Report

Based on the analysis performed using bootstrap sampling and comparing data for blood pressure between the population and bootstrap samples, the following findings are reported:

Bootstrap Means Comparison:

The bootstrap mean distribution (blue histogram) shows the variation in sample mean BloodPressure values across 500 bootstrap samples.
The red dashed line indicates the population's mean blood pressure. It is used as a reference point for comparing bootstrap sample means.
The bootstrap means are often close to the population mean, showing that the bootstrap samples are representative of the population in terms of mean BloodPressure.

Bootstrap standard deviation comparison:

The bootstrap standard deviation distribution (green histogram) shows the variation in the sample standard deviation of BloodPressure across 500 bootstrap samples.
The red dashed line shows the population's standard deviation of blood pressure. It provides as a point of comparison for bootstrap sample standard deviations.
The distribution of bootstrap standard deviations often overlaps with the population standard deviation, showing that the variability in bootstrap samples is similar to that of the population.

Bootstrap percentage comparison:

The bootstrap 95th percentile distribution (purple histogram) shows the variability in the 95th percentile of BloodPressure over 500 bootstrap samples.
The red dashed line reflects the population's 95th percentile for BloodPressure. It is used to compare the percentiles of the bootstrap samples.
The distribution of bootstrap percentiles is often similar to the population 95th percentile, indicating that the range of BloodPressure values at the 95th percentile in the bootstrap samples is consistent with that of the population.

Overall, the data indicate that the bootstrap samples accurately capture the variability and properties of the BloodPressure variable in the population. The bootstrap sampling methodology is a reliable way to estimate population statistics and analyze the uncertainty associated with them.