Confidence Interval Interpretation

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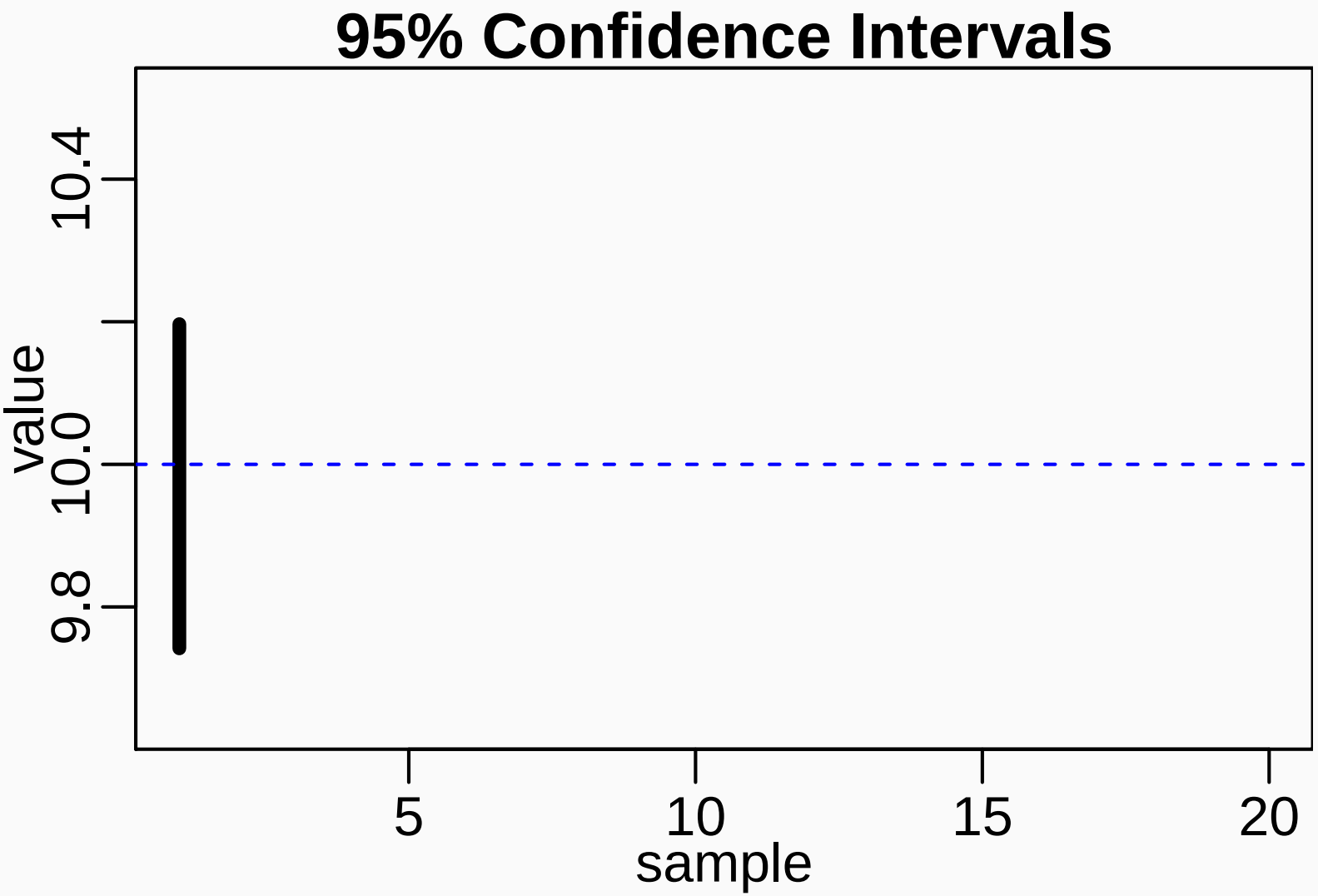
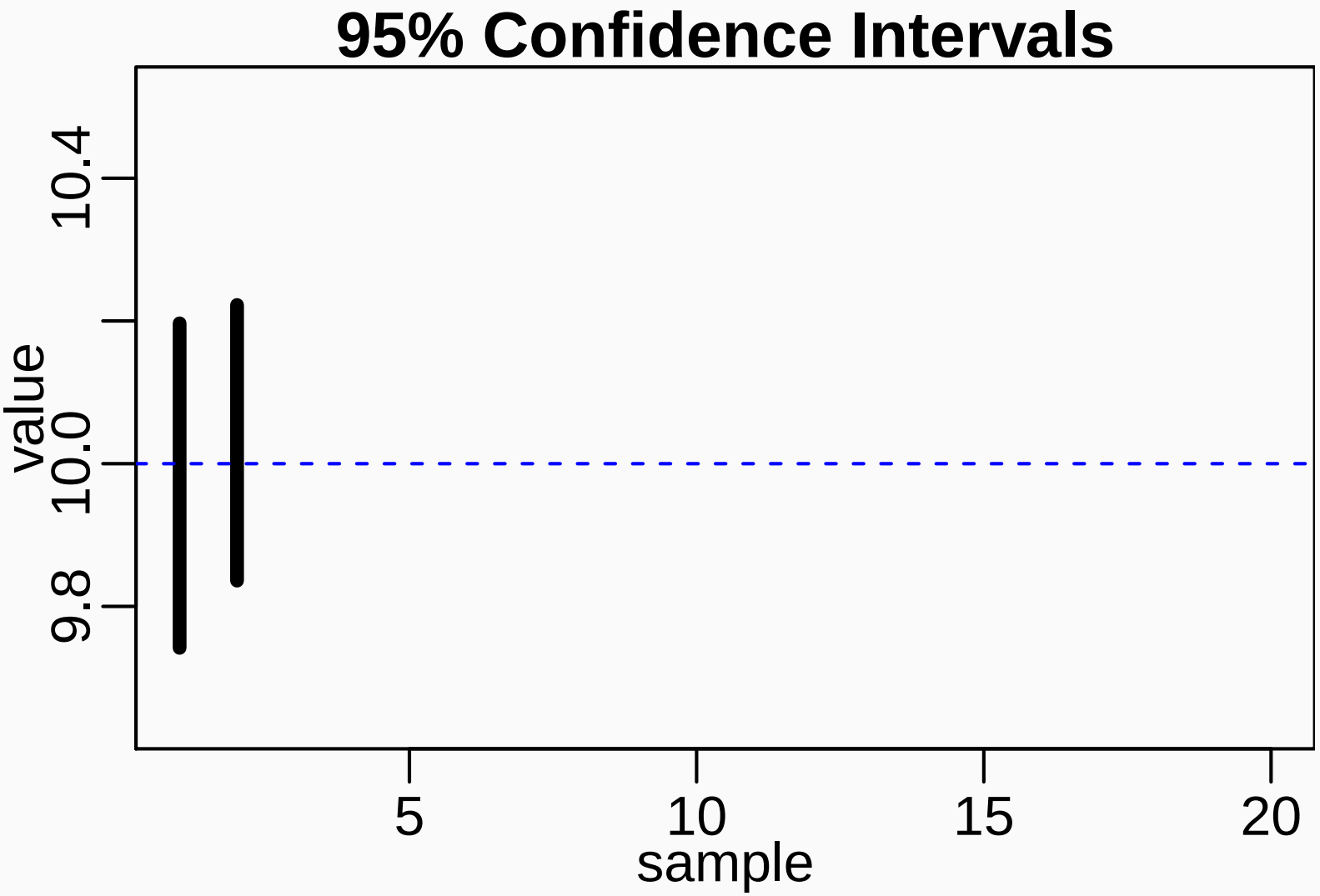
2018-12-07

