

Postnatal venous thromboembolism prophylaxis – an OAA survey

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A common scenario

32-year-old for elective caesarean section, no risk factors for venous thromboembolism (VTE).

Booking weight 80kg, height 170cm, BMI 27.6

At term weighs 96kg. BMI 33.2

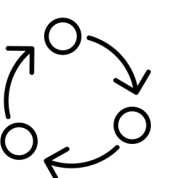
Does she qualify for LMWH?

What dose should she get?



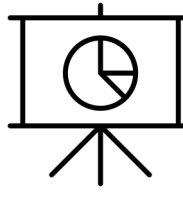
Introduction

Venous thromboembolism remains the biggest direct cause of maternal death in the UK, with multiple cases attributable to incorrect risk scoring or inadequate doses of low molecular weight heparin (LMWH) [1]. Recent “Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK” (MBRRACE) reports [1] note that existing VTE risk scoring systems are difficult to apply and need to be made simpler and more reproducible. It was noted locally that VTE risk scoring was done in a subjective and variable manner, particularly around obesity.



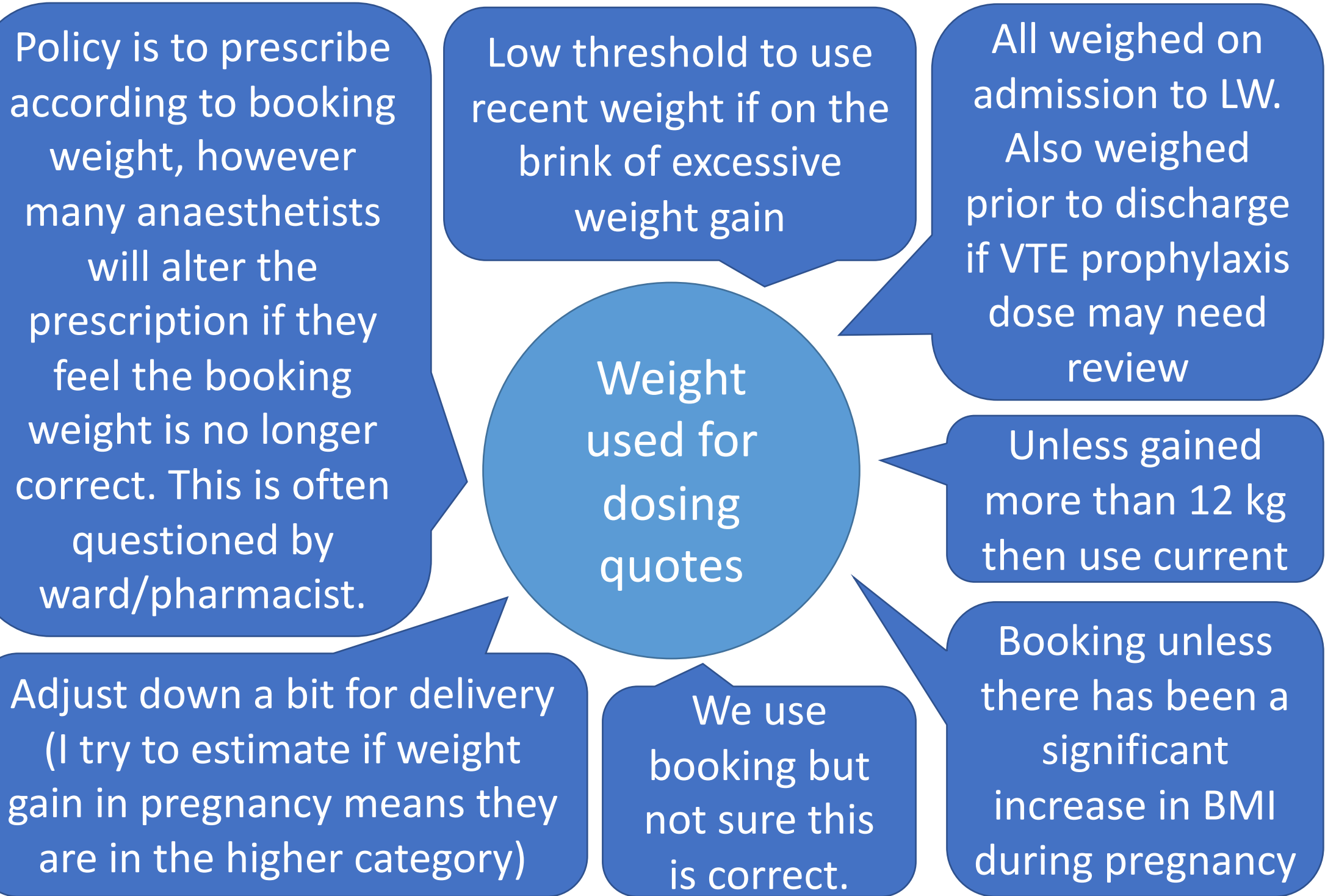
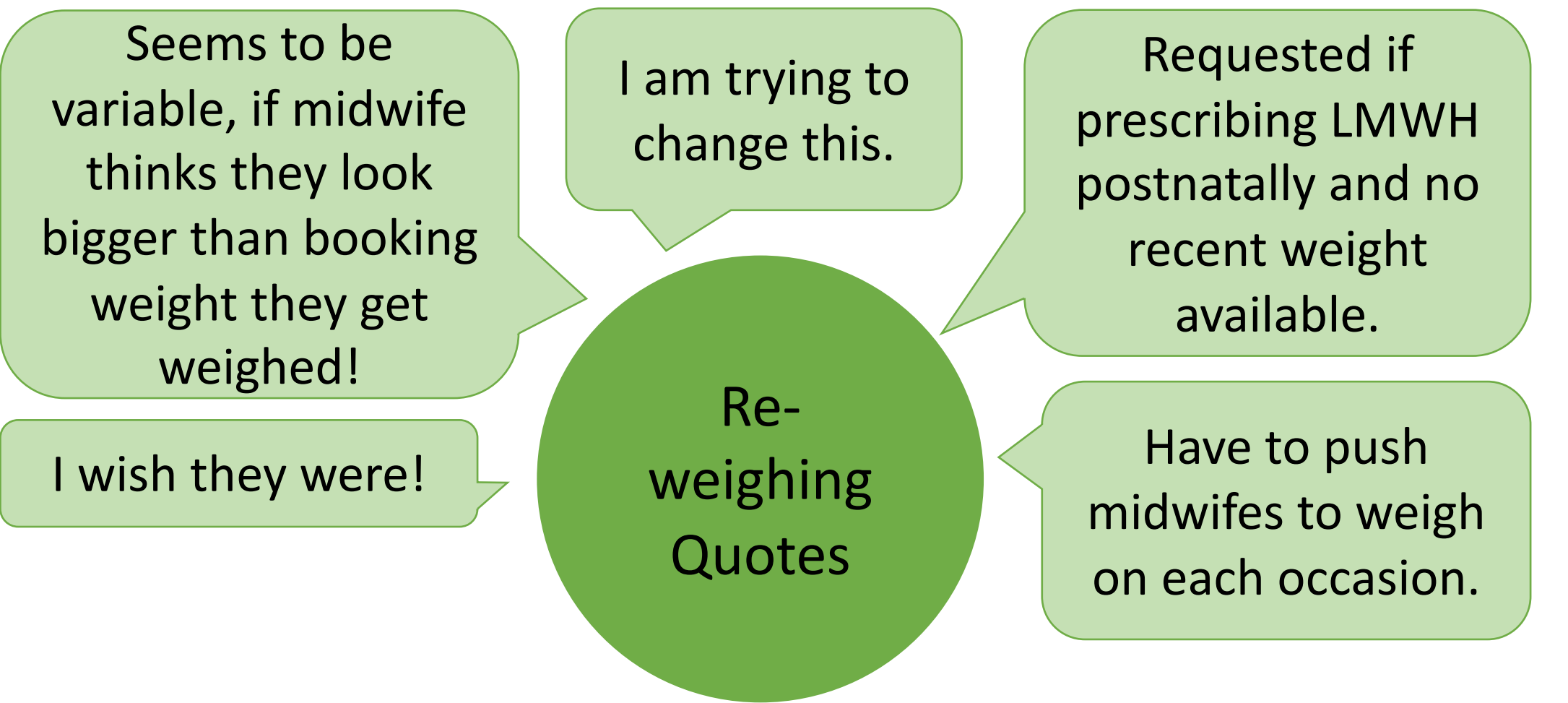
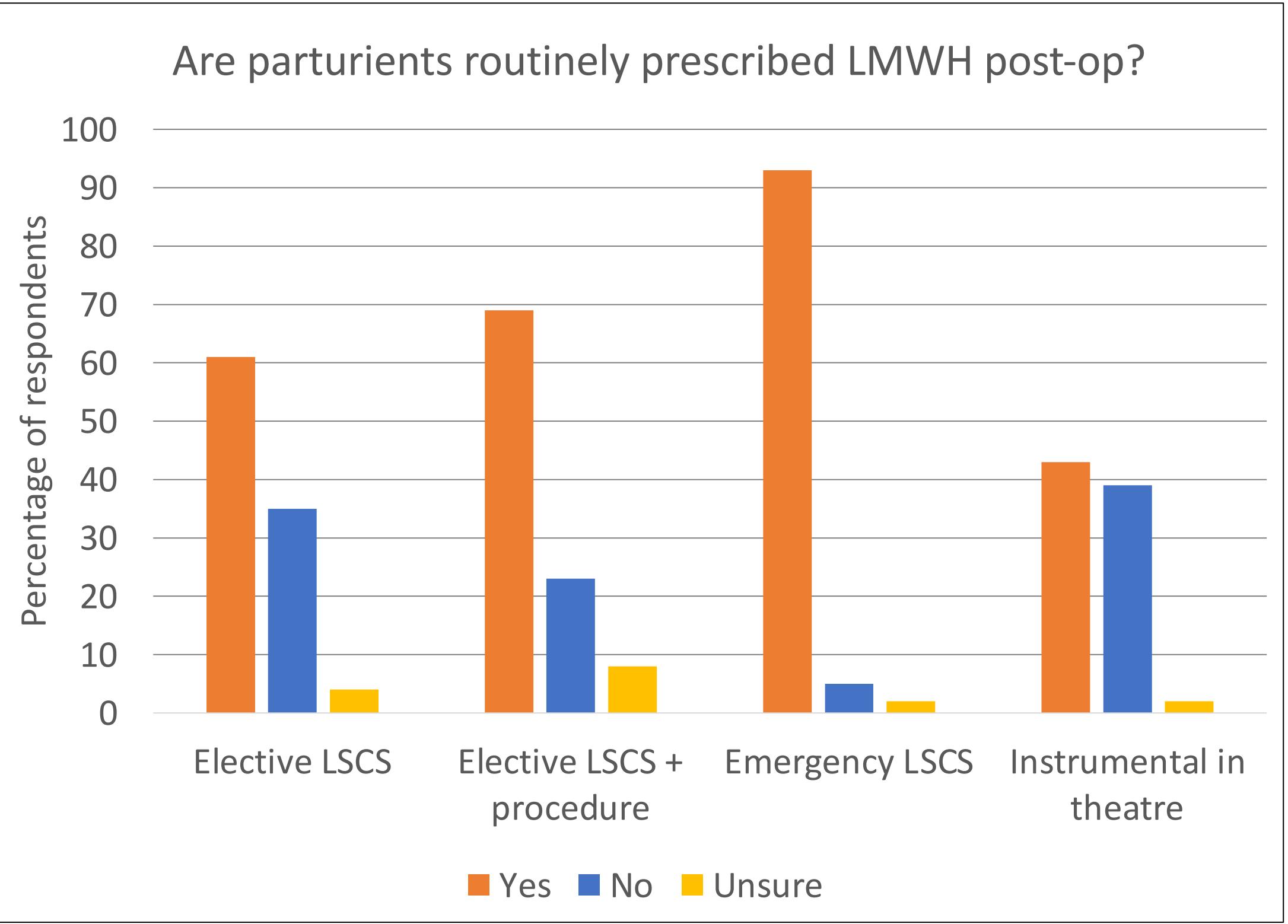
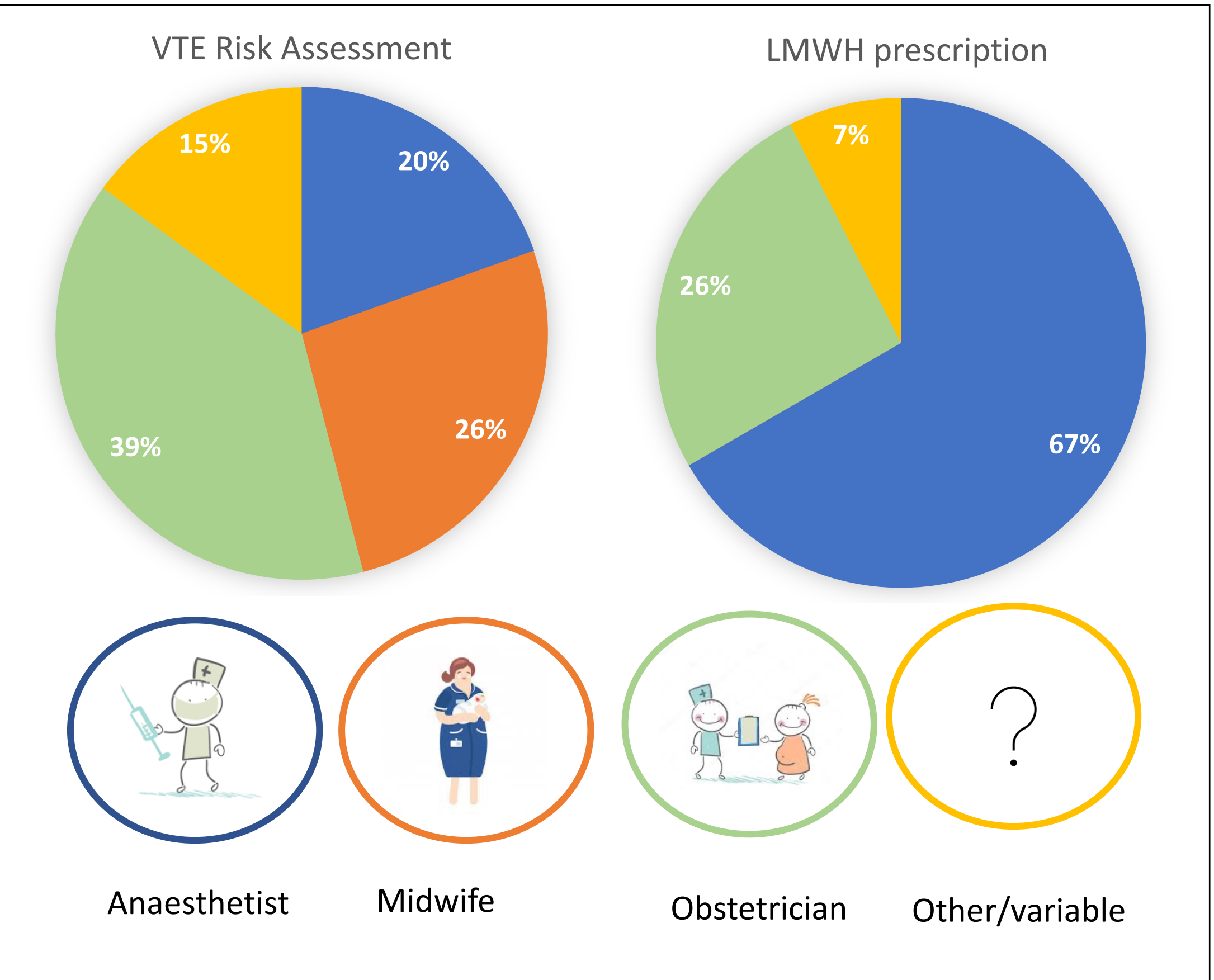
Methods

