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Beyond the headlines: Fetal movement awareness is an important stillbirth prevention strategy



Stillbirth is a global public health issue affecting over 2.6 million women at or beyond 28 weeks' gestation each year.¹ Raising awareness of decreased or reduced fetal movements (RFM) among pregnant women and clinicians is one existing strategy intended to reduce risk of stillbirth.^{2–4} RFM is strongly linked to stillbirth,⁴ yet suboptimal care for women with RFM is a commonly reported contributing factor to stillbirth.^{5,6} Women frequently report that clinicians have not listened to their concerns about RFM and many delay reporting.^{4,7} Misinformation about fetal movements is commonplace. For example, women are often told that RFM at term is to be expected due to the baby 'running out of room' or that RFM can be corrected by the woman drinking a glass of water. Such information can delay presentation with RFM. Reducing delayed presentation for RFM may increase the window of opportunity for meaningful assessment and intervention. Practice improvement initiatives aimed at raising awareness of RFM are widely accepted as an important prevention strategy for stillbirth.⁷

The recent AFFIRM trial results show that a package of care targeting women and clinicians did not reduce stillbirth rates, and increased interventions and neonatal admissions.⁸ The title of the editorial 'encouraging awareness of fetal movement is harmful' does not accurately reflect the AFFIRM trial findings.⁹ It is important to look beyond the headlines and try to understand what this well-conducted trial is telling us in this complex area.

The stillbirth incidence decreased from 4.40 per 1000 births in the usual-care group to 4.06 per 1000 births (beyond 24 weeks) in the intervention group, that is by 7.7% and overall perinatal mortality (6.82 and 6.21 respectively) by 8.9%.¹⁰ This effect, if confirmed in ongoing studies, could translate into over 4000 stillbirths alone averted annually (and families spared the tragedy of this loss) across high income countries.¹¹

Awareness was not assessed. The women were given a brochure which provided current evidence for why fetal movements are important and when to report change, however, there was no assessment of the effectiveness of this strategy in raising maternal awareness. For example, it is not known how many women read, understood and acted on the brochure. Neither is it known how the brochure was given: if it was simply handed to the woman, or the care provider took time to outline key points. It is therefore not reasonable to conclude that "awareness is harmful" when this was not assessed.

Further, the uptake of the AFFIRM intervention by clinicians was also not assessed, and so we do not know how well it was implemented. With limited evidence currently available on management of RFM,¹² it is also possible that the RFM

management protocol was lacking in some key, but as yet unknown, elements. Clinicians may have been too quick to act on reports of RFM. This is likely to have led to increased numbers of inductions, although it is difficult to know what the pregnancy outcome may have been if the woman was expectantly managed. The degree to which the findings are generalizable outside of the UK are questionable given the intention to treat analysis and the reported difficulties complying with the intervention protocol. Given the background initiatives on stillbirth prevention in the UK around this time (including wide dissemination of the *Royal College of Obstetricians & Gynaecologists* guidelines of RFM¹³), contamination in the control period through heightened awareness also cannot be excluded as a confounding influence.

Perhaps a more effective approach would be to improve induction protocols for women reporting RFM, with an aim to safely prolong pregnancy until 39–40 weeks' gestation, rather than discouraging awareness of fetal movements. RFM remains an important risk factor for adverse perinatal outcomes, including stillbirth. Our challenge is not ignore women's concerns about fetal movements but to double-down on efforts to better understand this important clinical sign and determine the best approach to investigation and management of RFM presentations.

The editorial's authors suggest that discouraging campaigns that promote RFM awareness before term should be considered.⁹ It certainly seems prudent to focus attention on the stage of pregnancy where the ongoing risk of stillbirth is highest, the proportion of unexpected and unexplained deaths is high, and where the risks to the baby associated with early birth are lowest. However, it is important to acknowledge that the risk of stillbirth associated with RFM is increased across all gestational age groups after 28 weeks¹⁴ and further that RFM is associated with preterm birth, exclusive of iatrogenic preterm birth. This evidence tells us that there is no safe gestation in the third trimester at which women presenting with this symptom can be completely reassured. Rather than discouraging conversations with women about fetal movements before term, the emphasis should be on careful consideration of the risks and benefits of delivery, particularly at earlier gestations.

Finally, it should be considered that a single, effective method to prevent most stillbirths is unlikely to be found and a bundle of different strategies may be the best approach,^{15,16} as long as these strategies adequately measure each element of care. Development of a good screening tool for stillbirth risk, particularly in low risk women, remains a high priority.¹⁷

We wholeheartedly agree with the conclusion of the AFFIRM trial authors⁸ that until further data from ongoing studies (*My Baby's Movements* in Australia and the *Mindfetalness* in Sweden) and the planned individual participant data meta-analysis are forthcoming, current practices around awareness raising and clinical management around RFM should remain unchanged. We should certainly not ignore the reporting by women of a symptom that may indicate that their baby is at risk. Shared decision-making and a sensible approach to risk assessment, with prudent use of obstetric interventions, should save lives without causing harm.

Declaration of interest

Vicki Flenady, David Ellwood, Glenn Gardener, Philippa Middleton, Michael Coory, Megan Weller, Della Forster, Adrienne Gordon, Fran Boyle, Katie Groom, Caroline Crowther, and Sue Walker are investigators on the My Baby's Movements trial funded by the National Health and Medical Research Council in Australia. Ingela Radestad is the lead investigator for the Mindfetalness trial. Keelin O'Donoghue is the lead investigator for REDucing stillbirth through bEhaViour chAnge iNtervenTions (RELEVANT) Study funded by the Science Foundation Ireland.

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