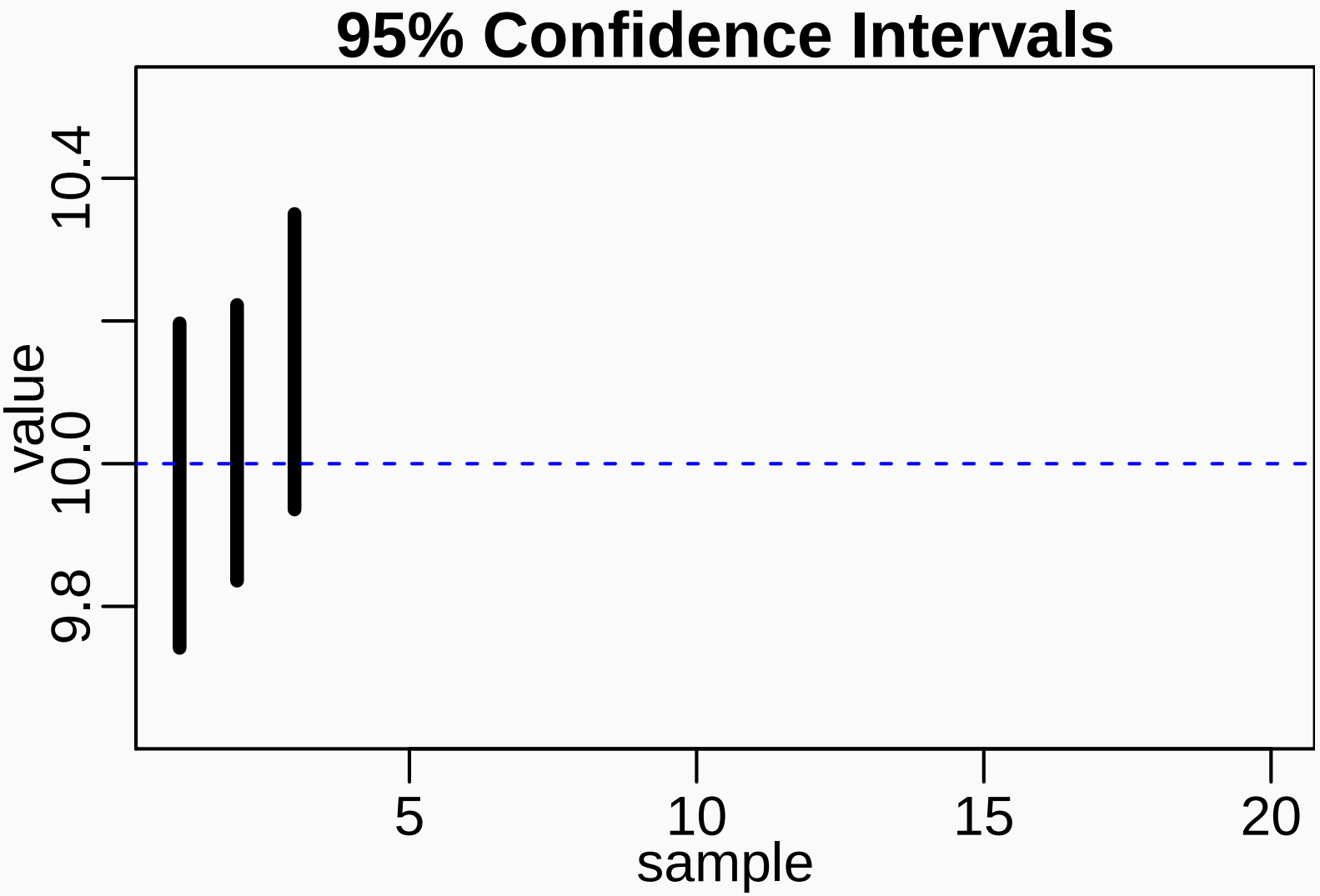
Covering True Mean i



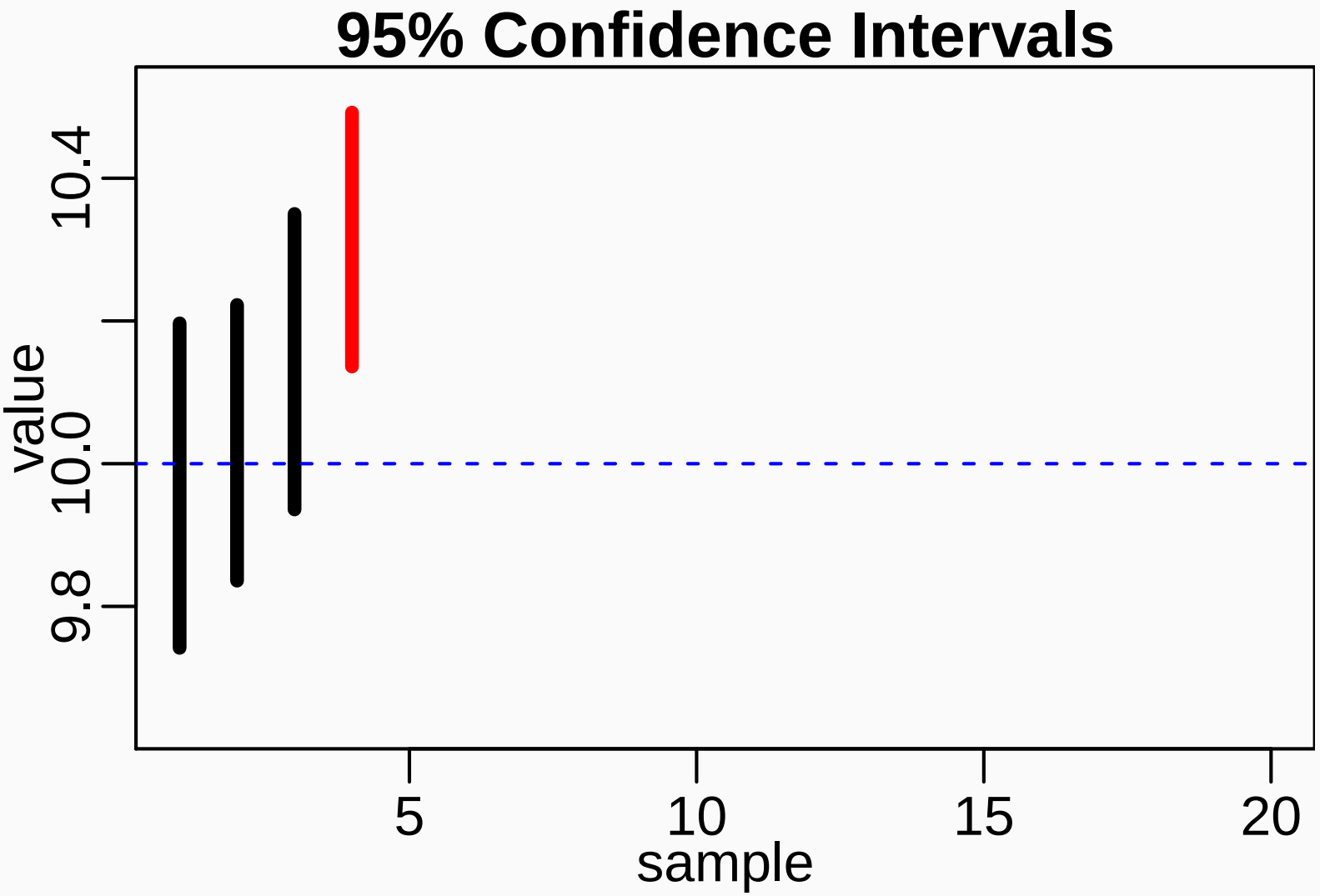
Covering True Mean ii



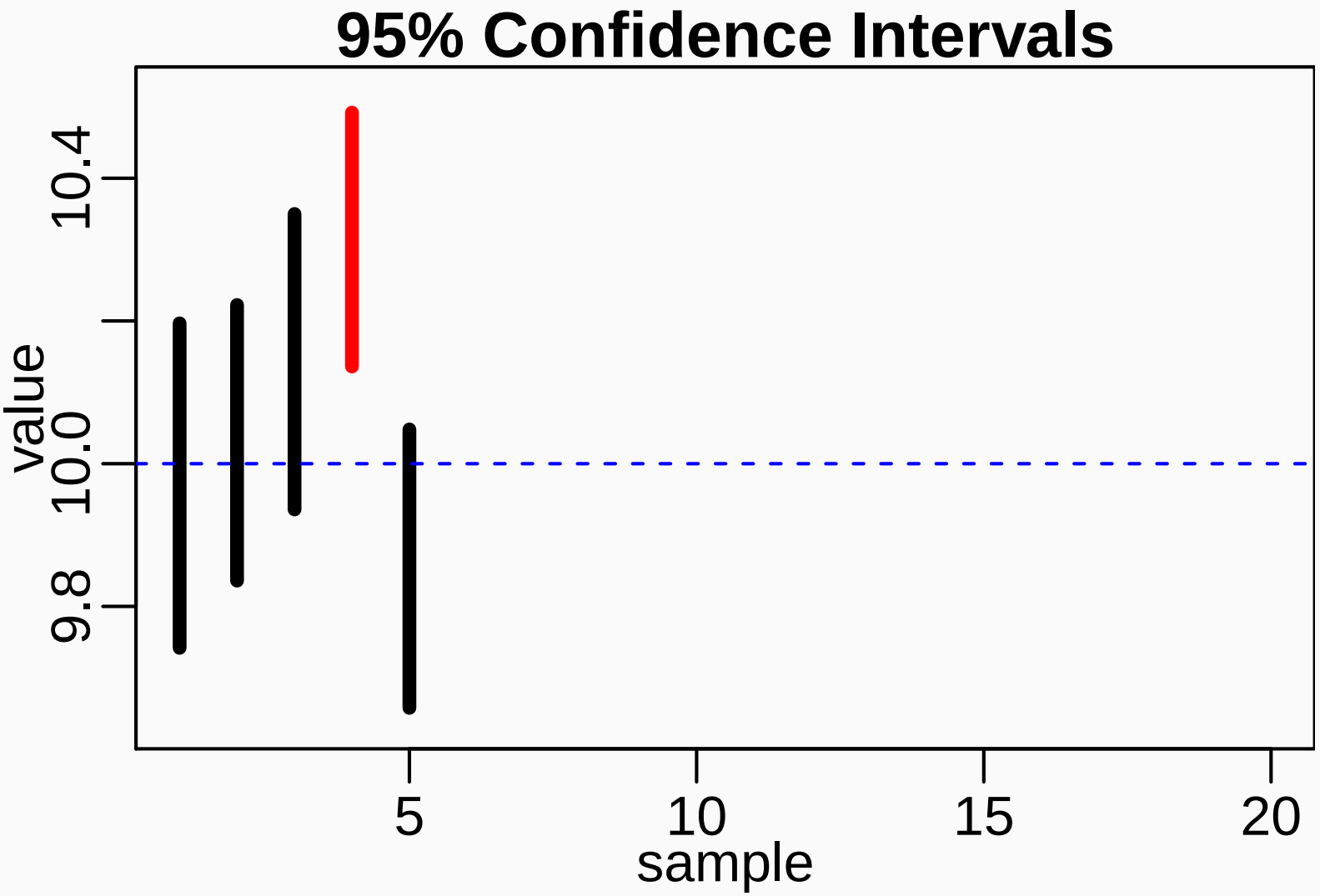
Covering True Mean iii



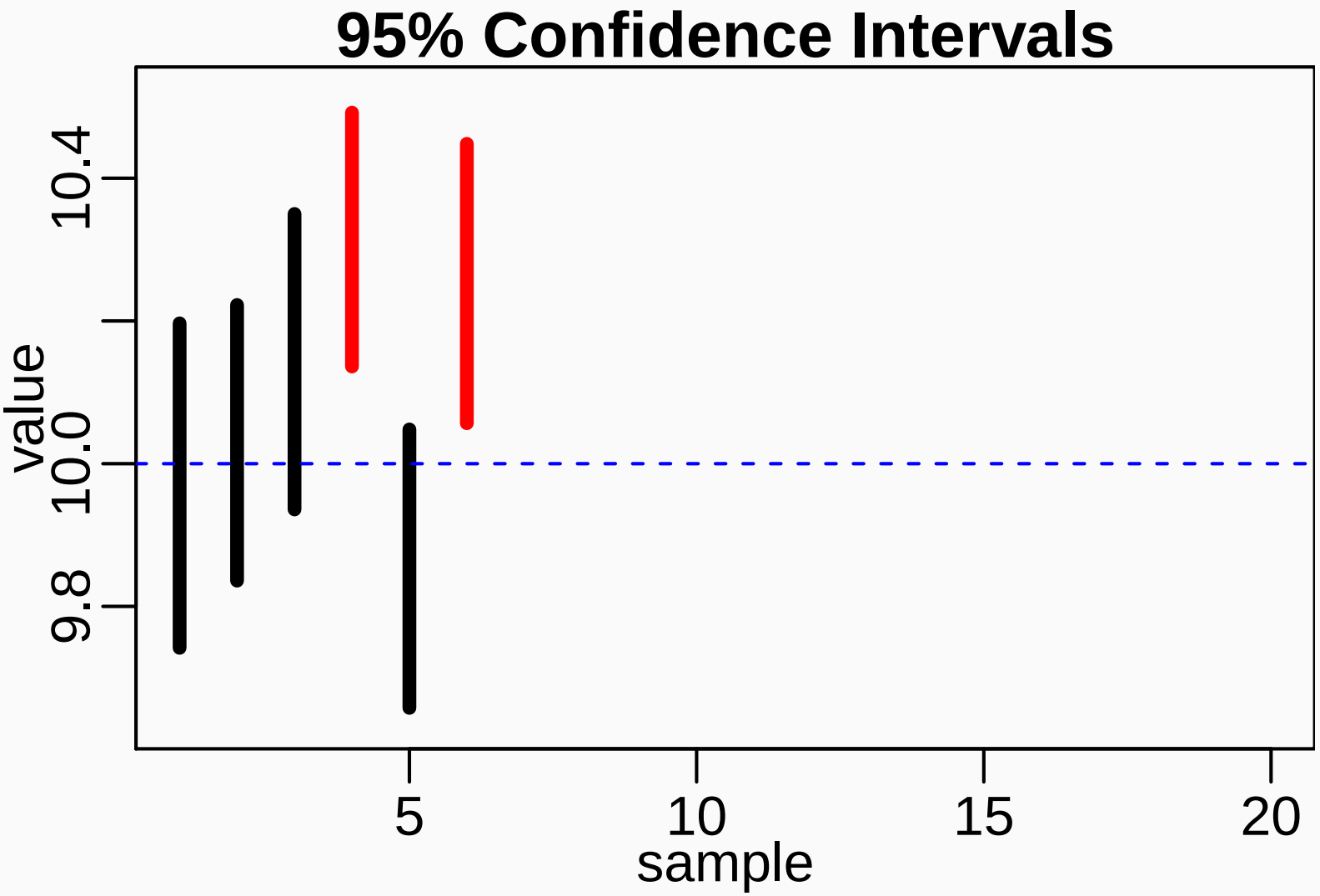
Covering True Mean iv



