

# Obstetric outcomes of Jehovah’s Witness mothers: a nine year observational study from an inner city London teaching hospital

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## Background

- Jehovah’s Witnesses is a religion derived from Christianity. There are approximately 140,000 in the United Kingdom<sup>1,2</sup>.
- A fundamental belief of a Jehovah’s Witness is that blood transfusions should not be accepted, even in a situation when life is at risk<sup>3</sup>.
- Maternal haemorrhage is one of the highest causes of maternal mortality in the UK<sup>4</sup>, and globally<sup>5</sup>.
- Due to their beliefs surrounding acceptance of blood products, Jehovah’s Witnesses pose a unique obstetric challenge.
- We sought to assess contemporary obstetric outcomes of JWs at our unit, a centre of excellence catering for one of the largest populations of JWs in the UK.

## Methods

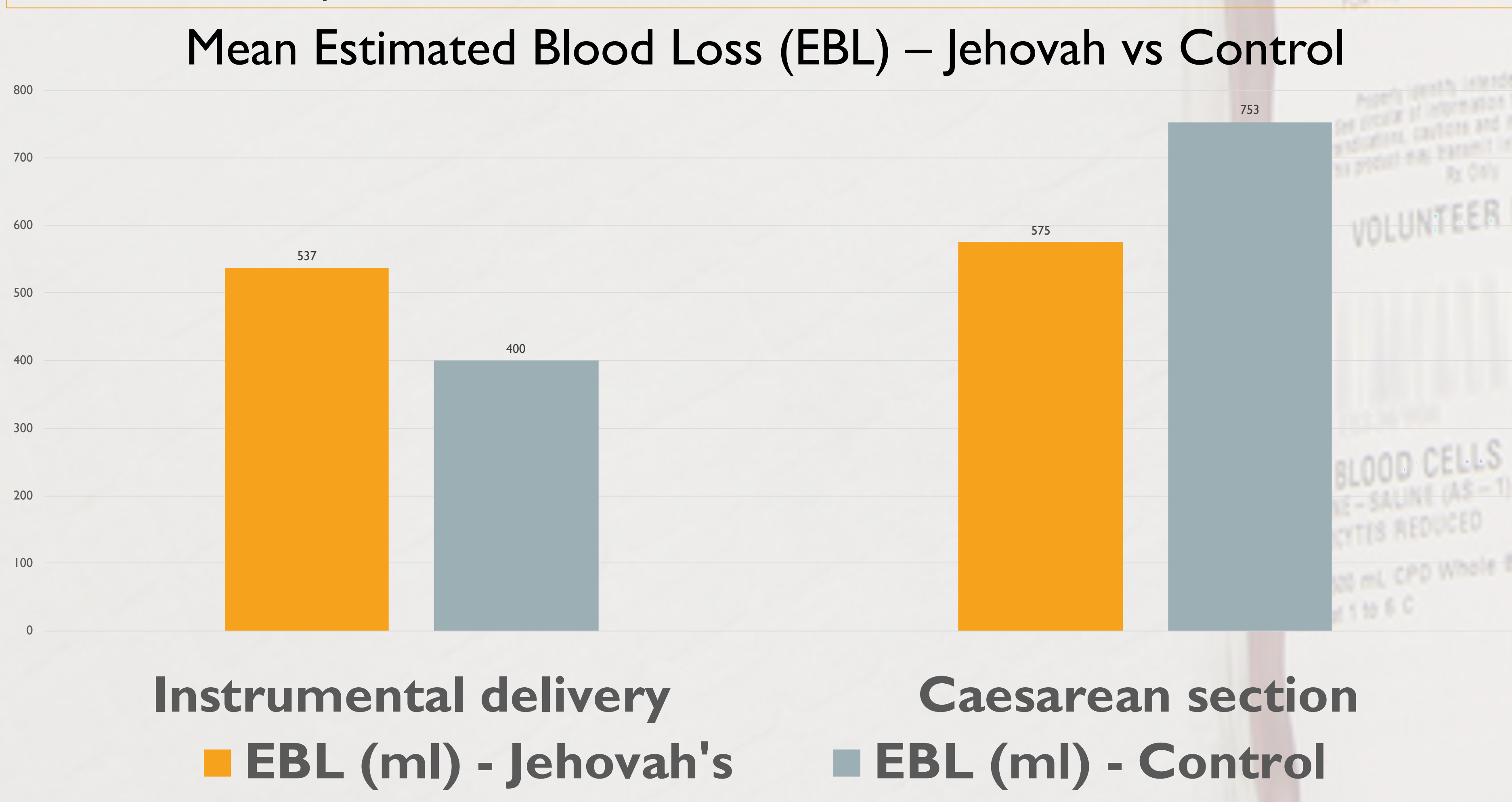
We designed a retrospective observational study assessing deliveries of Jehovah’s Witness mothers between the years of 2013-2021, using paper and electronic data. We devised a control group matched for mode of delivery to directly compare estimated blood loss and complications.

## Results

- 135 deliveries occurred during the nine years studied.
- The mean maternal age was 30.26 years ( $\pm 0.54$ ) and gestation at delivery was 38.664 ( $\pm 0.45$ ) respectively.
- The mean predelivery haemoglobin was 118g/l ( $\pm 1.33$ ) and 57% of women received antenatal iron supplementation.
- 74% of patients were reviewed by a senior registrar or consultant during the antenatal period.
- At caesarean, autologous cell salvage was used in 100% of births and a consultant was present at 62% births.
- There were no maternal deaths nor admissions to intensive care unit and the most serious complication was a single uterine rupture.
- The mean 5-minute Apgar scores 9.1 ( $\pm 0.09$ )
- There was found to be no significant difference between the estimated blood loss in instrumentals and caesarean sections between Jehovah’s witnesses and controls

## Conclusions

- Patients overwhelmingly received consultant-led care, underwent rigorous antenatal optimisation of haemoglobin and experienced good obstetric and fetal outcomes.
- There was a large variety in which blood products were deemed acceptable by different women, further reinforcing the need for careful, detailed antenatal counselling
- The most acceptable intervention concerning blood was cell salvage
- JWs appear to receive better obstetric care than other groups. It is led by senior clinicians, with intensive antenatal improvement of haematinics, and delivery is as bloodless as possible with access to technology such as cell salvage, whichh is safer than allogenic blood transfusion.
- We argue that this optimal level of care should be provided as standard to all patients. This strategy would improve patient outcomes, help preserve dwindling stocks of donor blood and likely prove cost-effective, given the considerable cost of blood transfusion to the health service.



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