We conducted a national survey of OAA consultant members. Questions covered current practice in postnatal VTE risk scoring and LMWH prescribing and dosing. We also asked whether proposed clinical scenarios, reflecting Royal College of Obstetricians and Gynaecologists (RCOG) national guidance [2], were considered risk factors for VTE. Free text comments were welcomed.

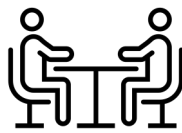


Results

88% of respondents used booking weight to dose post-natal LMWH and more than a third of respondents said that re-weighing at any point after booking was not routine.



Would you consider this a risk factor for VTE? (% of respondents)				
	Yes (%)	No (%)	Unsure (%)	RCOG risk factor [2]
Baby in OP position delivered by ventouse	25	46	29	Mid-cavity rotational delivery
Type 1 diabetes without nephropathy	57	21	21	T1DM with nephropathy
Current occasional smoker	67	15	18	Smoker
Pregnancy induced hypertension	74	16	10	Current pre-eclampsia
Current UTI on antibiotics	39	38	23	Current systemic infection



Discussion

The survey demonstrates variation in postnatal VTE prophylaxis assessment and management. Anaesthetists frequently undertake postnatal LMWH prescribing for obstetric theatre cases and therefore have a key role in ensuring consistent delivery of evidence-based guidance. Successful weight-based postnatal LMWH dosing relies on accurate weight, which the survey shows is often inaccessible. There is concern in some groups that re-weighing could worsen stigma around obesity, but small studies suggest that women have positive feelings about being weighed in pregnancy [3] and MBRRACE suggests reweighing at 28 weeks and postnatally for women close to weight-thresholds.

Current VTE risk scoring systems remain ambiguous and difficult to apply in practice. A more pragmatic and possibly more permissive approach to LMWH prescribing may be useful to facilitate consistent practice in the high-risk postnatal period.



References

- [1] Knight M, Bunch K, Tuffnell D, Patel R, Shakespeare J, Kotnis R, Kenyon S, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK. Saving Lives, Improving Mothers’ Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2021.
- [2] Royal College of Obstetricians and Gynaecologists (2015a). Green-top Guideline 37a: Reducing the risk of venous thromboembolism during pregnancy and the puerperium. London, RCOG.
- [3] Allen-Walker V, Hunter AJ, Holmes VA, McK et al. Weighing as part of your care: a feasibility study exploring the re-introduction of weight measurements during pregnancy as part of routine antenatal care. BMC Pregnancy Childbirth. 2020 May 29;20(1):328.