the fingers reach opposite margins of the cervical os. The distance between the tips of the fingers is estimated by the operator and expressed in centimeters.” (402.e1)

This approach works really well in early labour. However, when a woman is nearing the end of labour, midwives tend to focus on feeling *what remains*. Maybe we can’t stretch our fingers far enough apart, or the presenting part prevents us from doing this. Or, perhaps most importantly, we don’t want to cause the woman more discomfort than absolutely necessary by performing digital gymnastics while she is trying to cope with labour. Rather than making our fingers into soft callipers which we spread apart to measure the os, we feel carefully around the edges of whatever is presenting in order to determine how much of the cervix can still be felt. Then we subtract

however many centimetres we feel are remaining from the magical number ten.

...and the Implications

The point at which we switch from measuring the os to measuring the edge may vary according to the individual. The implications, however, are universal. If we are attending a woman who has a perfectly round cervical os and a textbook baby who needs that cervix to open to exactly ten centimetres, we have no problem. But what about the woman with a larger baby who is going to need her cervix to dilate to eleven centimetres? When her midwife switches from measuring the os to measuring the edge, she is going to effectively lose a whole centimetre of the work that she has done and appear to be making slower progress than she really is. It’s sort of the cervical equivalent of that Saturday night in March when we lose an hour of sleep because the clocks go forward. The implications of this loss of progress depend a bit on how closely labour is monitored, but in a situation where the partogram and strict time limits are seen as key it is possible that women are having unnecessary intervention as a direct result of our lack of attention to individual variability.

I am not, by the way, arguing that the calliper approach should be used throughout labour, and neither am I planning to conclude that this supports the introduction of those rather un-woman-centred machines that mechanically measure cervical dilation by applying probes to the cervix and making women labour on or near machines that can read them. Frankly, neither of these things are necessary if we can simply find a way to take into account the fact that we are not all the same size and that full dilation encompasses a range of possibilities which do not all equate to exactly ten centimetres. Which I do not believe is a particularly revolutionary idea. I mean, I can understand why Copernicus had a hard time convincing people about heliocentric cosmology because the idea that the earth revolved around the sun was a radical theory which changed the way that humanity viewed itself, but is the theory that human women come in all different shapes and sizes really that hard to accept?

References

- Davis-Floyd RE (2004). Foreword. In: Downe S (2004) Normal Childbirth: Evidence and Debate. Churchill Livingstone, Edinburgh.
- Nizard J, Haberman S, Paltieli Y, et al (2009) How reliable is the determination of cervical dilation? Comparison of vaginal examination with spatial position-tracking ruler. American Journal of Obstetrics and Gynecology 200: 402.e1-402.e4.