Does this systematic review arrive at wrong conclusions? Holistic view of training of intrapartum fetal monitoring and importance of its content. Re: Kelly S, Redmond P, King S, et al. Training in the use of intrapartum electronic fetal monitoring with cardiotocography: systematic review and meta-analysis. BJOG 2021; https://doi.org/10.1111/1471-0528.16619.

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Letter to the Editor, BJOG

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Dear Editor,

The impressive systematic review by Kelly et al[1] using robust and up-to-date methodology may leave clinicians puzzled. The American Statistical Association has stated a fundamental principle in 2018, 'No definitive conclusions should be primarily based on statistical modelling without wider balanced nuanced reasoning'. Moreover, 800+ scientists and statisticians pondered, 'How does statistics often lead scientists to deny differences clear to see/experience?'[2] Kelly and co-workers[1] after examining 64 studies and 13 randomised-controlled-trials (RCTs) inform obstetricians that there is failure to demonstrate evidence that training of intrapartum fetal monitoring (IFM) works, root of a crisis. if some meaningful conclusions cannot be drawn from five RCTs of reasonable quality showing benefit, then this goes against the thesis of this review.[1] Has everyone missed some magic formula for a high-quality study showing definitive benefit of training, especially given that it is difficult to prove the benefits of IFM itself? The idealistic description in the review with multiple goals does not seem to offer such a formula. Focussed studies on specific issues of training or new ideas would of course be practical and welcome/desirable.

The PROMPT-group[3] has made major ground-breaking contribution establishing multidisciplinary-team-based skills-drill training. The review[1] makes brief mention of some objections to the content of the training as its scientific validity is more important for outcomes and litigation. The only high-quality study of IFM training and practice (by PROMPT-group)[3] shown to improve perinatal outcomes dates to 1998 – 2003, which importantly taught the contemporary truthful pattern-recognition of centrally important fetal heart rate decelerations as "majority early (benign-reflex like head-compression) and minority variable (cord-compression)".[4] The PROMPT or other groups may be unable to repeat similar study (definitive proof) because of the confounding from current substantial pre-existing training. Crucially, the British guidelines now use an untruthful unscientific pattern-recognition of "no early and majority variable decelerations" shown to detect only 30% acidaemic babies under practice conditions,[4] in contrast to the older British study.[3] The review[1] is completely silent about this current "Orwellian reality-control and double-think". The St Georges group provides good evidence that their cardiotocography (CTG) training is well-absorbed by the trainees.[1] However, the so-called physiological CTG training has been shown as 'anti'-physiological with major risk to fetuses.[4] Fortunately, simple gut-instinct of the birth-attendants would over-ride some grossly harmful training.[4]

This review[1] may have come to a wrong conclusion/recommendation that, 'Awaiting better data, CTG-training should follow the evidence-base for maternity training: local, multi-professional with integrated teamworking and support-tools'. Most British hospitals previously held half-day comprehensive IFM training sessions as local team-based activity like the older British study,[3] but have moved away from these in recent years (sporadic non-mandatory small-scale CTG-review meetings excluded). Notwithstanding the consclusions[1], most birth-attendants are now mandated to complete approved web-based IFM training-modules once a year individually commonly in the comfort of their homes. Most British hospitals have pragmatically adopted these centralised all-inclusive on-line IFM training programmes (not just support-tools) because of several obvious practical and quality advantages; and are not seeking a high-quality study proving superior perinatal outcomes, whether realistic or not.

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References:

1. Kelly S, Redmond P, King S, Oliver-Williams C, Lam e G, Liberati E et al. Training in the use of intrapartum electronic fetal monitoring with cardiotocography: systematic review and meta-analysis. BJOG 2021; https://doi.org/10.1111/1471-0528.16619.
2. Amrhein V, Greenland S, McShane B. Scientists rise up against statistical significance. Nature 2019; 567:305-307.

3. Draycott T, Sibanda T, Owen L, Akande V, Winter C, Reading S et al. Does training in obstetric emergencies improve neonatal outcome? BJOG. 2006; 113(2):177–182.
4. Sholapurkar SL. Myths at the core of intrapartum cardiotocography interpretation - Risks of false ideology, Prospect theory and way forward. Clin Obstet Gynecol Reprod Med. 2019; 5:1-9.