## WHO next-generation partograph: revolutionary steps towards individualised labour care?

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## Commentary

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Hofmeyr et al. anticipate that departure from the familiar partograph "may provoke anxiety and even antipathy among healthcare professionals". We do concur that change is urgently needed to reach beyond the co-existence of too little, too late and too much, too soon care during childbirth. In particular, we applaud the World Health Organization (WHO) for their underlying Better Outcomes in Labour Difficulty (BOLD) project, which has disclosed the urgency of delaying the onset of the active phase of the first stage of labour from 3-4 centimeters of cervical dilatation to at least 5.3 We do agree that the previously premature designation was "a major iatrogenic cause of apparent poor labour progress and unnecessary interventions", which has contributed to the epidemic of caesarean sections in many countries globally. For the Labour Care Guide (LCG), however, to catalyse such change, we urge WHO to consider three major concerns before

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further LCG implementation.

First, any early warning chart only becomes a "monitoring and response tool" when applied in combination with clear guidance as to how to respond.  $^{2,4}$  We once again draw attention to WHO's own multicentre cluster-randomized trial of 35.484 births in South-East Asia, which indicated that failure to know what to do next may be more central to suboptimal partograph use than failure to fill it in. Combining the partograph with clear management guidelines was associated with reductions in rates of prolonged labour (from 6.4% to 3.4%), oxytocin use for labour augmentation (from 20.7% to 9.1%), emergency caesarean section (from 9.9% to 8.3%) and intrapartum stillbirth (from 0.5% to 0.3%). Although the LCG provides alert values for cervical dilatation, its user's manual is unclear and leads to confusion with regard to when and which action should follow. The previous WHO 2018 guidelines were also unspecific in this respect, and even in disagreement with the 2017

guidelines.<sup>6</sup> Lack of specific guidance on prolonged labour is particularly alarming in light of the high rates of oxytocin augmentation in low-resource hospitals in Nigeria and Uganda, disclosed in WHO's BOLD project.<sup>3</sup> Oxytocin augmentation, when indicated, prevents the risks of prolonged labour, but introduces risks of perinatal adverse outcomes in low-resource hospitals, if not combined with appropriate surveillance.

Similar to the aforementioned WHO study of the partograph, the PartoMa project has co-created clear and comprehensive intrapartum management guidelines with frontline health providers in Tanzania. In case of suboptimal labour progress, the PartoMa guidelines suggest: 1. Consider underlying causes (power of contractions, pelvis, position of the baby, urination and anxiety); 2. Artificial rupture of membranes when these are still intact, caring support, oral fluid, food and ambulation); 3. When the partographs's action line is crossed, consider careful augmentation with oxytocin; 4. Assisted vaginal birth considered in second stage of labour. Only when these action steps do not apply should the last option of performing caesarean section be considered.

Secondly, the LCG is not context-stratified to available resources. Therefore, one may question the claim that it sets off "revolutionary steps towards individualized labour care". Maternity units in low- and lower-middle income countries are increasingly congested and the human resources crisis is tremendous. <sup>7,8</sup> As we have previously disclosed, it is just impossible to follow the LCG's surveillance regime if caring for more than two women simultaneously. <sup>4</sup> Checking fetal heart rate and assessing contractions, blood pressure, pulse and vaginal examination every four hours during active labour, would take 110 minutes per woman, excluding extra time for supportive care. <sup>6</sup>

Although the different thresholds for every centimetre of dilatation may provide accurate average progression curves, such complexity hampers care provision in already overstretched clinical realities. Furthermore, if a woman remains just below the LCG's threshold at each centimeter of

dilatation, she can be in active labour for over 18 hours without triggering cervical alerts. At the same time, the 95<sup>th</sup>centile for cumulative time from 5 to 10cm in the WHO's Bold study was 11 hours. This adds to the confusion of the LCG and causes concern for how strong the LCG is informed by the underlying BOLD evidence.<sup>3</sup> For anyone who has worked in busy maternity units amid cries of pain and fear of women labouring alone, such extended "watchful waiting" seems to be a horrifying prospect. Moreover, it may be good to remember that historically the first partograph, as designed by Philpott in the 1970s, included the four-hour time frame between the alert and action lines with the aim of arranging timely referral from a basic to a comprehensive emergency obstetric care facility for those women who crossed the alert line. Crossing the alert line was not intended as an indication for oxytocin augmentation.<sup>9</sup> Many women may need earlier alertness than the new LCG proposes to initiate the aforementioned steps 1 and 2, and to arrange timely referrals for those giving birth in facilities without comprehensive emergency obstetric and neonatal care functions.

As the LCG stands now, the new "partograph" may work in private practice with one-to-one care, a birth companion present and pain-relief available. The presence of a birth companion is an evidence-based intervention, increasing spontaneous vaginal births and reducing the need for pain relief.<sup>10</sup> A birth companion,

however, is often not allowed in the busy labour wards in many countries in sub-Saharan Africa whilst pain relief is only in place for post-operative care.

Finally, adaptation and pilot testing of the LCG is paramount, including assessments of less obvious direct and indirect (side-)effects. What is included and how it is prioritized in a universal partograph might frame priorities of what is done, and what might be neglected.<sup>4</sup> For instance, we applaud WHO for placing additional focus on the second stage of labour. However, neglecting the latent phase is worrisome as it may cause delay in recognizing complications or onset of active labour.<sup>11</sup> Many women who enter facilities in the latent phase, are those with prolonged labour in the active phase and need our support also during the latent phase. Likewise, we applaud WHO for emphasizing compassionate and supportive care during birth, including advocating for birth companions and the option of pain relief.<sup>10</sup> However, to include for instance posture of the woman higher up on the partograph than the well-being of her unborn baby, which used to be at the top, seems disrespectful to women's priorities. Monitoring the baby is an essential part of caring support, but in many low-resource maternity units still highly under-prioritized.<sup>12</sup>

To conclude, our "anxiety" is not caused by fear of change, but by fear of history repeating itself. At global and local levels, we must intensify the struggle to end root causes of unacceptable intrapartum care, including the human resources for health crisis and women's unmet sexual and reproductive rights. Simultaneously, we must assist currently overburdened and often less well trained midwives and doctors with clear, realistically achievable and integrated monitoring and response guidance.<sup>4</sup> We sincerely hope that the LCG will be adapted based on our worries. We feel that such adaptation is the only way to reach "the right amount of care at the right time, delivered in a manner that respects, protects and promotes human rights".

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