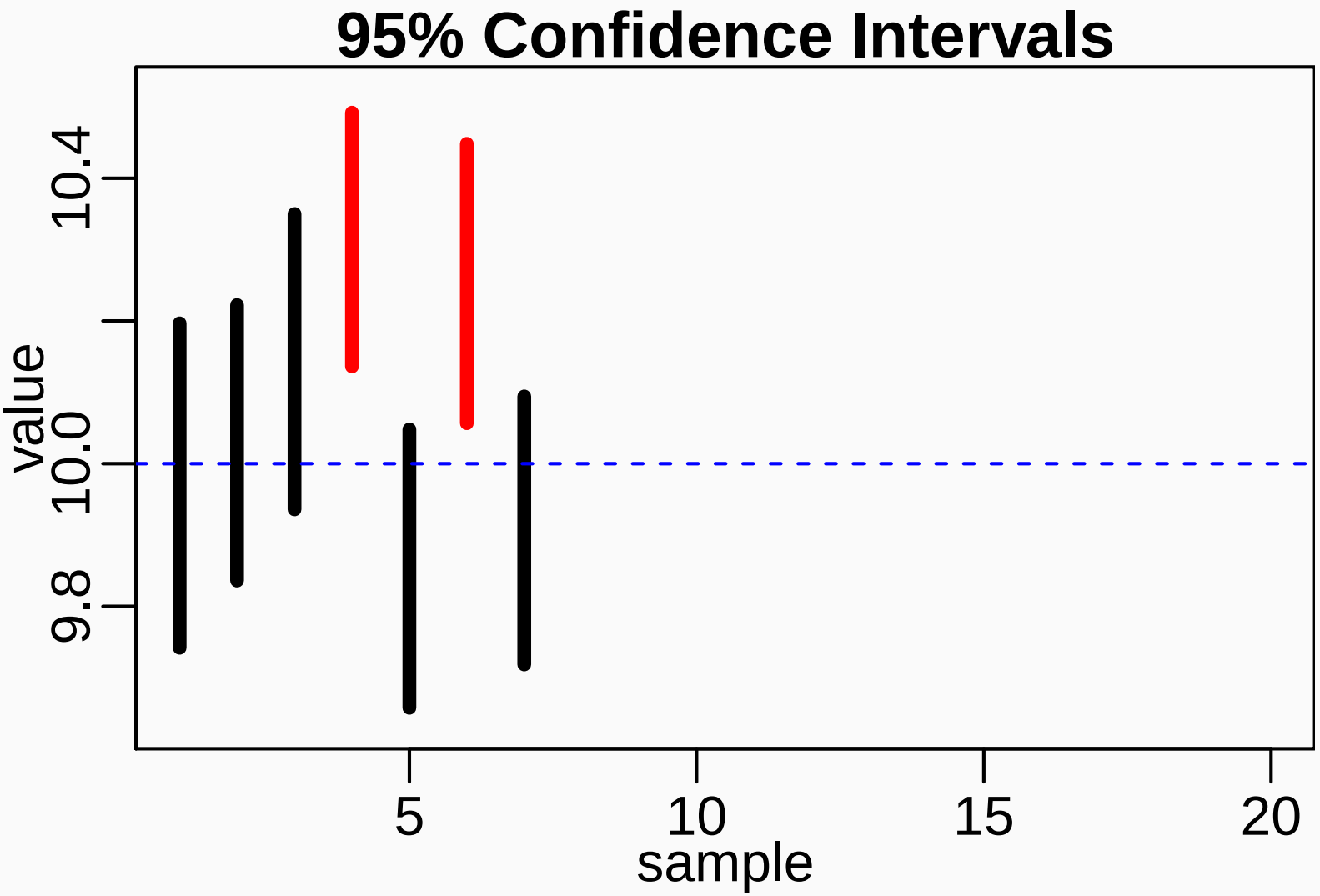
Covering True Mean v



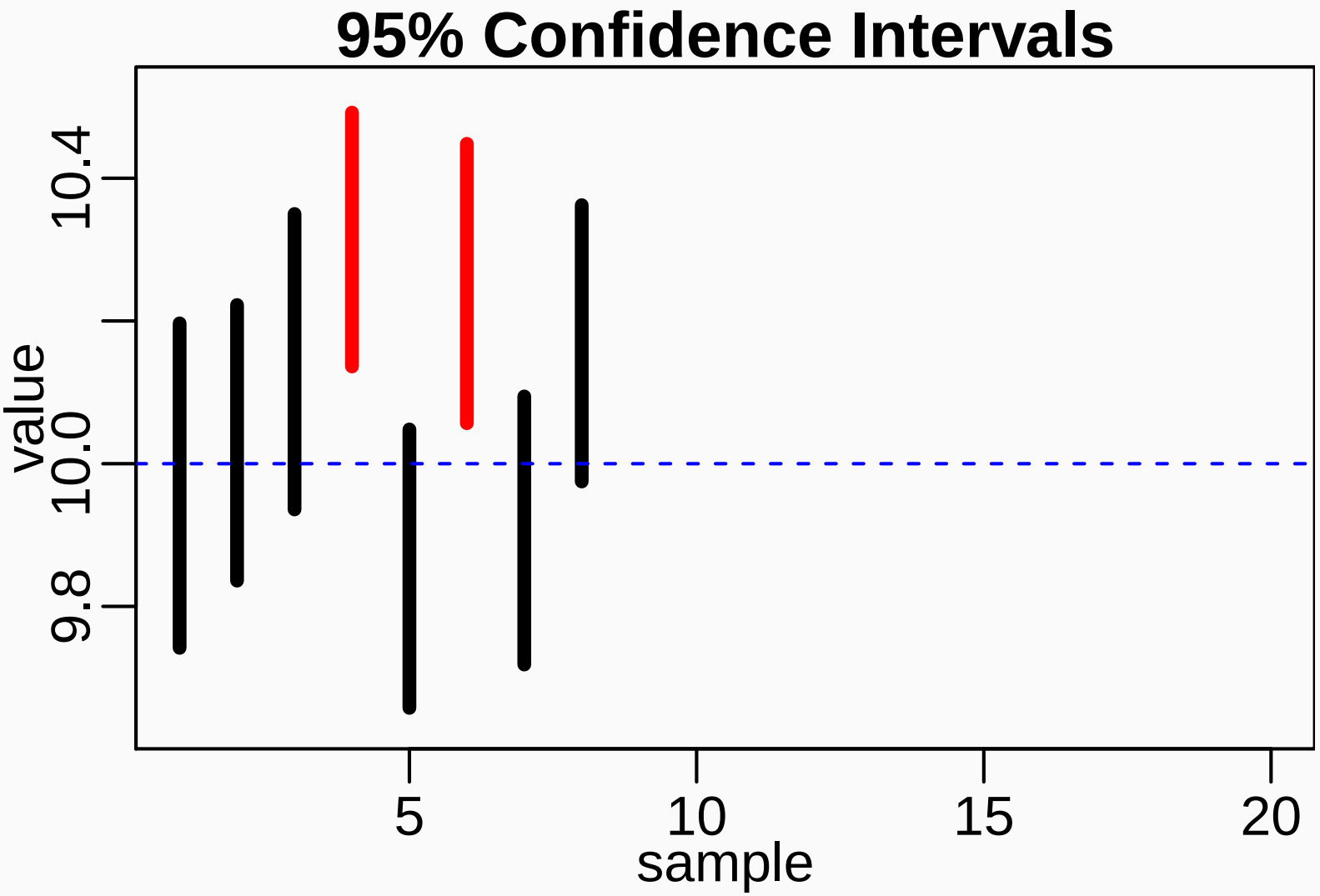
Covering True Mean vi



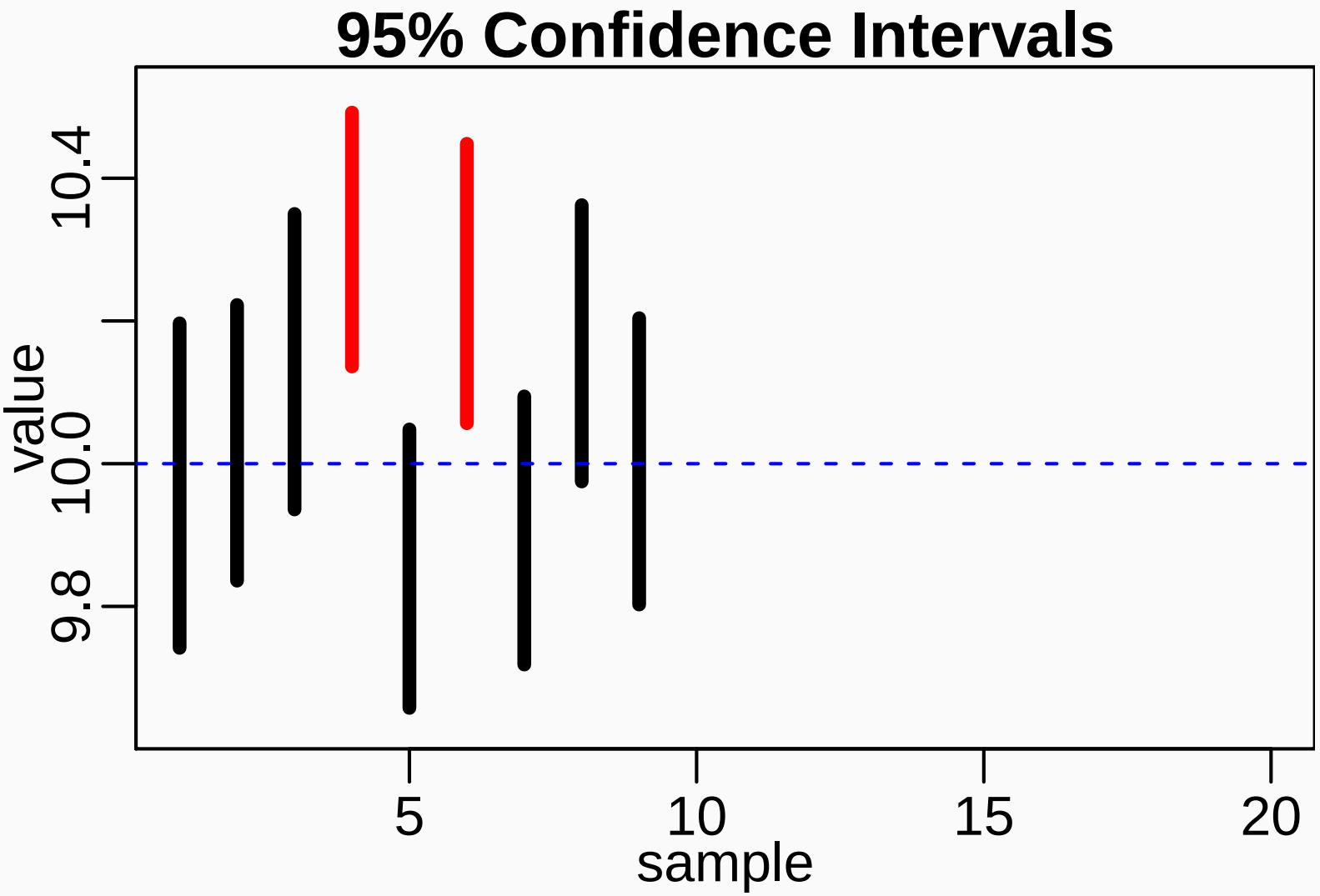
Covering True Mean vii



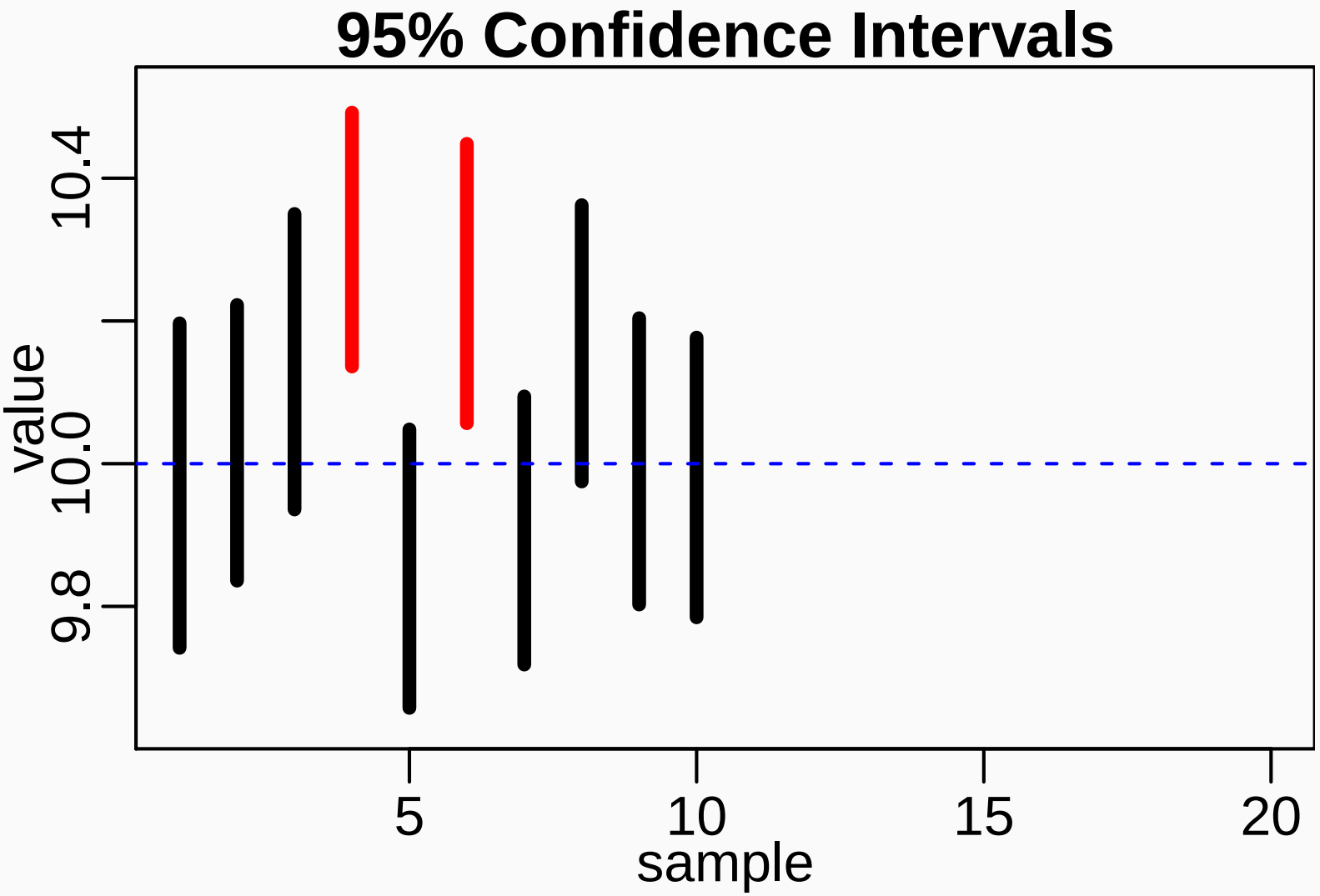
Covering True Mean viii



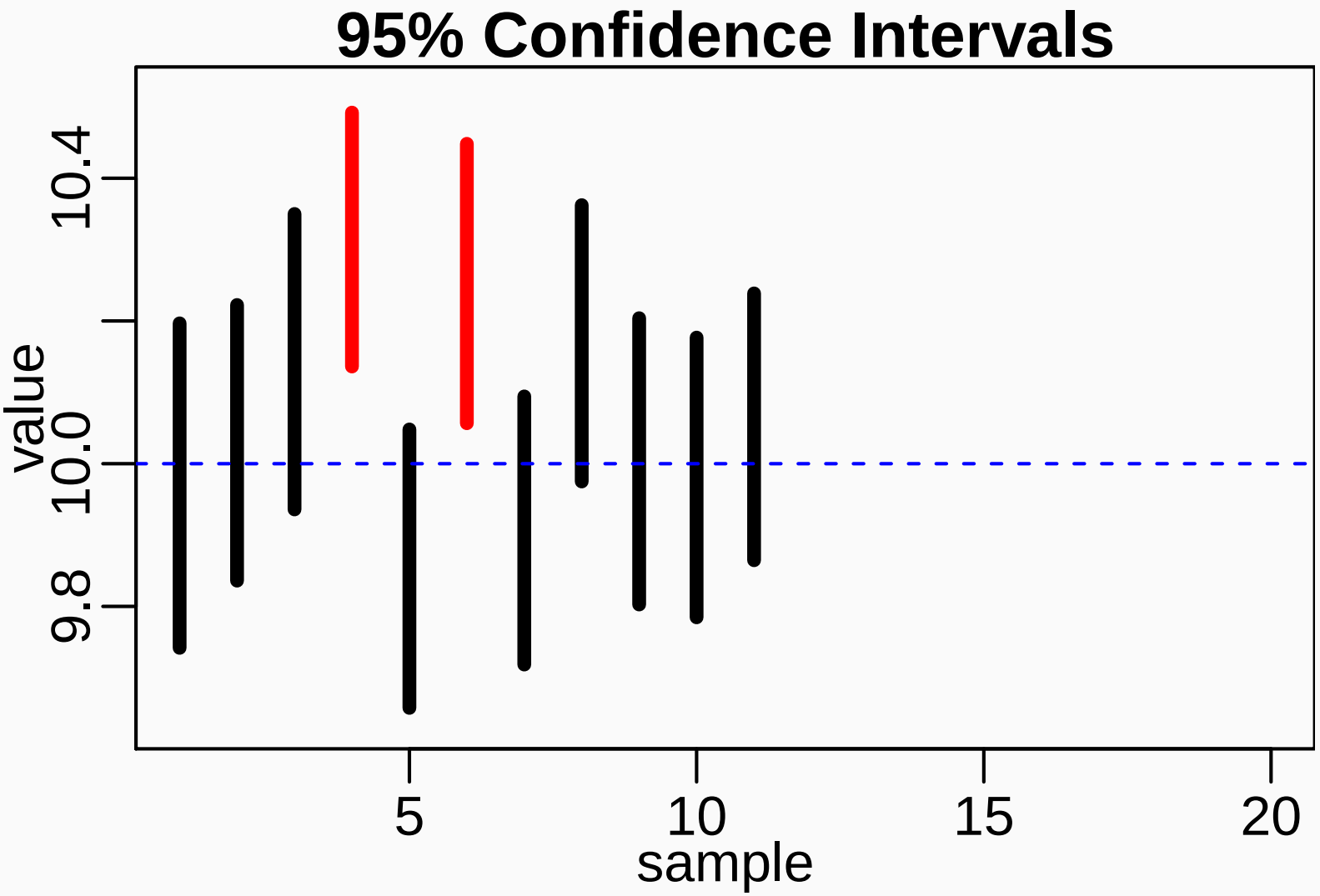
