

**APPLICATION OF ASYMPTOTIC DISTRIBUTION OF MANN-WHITNEY
STATISTIC TO DETERMINE THE DIFFERENCE BETWEEN THE
SYSTOLIC BLOOD PRESSURE OF MEN AND WOMEN OVER 45 YEARS OF
AGE**

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ABSTRACT

We have applied the derived asymptotic distribution of the Mann-Whitney statistic to the systolic blood pressure of different groups; men and women, to determine if there is a difference in their blood pressures. The analysis showed there is no difference between the blood pressures of men and women at 0.05 and 0.01 significance levels. The same result was obtained when Mann-Whitney statistic was applied to a smaller sample of the systolic blood pressures of men and women.

Keywords: Systolic blood pressure, Man-Whitney Statistic, Asymptotic distribution.