AIMS Campaign for Physiology-Informed Maternity Services

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Why Physiology-Informed Maternity Services?

AIMS supports all maternity service users to navigate the system as it exists and campaign for a system that truly meets the needs of all. We campaign for improvements in the maternity services based on a principle of proportionate universalism, to ensure that we have equitable, high-quality services for all.

After decades of reports into problems in the maternity services, (Ockenden, 2022, Kirkup, 2015), one of our concerns is that the maternity services often function without a good understanding of the physiological processes of labour and birth.

We believe that physiology-informed education and services are a key element of the maternity service improvement agenda. Increasingly, research is emphasising how vulnerable the physiological process of labour is to disruption (Olza, 2020, Walter, 2021). We are campaigning for maternity services to develop a 'physiology-informed' approach, maximising the chances of pregnancy, labour, birth and the postnatal period remaining problem-free, whilst also supporting the delivery of timely, safe and effective medical treatment when this is beneficial and wanted.

Our campaign seeks to preserve options within state-funded maternity services that properly support - rather than disrupt - normal physiological processes of labour and birth. We did this by developing language that we hoped others could understand as ***collaborative***. Our approach is explained in more detail in our position paper (AIMS, 2021).

The Kirkup report suggested that some healthcare professionals have prioritised normal childbirth 'at any cost' over safe and personalised care, whilst also noting that 'the safety of maternity units depends on their level of vigilance to detect risk and deviation from the norm, and on their taking effective action when it is found' (Kirkup, 2015). **We believe that a thorough, back-to-basics understanding of birth physiology underpins good care.**

AIMS remains optimistic that with a renewed focus on understanding physiology, staff can be supported to champion with confidence a **salutogenic** approach, facilitating normal physiological processes where all is well, whilst being in a position to better recognise pathophysiology - so that interventions can still be offered to maintain safety, focussing scarce resources where they are needed.

"We were quietly confident. We knew that our interest in normal birth – by which we mean physiological birth - was nothing to do with a misguided 'pursuit of normal birth at any cost'. Indeed, we are proud of our pioneering role that supported the development of research activity in this key area."

References
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What do we mean by "Physiology-Informed Care"? - Short Case Studies

Optimal Cord Clamping and Intact Cord Resuscitation

AIMS supports midwife Amanda Burleigh's campaign for optimal cord clamping "*Wait for White*". Optimal cord clamping is a key part of physiological birth, providing the neonate with a full blood volume and important in helping the transition to extra-uterine life.

Image © www.waitforwhite.com

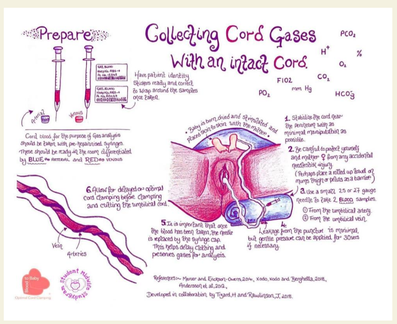

Image © www.bloodtobaby.com

Bedside resuscitation with the cord intact allows ventilation to be started before cord clamping, which can help to compensate for hypoxia. Improved outcomes include: earlier stabilisation of blood pressure, increased blood volume, increased haemoglobin and iron levels and reduced risk of anaemia (Rabe *et al*, 2019, Robledo *et al, 2022).*

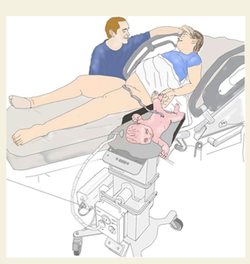

Image: Katheria et al (2021)

For preterm neonates, immediate cord clamping can cause a loss of up to 50% of blood volume (www.waitforwhite.com). Optimal cord clamping for preterm babies reduces risks including intraventricular haemorrhage and sepsis. In fact, for preterm neonates, immediate cord clamping has been shown to increase the risk of neonatal mortality by 28% (Fogarty *et al*, 2018).

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Biomechanics

AIMS is proud to showcase the work of Molly O'Brien, who teaches *Biomechanics for Birth,* including techniques to diagnose and rectify labour dystocia which Molly first developed while working as an NHS midwife for 20 years. Molly believes that ideally these techniques should be available for all birthing women and people to utilise for themselves.

Preliminary audits of several NHS Trusts which have introduced a biomechanic approach show a reduction in instrumental births and severe perineal trauma and an increased number of positive birth experiences (Smith, 2023).

"a deeper understanding of anatomy and physiology has proved to be a far more accurate tool to understanding what is making birth more prolonged and painful….. Identifying and piecing together signs of a suboptimal position requires a change in perceptions of birth from "birth is normal in retrospect" to trust and belief in birth as a normal physiological function" . Molly O' Brien

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CALL TO ACTION: WE NEED YOU!

- **Can you help us develop a vision of physiology-informed maternity services?**
- **In what key areas of practice and management is an understanding of physiology absent or insufficient?**
- **What barriers do you feel there are to implementing a physiological approach?**

  "Lack of antenatal education and understanding of birth and physiology, time pressures, defensive practice" (Student Midwife, 2023)
  "Student midwives responses included rigid guidelines, fear, defensive practice" (Senior midwife, 2023)

- **How has an improved understanding of physiology improved maternity services in your area?**
- **How can you encourage broad support for the idea that a good understanding of physiology must be at the heart of maternity services, whatever the planned mode of labour or birth?**

Come and talk to us on the AIMS stand, we'd love to hear your opinion!

Family-centred Caesarean Birth

Family-centred Caesarean birth (FCCS) generally refers to one or all of the following; a slow physiological birth of the baby, optimal cord clamping and delivery into skin-to-skin. A version of these adaptations to the traditional Caesarean procedure was first described in BJOG in 2008 (Smith *et al*, 2008), and has not so far been found to be associated with any increased rate of complications for the birthing woman or baby (Bronggeest *et al*, 2019, Korteweg *et al* , 2017).

NICE recommend that women's preferences for birth such as de-medicalisation of the delivery experience should be facilitated where possible (NICE, 2015). This can foster a sense of involvement and empowerment in the birth process, which can be significant in alleviating feelings of detachment and disconnectedness that some experience, particularly following previous traumatic birth experiences. These techniques can allow for an immediate bond between parent and baby, leading to greater success in breast/chest-feeding initiation.

Occasionally, the mother or birthing person may prefer to assist with the birth of the baby – termed "maternal-assisted Caesarean" (MAC). This can be safely facilitated where the situation and team experience allow. By allowing a **slow delivery** of the neonate's body without the use of fundal pressure, a more physiological birth can hopefully be achieved with less discomfort for the patient. The principle for the surgeon is hands off, giving time for autoresuscitation whilst the uterus contracts to expel amniotic fluid out from the lungs. Theoretically this practice mimics vaginal birth and aims to achieve a more physiological adaptation to extrauterine life, as well as enhancing the birth experience for the woman/birthing person and their partner (Smith *et al*, 2008).

Principles of Family-Centred Caesarean Birth (FCCS)

1. Promotion of holistic birth experience
2. Slow delivery of neonate's body, without fundal pressure
3. Optimal cord clamping
4. Early skin-to-skin contact

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