Covering True Mean ix



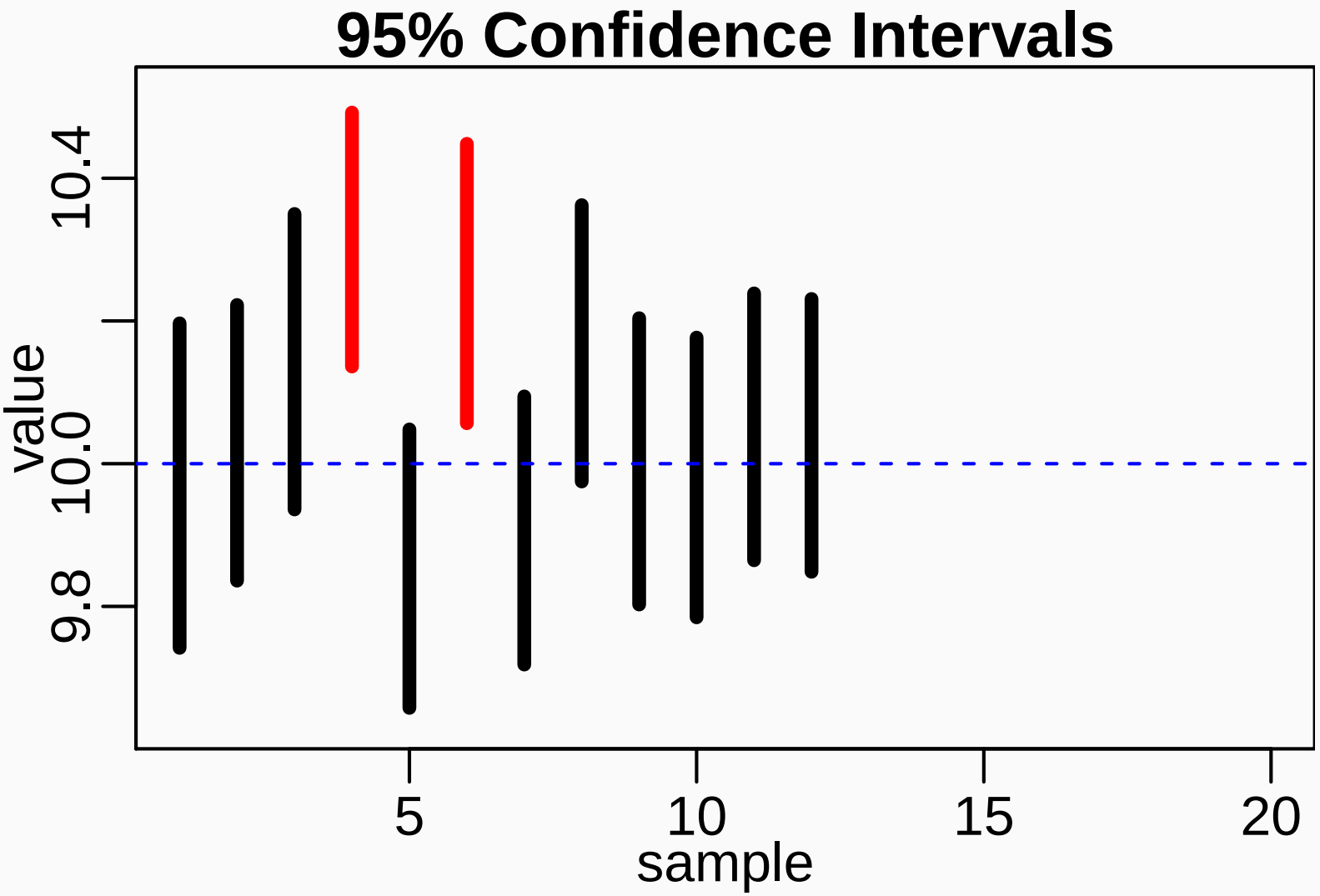
Covering True Mean $\bar{x}$



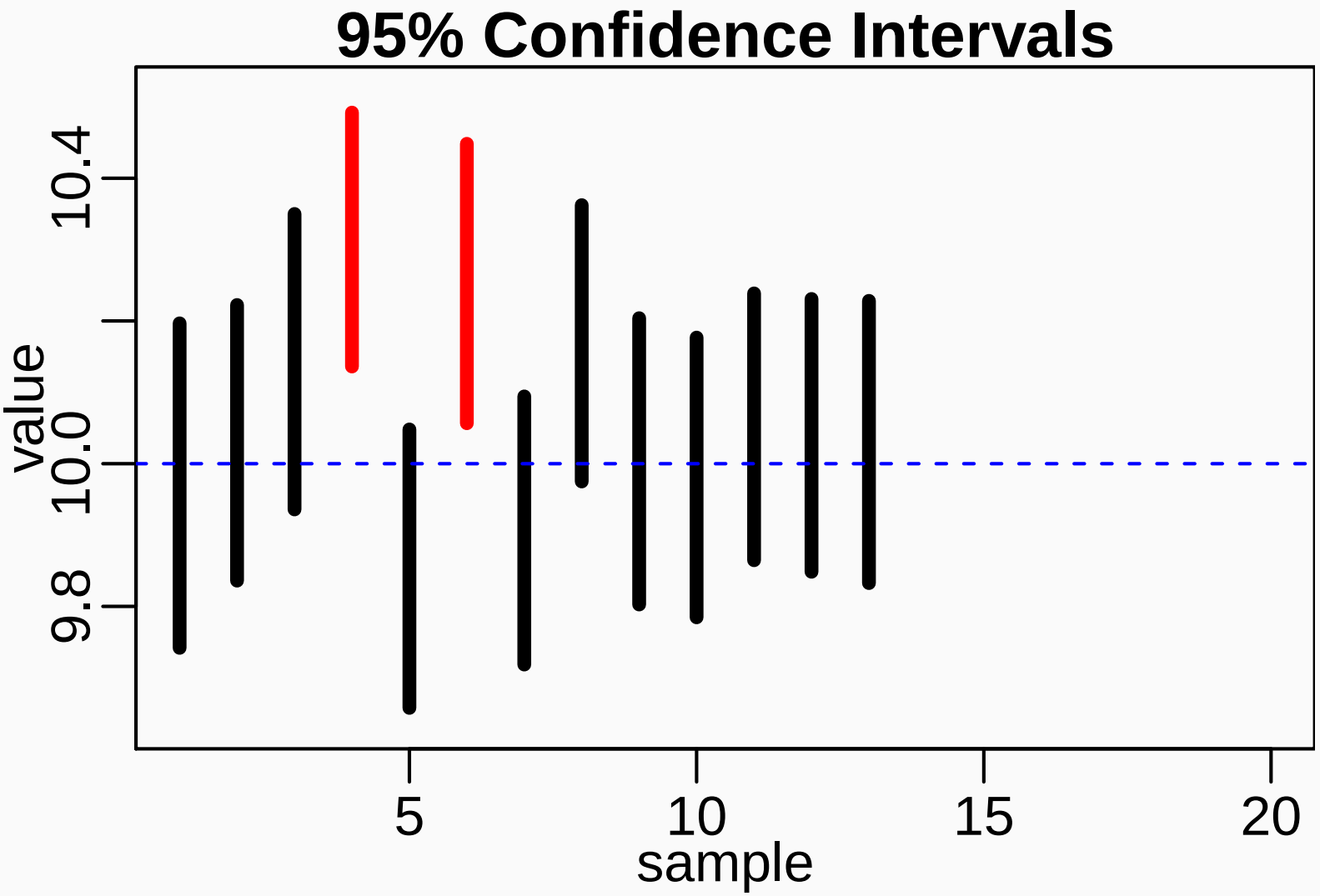
Covering True Mean xi



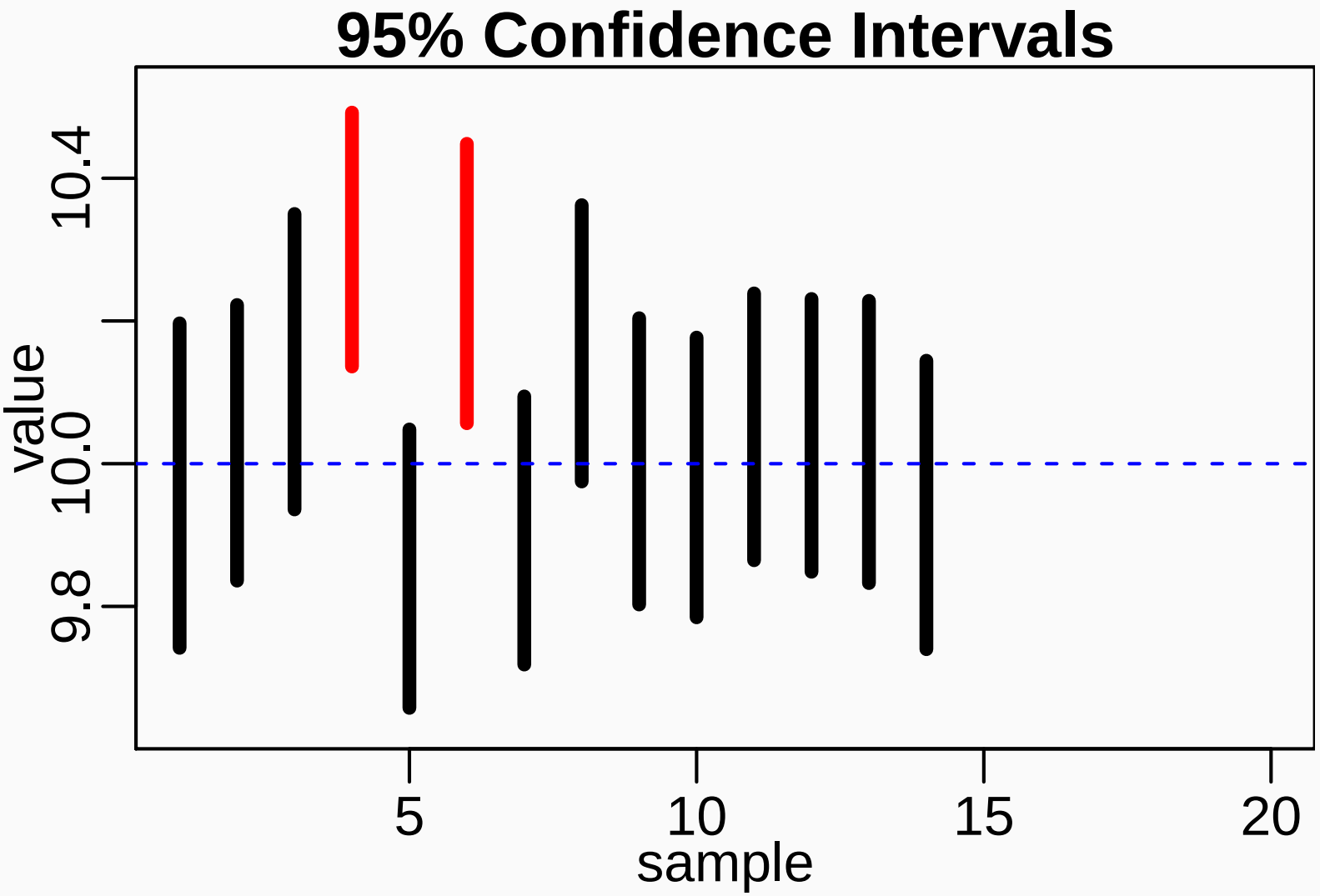
Covering True Mean xii



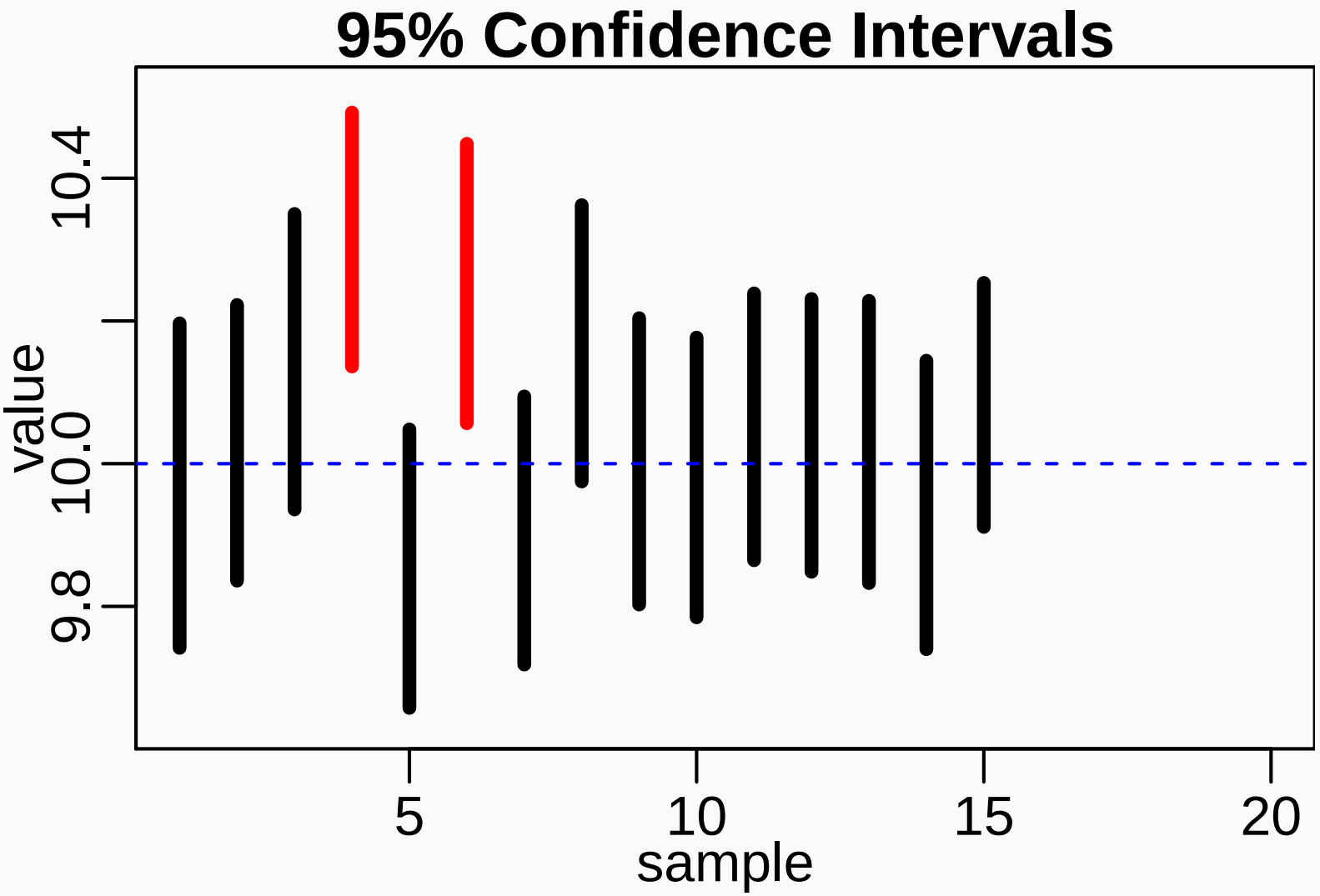
