

How do women choose between vaginal birth after caesarean (VBAC) and elective repeat caesarean section (ERCS)?

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INTRODUCTION

Maternal birthing choices after caesarean section are influenced by multiple factors.^{1,2,3} This decision making can be further supported by understanding the factors that influence the choice between an elective repeat caesarean birth and vaginal birth after caesarean.

OBJECTIVES

1. Identify factors that influence maternal decision regarding mode of delivery following a caesarean section.
2. Explore an association with sociodemographic and clinical characteristics.

METHOD

-Prospective questionnaire-based survey of pregnant women with one previous caesarean section at attending Ipswich hospital Antenatal Clinic between April 2019 to April 2020.

-Separate questionnaire provided to women based on birth choice, VBAC or ERCS, to examine the influence of cultural values, safety, logistics and recommendations in maternal decision making.

-Statistical analysis: Maternal characteristics were summarised by group, using means if continuous data and percentages if categorical data. Difference in the proportion of women choosing VBAC over ERCS based on maternal or clinical characteristics were summarised using relative risk and 95% confidence interval. Factors indicated by women as influencing their birthing choice were summarised as percentages to the nearest whole number according to Agree (includes agree and strongly agree), Neutral and Disagree (includes disagree and strongly disagree). Thematic analysis of open-ended questions was performed and summarised as percentages to the nearest whole number. The data was analysed using SAS version 9.4 (SAS Institute, Cary, NC, USA).

-Ethics: study approved by the West Moreton Health Service District Health Research Ethics Committee (HREC): HREC/2018/QWMS/48465.

RESULTS

Amongst the 91 eligible participants, 51 women (56%) had chosen VBAC and 40 women (44%) had chosen ERCS. Predominant factors that influenced VBAC uptake were shorter length of hospital stay (45, 88%), desire for natural delivery (42, 82%) and safety (42,82%) (Table 1). The main factors

that influenced maternal choice for ERCS were materno-fetal safety (32, 80%), avoiding an emergency caesarean (32, 80%) and knowing the timing of delivery (22, 55%) (Table 1). The clinical characteristics significantly associated with a preference for VBAC were parity ≥ 2 (RR:1.85 95% CI: 1.35-2.53) and ≥ 1 previous vaginal delivery (RR: 1.91 95%CI: 1.41-2.59). A woman under Midwifery care was more likely to choose VBAC compared to Doctors model of care (RR: 1.55 95%CI: 1.11-2.17).

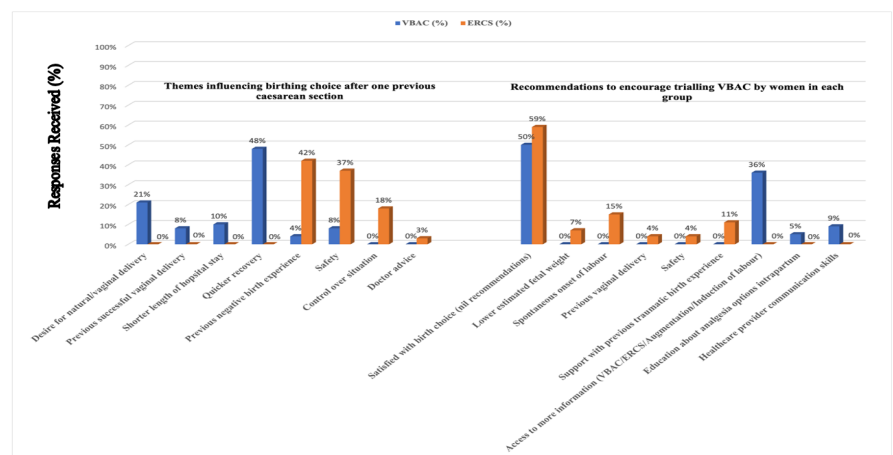
Table 1: Questionnaire responses examining factors influencing maternal preference for birth after a caesarean section

FACTORS	VBAC (51 women)			
	Agree n (%)	Neutral n (%)	Disagree n (%)	MISSING n (%)
Desire a vaginal/natural delivery	42 (82%)	8 (16%)	13 (25%)	1 (2%)
Cultural beliefs and values	13 (25%)	25 (49%)	13 (25%)	
Reduced hospital length of stay and quicker recover	45 (88%)	5 (10%)	1 (2%)	
Increased chance breastfeeding	29 (57%)	16 (31%)	6 (12%)	
Safer option	42 (82%)	4 (8%)	4 (8%)	1 (2%)
Doctor/midwife influence	9 (18%)	18 (35%)	23 (45%)	1 (2%)
Partner influence	15 (29%)	20 (39%)	16 (31%)	
Family and friends influence	14 (27%)	15 (29%)	22 (43%)	
Social media influence	1 (2%)	8 (15%)	41 (80%)	1 (2%)
Small risk of uterine rupture	46 (90%)	5 (10%)		
Felt adequately counselled about my birthing options <u>vs</u> ERCS vs VBAC	48 (94%)	3 (6%)		
Felt adequately supported with my decision to have a VBAC	48 (96%)	3 (6%)		
FACTORS	ERCS (40 women)			
	Agree n (%)	Neutral n (%)	Disagree n (%)	MISSING n (%)
Safer option	32 (80%)	7 (18%)	1 (2.5%)	
Avoid an emergency caesarean section	32 (80%)	4 (10%)	4 (10%)	
Knowledge about delivery timing	22 (55%)	6 (15%)	12 (30%)	
Concurrent female sterilisation	6 (15%)	4 (10%)	30 (75%)	
Partner influence	3 (8%)	11 (28%)	26 (65%)	
Doctor/midwife influence	2 (5%)	9 (23%)	27 (68%)	2 (5%)
Family and friends influence	3 (8%)	8 (20%)	28 (70%)	1 (3%)
Social media influence	1 (3%)	0 (0%)	39 (98%)	
Avoid labour pain	5 (13%)	2 (5%)	32 (80%)	1 (3%)
Reduce my chance of a pelvic organ prolapse	8 (20%)	4 (10%)	28 (70%)	
Felt adequately counselled about my birthing options <u>vs</u> ERCS vs VBAC	36 (90%)	3 (8%)	1 (2.5%)	
Felt adequately supported with my decision to have a caesarean section	36 (90%)	4 (10%)	0 (0%)	

† Percentages rounded off to nearest integer

The questionnaire 'free text' section allowed women to state the main factors (analysed into themes) driving birth choice and recommendations that could increase VBAC uptake (Figure 1).

Figure 1: Thematic analysis of main driving factors for mode of delivery after a caesarean section (free text section)



CONCLUSION

Maternal decision regarding mode of delivery after a prior caesarean birth is influenced by several factors. Knowledge about factors that drive maternal choice can assist healthcare providers to optimise antenatal counselling and support the shared decision making.

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