1. Create at least one graph of total blood loss

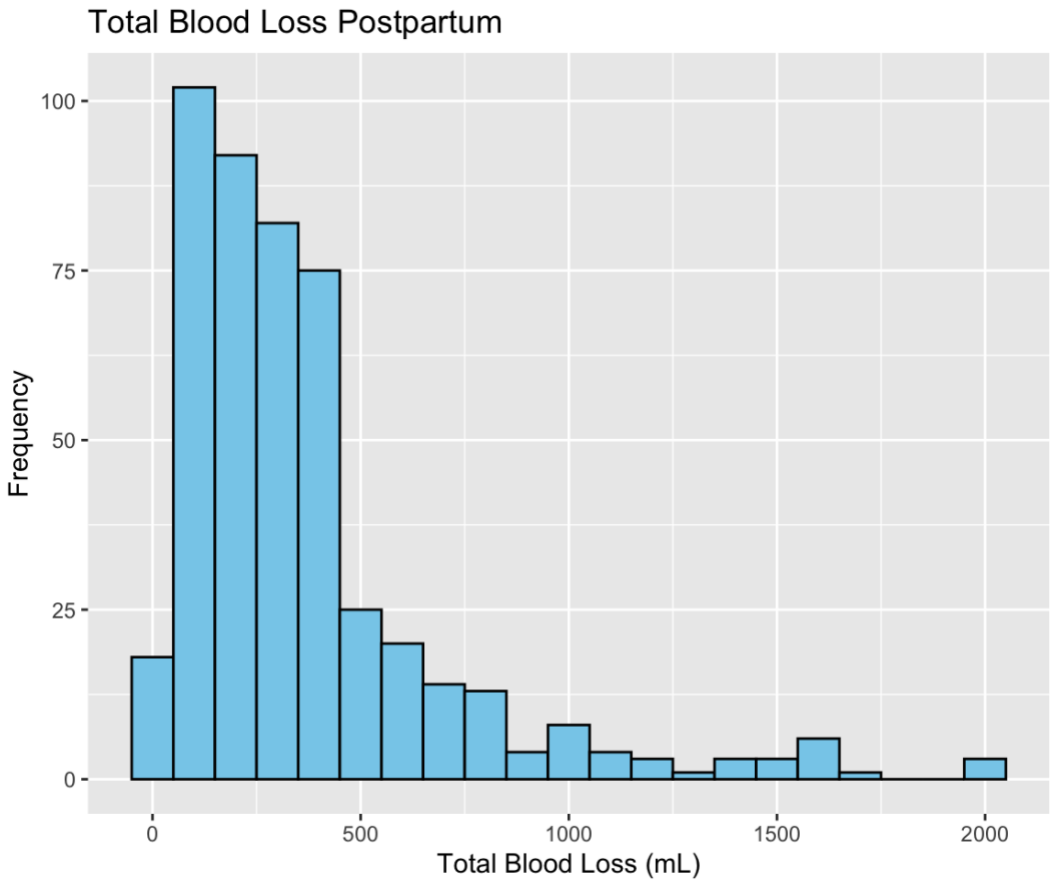

Figure 1: Total Blood Loss Histogram

2. Calculate summary statistics for total blood loss

Variable	Min	Q1	Median	Mean	Q3	Max	SD	Range	IQR
TotalBloodLoss	20	150	300	384.9	450	2000	333.74	[20, 2000]	300

Table 1: TotalBloodLoss Summary Statistics

3. Based on your summary information, check CLT, choose a test, and conduct a hypothesis test, and examine the results

3A: Assume that the sample is representative, the people are independent, and the data is accurately measured. Check the Central Limit Theorem.

CLT conditions are met since independence is given, and $n > 477$ is well above the required $n \geq 30$. Despite the right-skewed distribution (mean > median), the large sample size ensures the sampling distribution of the sample mean is approximately normal, allowing us to use a t-test.

3B: Based on your decision about the Central Limit Theorem, explain what test you're going to do and why.

Since CLT conditions are met, I will use a one-sample t-test to test whether the mean total blood loss is greater than 500 mL. The t-test is appropriate because we have one sample of continuous data with an unknown total population standard deviation, and the CLT ensures the sampling distribution is approximately normal.

3C: Write out the hypotheses you are testing.

Ho: $\mu = 500$

Ha: $\mu > 500$

Ho/Ha with Context:

Ho: The average total blood loss per patient is equal to 500 mL.

Ha: The average total blood loss per patient is greater than 500 mL.

3D: Give the p-value for your test

p-value = 1.00

3E: Give a decision and conclusion for the test based on $\alpha = 0.05$.

At $\alpha = 0.05$, we fail to reject H_0 because the p-value of $1 > \alpha$ (0.05). Thus we do not have sufficient evidence to conclude that patients in Argentina lose more than 500 mL of blood on average during vaginal delivery.

4. Find the 95% confidence interval for average blood loss using software.

95% CI for average total blood loss: [354.84, 414.89] mL