Covering True Mean xiii



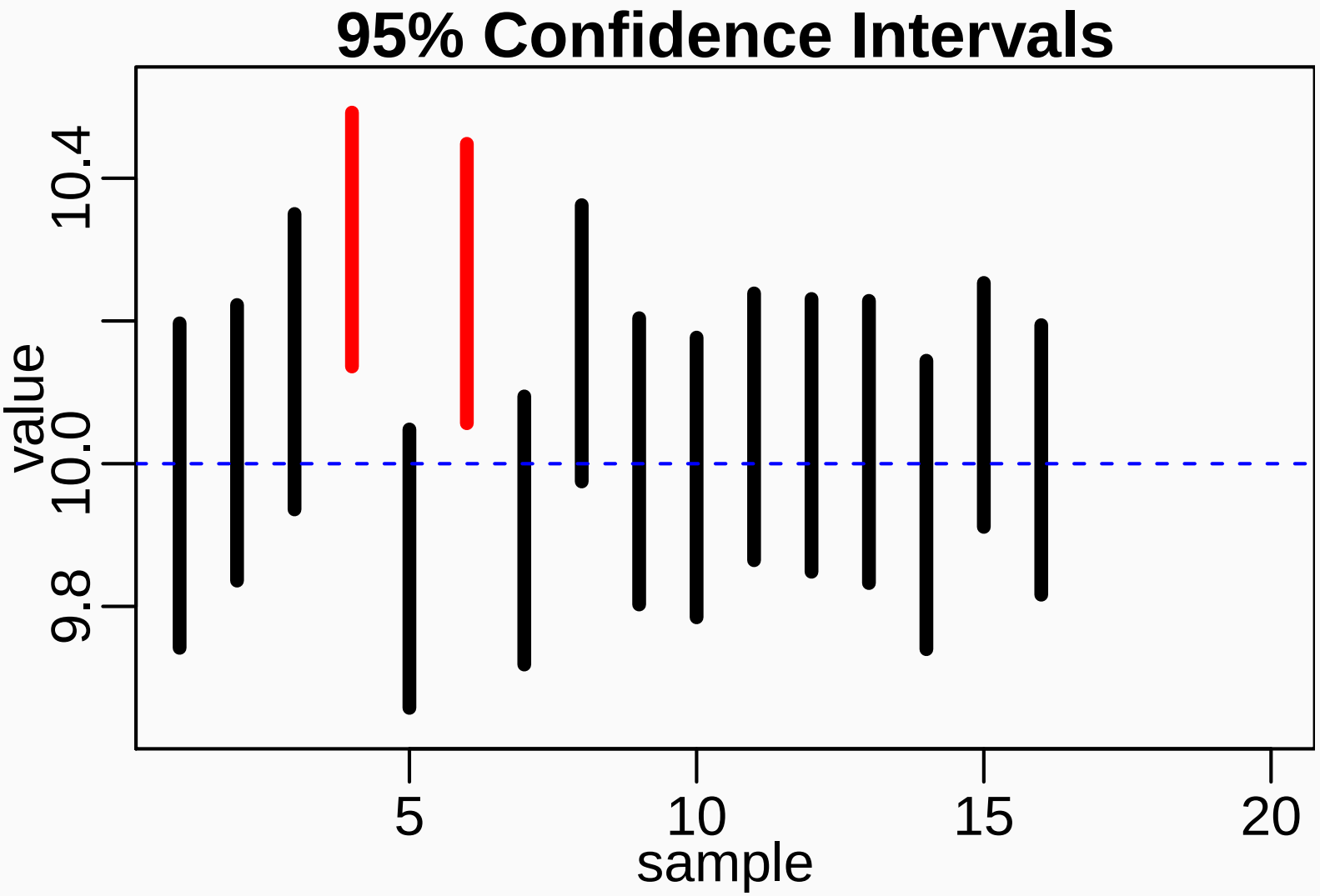
Covering True Mean xiv



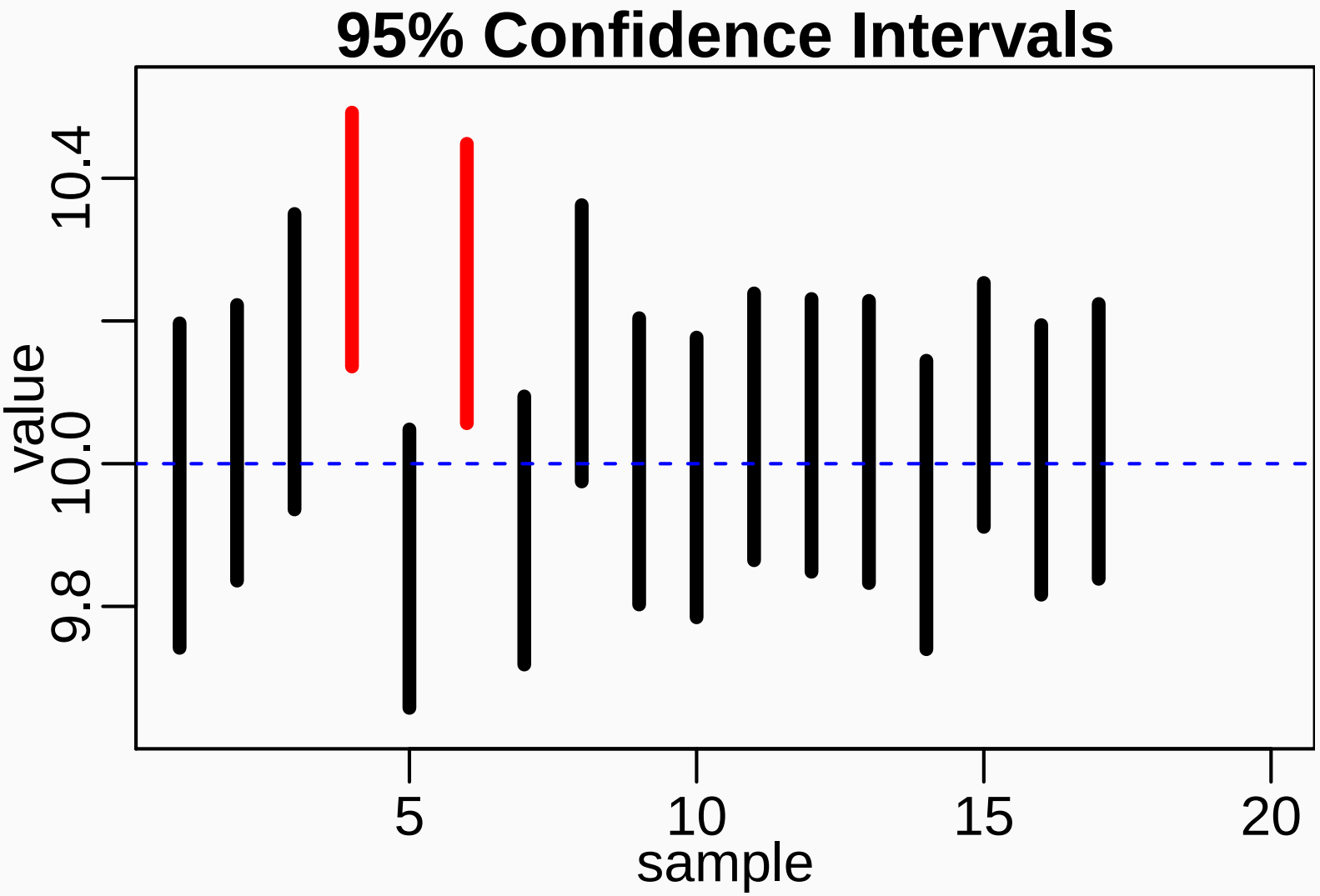
Covering True Mean xv



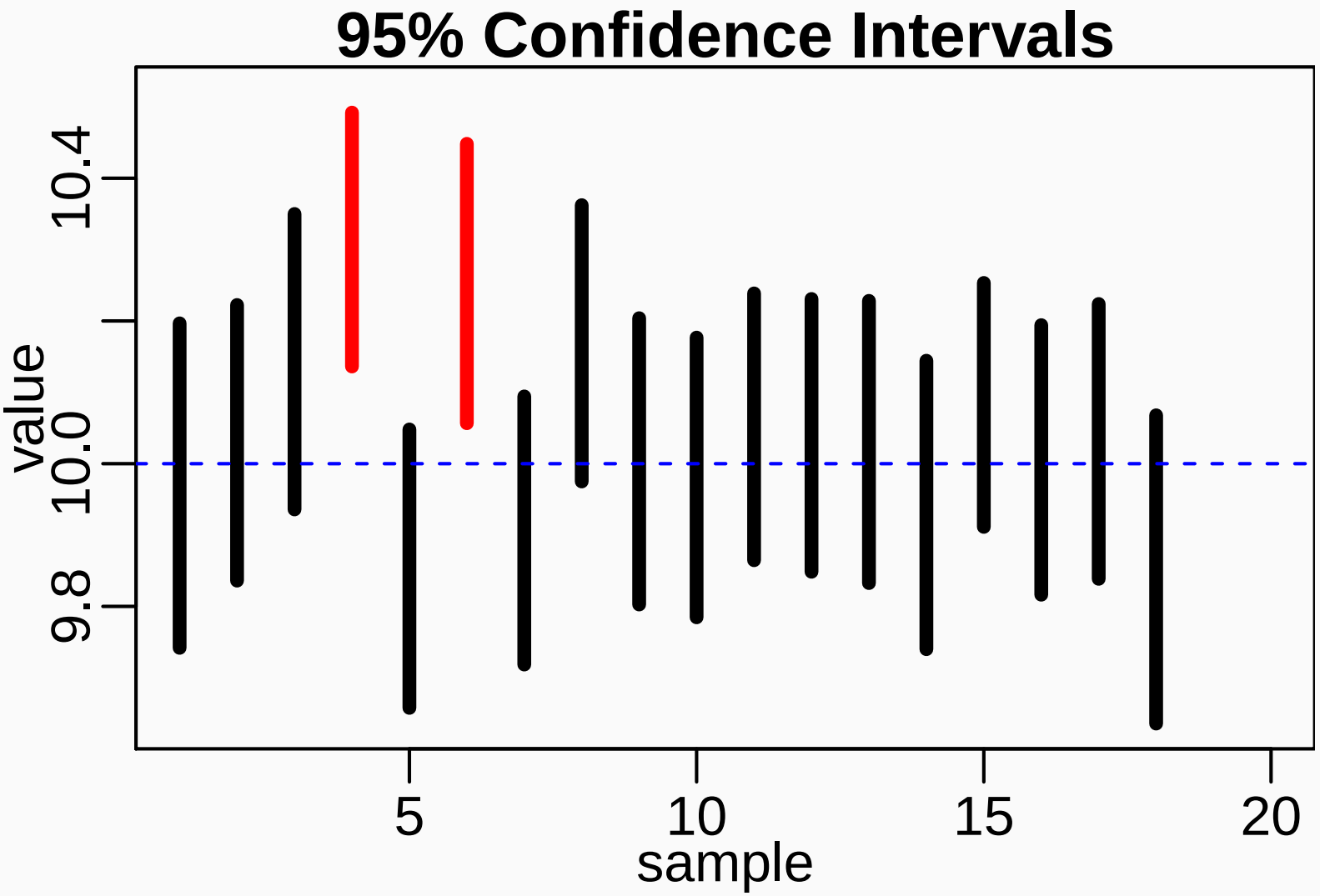
Covering True Mean xvi



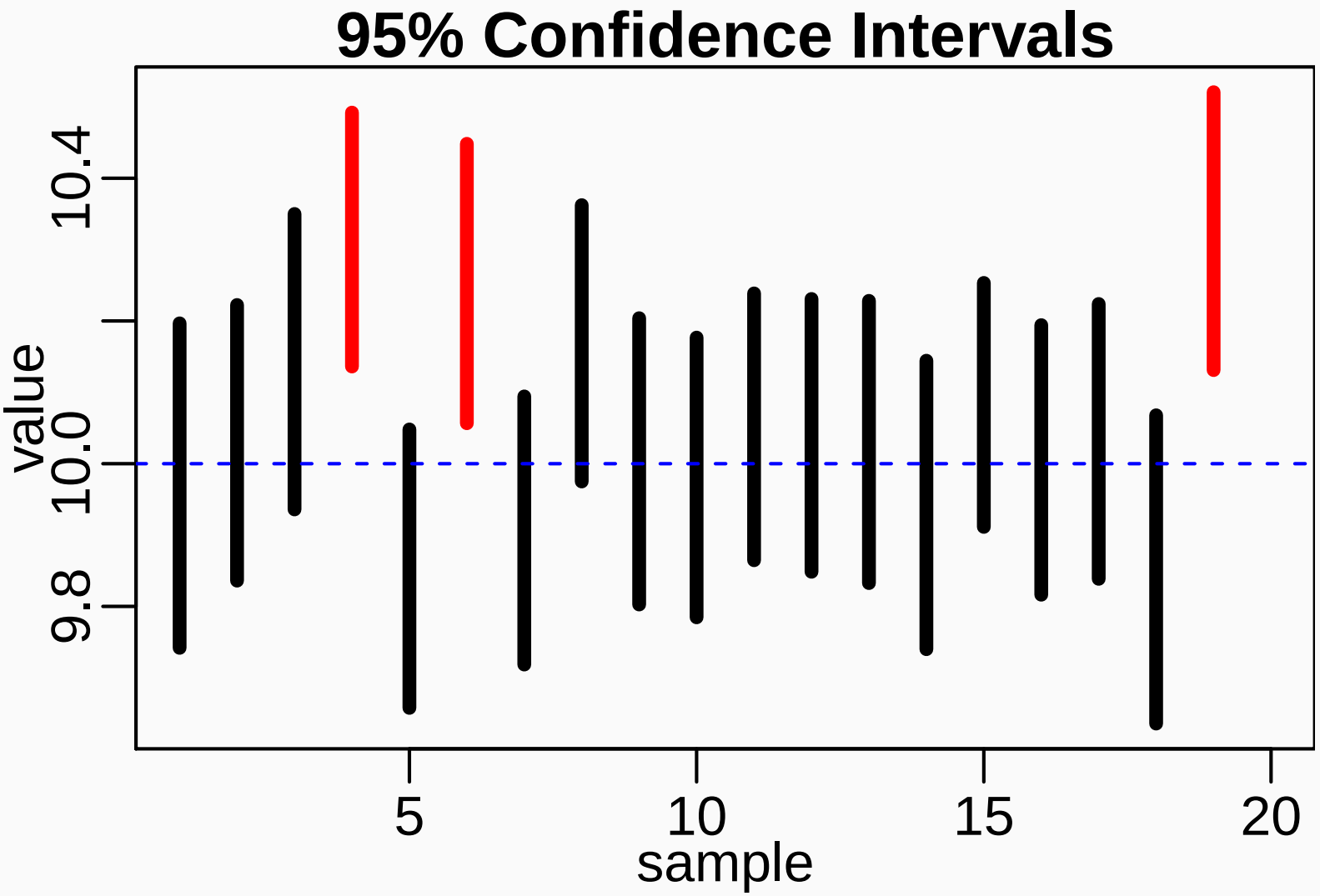
