

UPTAKE AND OUTCOMES OF VAGINAL BIRTH AFTER CAESAREAN (VBAC) IN NHS LANARKSHIRE DURING COVID-19

Eleanor Ziegler, Annapurna Pandravada, Hilary Godsman
University Hospital Wishaw (UHW), NHS Lanarkshire

Introduction

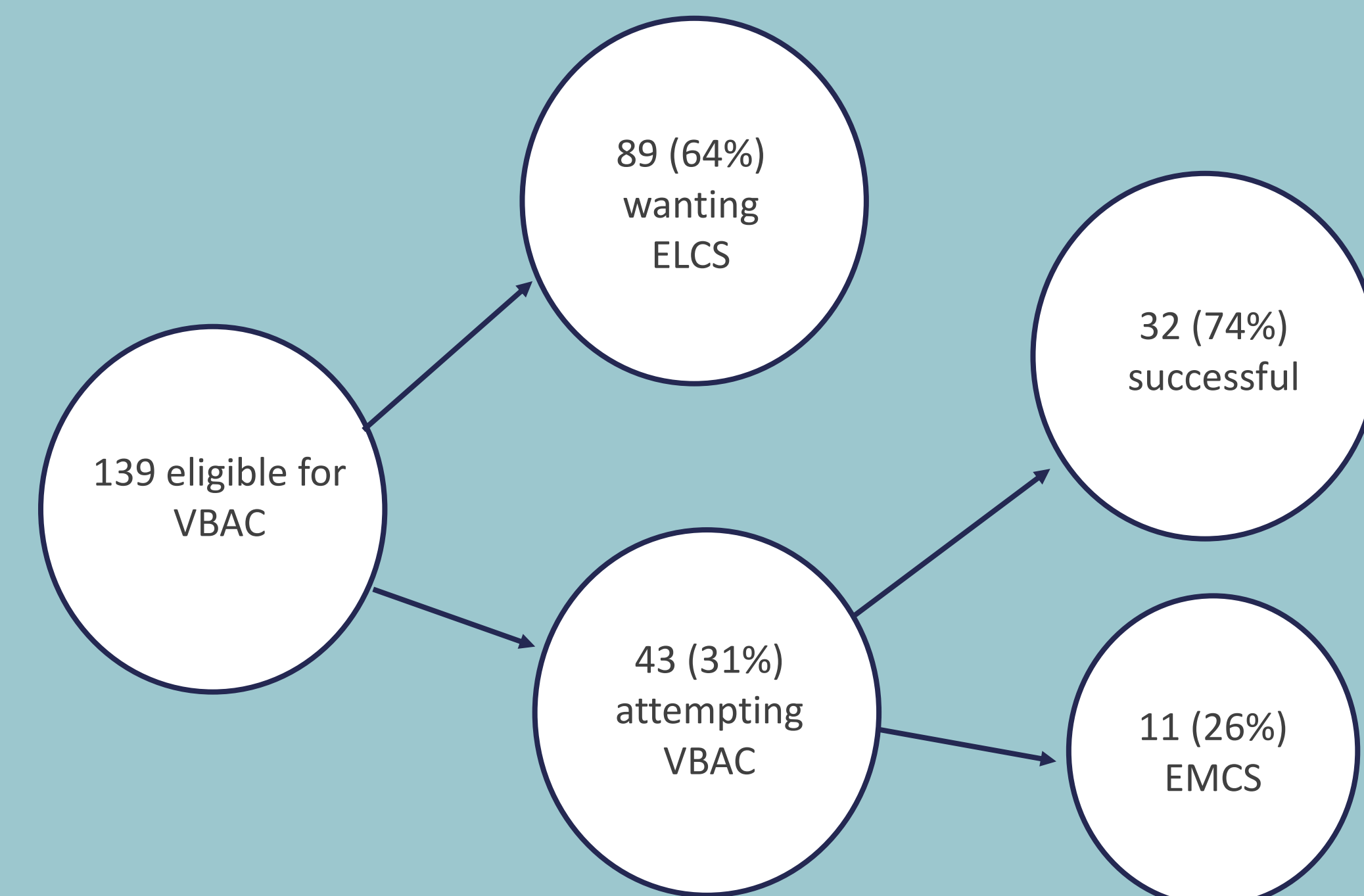
Prior to the Covid-19 pandemic, antenatal practice was reviewed to identify areas of improvement regarding counselling in order to potentially increase VBAC rates. At the start of the pandemic these techniques were implemented with a mind to reduce stay in hospital and potential hospital acquired Covid-19 infection. VBAC rates increased anecdotally during this period ostensibly due to the above reasons, and the purpose of this audit was to evaluate the effect of the newly implemented guidelines since the previous audit cycle on actual rates of VBAC, ERCS, and EMCS