Covering True Mean xvii



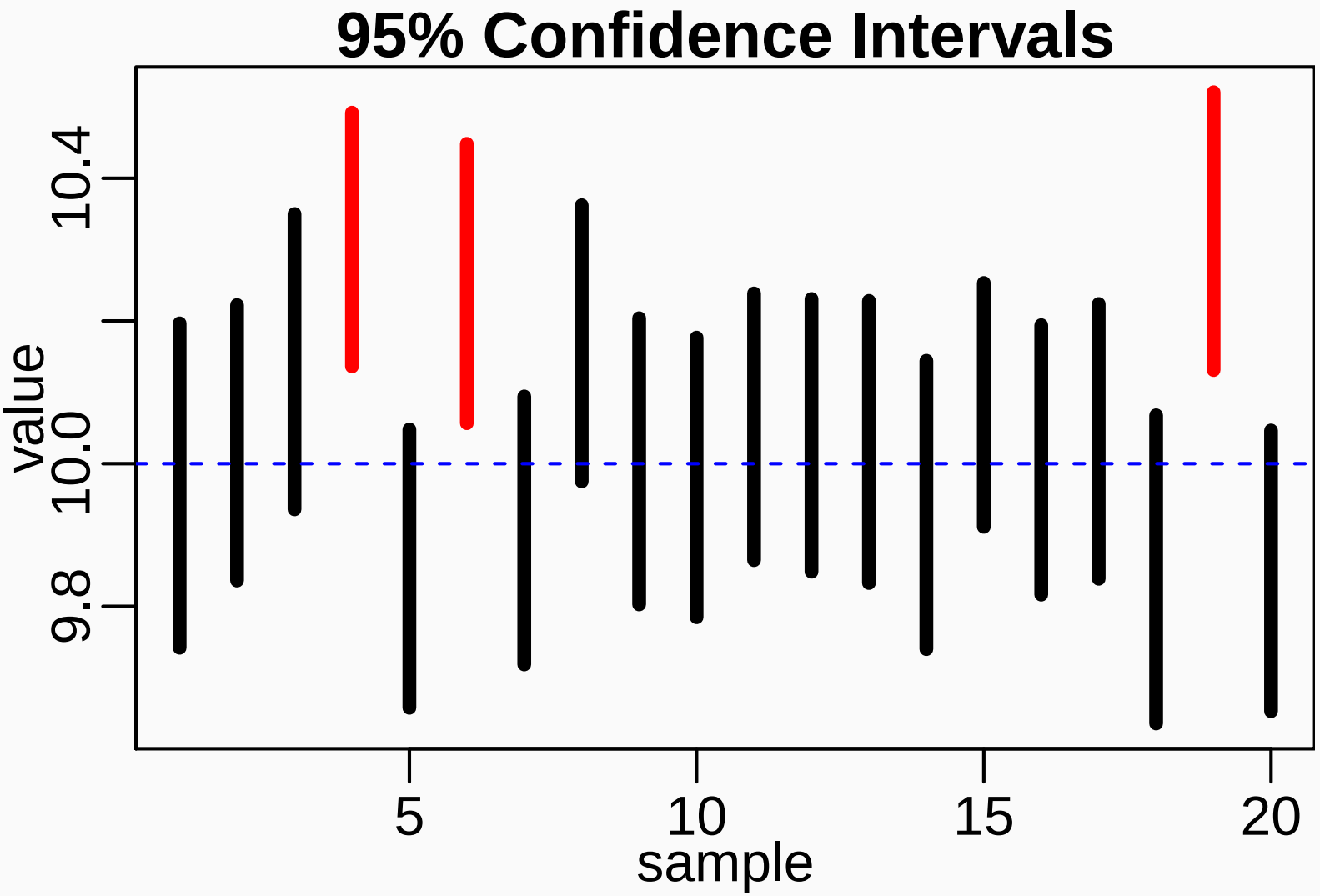
Covering True Mean xviii



Covering True Mean xix



Covering True Mean xx



Correct/Incorrect Descriptions of CI

Let l and u be the lower and upper bounds, respectively, of a 95% confidence interval.

What does "With 95% Confidence, μ is between (l, u)" mean? Which interpretations are correct/incorrect?

1. The probability of μ being between l and u is 95%.
2. Prior to sampling, the probability of μ being captured by our confidence interval is 95%.
3. 95% of the population's distribution is between l and u.
4. If we were to draw another sample, the new $\bar{X}$ would be between l and u with 95% probability.
5. 95% of new $\bar{X}$'s would lie between l and u.
6. We used a procedure that captures the true μ 95% of the time in repeated samples.