Aims

- Evaluate the uptake and documentation of techniques implemented since the previous audit
- Examine whether the techniques implemented since the 2019 audit had successfully increased VBAC rate to 40-50%
- Report on how many women were given the RCOG VBAC leaflet at booking
- Assess the rate of complications from VBAC and ERCS

Methods

- The case notes were reviewed for women who had an EDD from May to June 2020, who had previously delivered by caesarean section, and had ≥ 1 previous pregnancy. These were entered into a Microsoft Excel proforma and analysed
- Exclusion criteria were: >1 previous caesarean; women for whom VBAC was medically contraindicated; and women who had booked or delivered outside of Wishaw for their current pregnancy
- **Total eligible for VBAC = 139**



References

- 1.Black M, Entwistle VA, Bhattacharya S, Gillies K. Vaginal birth after caesarean section: why is uptake so low? Insights from a meta-ethnographic synthesis of women's accounts of their birth choices. *BMJ Open*. 2016 Jan 8;6(1):e008881. doi: 10.1136/bmjopen-2015-008881. PMID: 26747030; PMCID: PMC4716170.
- 2.Catling-Paull C, Johnston R, Ryan C, Foureur MJ, Homer CS. Non-clinical interventions that increase the uptake and success of vaginal birth after caesarean section: a systematic review. *J Adv Nurs*. 2011 Aug;67(8):1662-76. doi: 10.1111/j.1365-2648.2011.05662.x. Epub 2011 Apr 29. PMID: 21535091.
- 3.Lundgren, I., van Limbeek, E., Vehvilainen-Julkunen, K. *et al*. Clinicians' views of factors of importance for improving the rate of VBAC (vaginal birth after caesarean section): a qualitative study from countries with high VBAC rates. *BMC Pregnancy Childbirth* 2015; **15**:196. <https://doi.org/10.1186/s12884-015-0629-6>
- 4.Triebwasser, J.E., Kamdar, N.S., Langen, E.S. *et al*. Hospital contribution to variation in rates of vaginal birth after caesarean. *J Perinatol* 2019 **39**, 904–910. <https://doi.org/10.1038/s41372-019-0373-2>
- 5.Wingert, A., Hartling, L., Sebastiani, M. *et al*. Clinical interventions that influence vaginal birth after caesarean delivery rates: Systematic Review & Meta-Analysis. *BMC Pregnancy Childbirth* **19**, 529 (2019). <https://doi.org/10.1186/s12884-019-2689-5>

Abbreviations: VBAC (Vaginal Birth After Caesarean); ERCS (Elective Repeat Caesarean Section); EMCS (Emergency Caesarean Section); IOL (Induction of Labour)

Results

Uptake and success

- **VBAC as final MOD** amongst women attempting VBAC decreased by 5% from 2019 to 2020 (28% to 23%)
- **Low uptake** of VBAC in 2020 (31% at third trimester) but **good success** rate (74%) of those attempting VBAC
- **Higher success** rate in those with **previous vaginal delivery** (53%) than those with ERCS (15%) or EMCS (20%) as final MOD
- Higher rate of women opting for VBAC at third trimester (43%) vs booking appointment (40%)

Complications

- Higher complication rates for VBAC (53%) than ERCS (37%)
- Highest complication rate in EMCS (55%)
- **Complication rates increased** by 24% for VBAC, 6% for ERCS, and 5% for EMCS compared to 2019
- Maternal complications: PPH, perineal tears, wound infection, wound dehiscence, bladder injury, hypotension, allergic reaction, and retained placenta

- **One woman had a uterine rupture (VBAC IOL converted to EMCS)**

Antenatal practice

- 95% of women had an agreed final MOD documented by the third trimester appointment
- Highest rate of leaflets documented as being given in the successful VBAC group (50%) vs ERCS (17%) or EMCS (20%)

Conclusions

- The target of 40-50% VBAC uptake since the previous audit was not met (23%)
- Currently available data suggests that provision of the RCOG leaflet and discussion at booking did not increase VBAC as final MOD
- Rate of complications increased from 2019 to 2020 for all MOD

Recommendations

- Increase provision of the VBAC leaflet at booking to make information available to all eligible women
- Increase documentation of leaflet provision and discussion of VBAC at booking to enable further analysis
- Previous recommendations that were not implemented should be trialled, such as creating a local statistics leaflet in addition to the VBAC information leaflet, and introduction of a multidisciplinary consultant-led VBAC clinic for antenatal counselling

