

LECTURE 14

IF THE MEAN OF THE TOTAL POPULATION IS UNKNOWN:

SO WE WOULD CHOOSE TWO SAMPLES FROM THE COMMUNITY AND COMPARE BETWEEN THE TWO ARITHMETIC MEANS OF THESE TWO SAMPLES, AND
.HERE WE HAVE T-TEST FOR COMPARISON BETWEEN TWO SAMPLE MEANS

Here we should calculate only one measure of dispersion estimated from the two samples and it is called pooled variance denoted (S^2_p).

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S^2_p}{n_1} + \frac{S^2_p}{n_2}}}$$

$$S^2_p = \frac{S^2_1(n_1 - 1) + S^2_2(n_2 - 1)}{n_1 + n_2 - 2}$$

S^2 = variance
($N-1$) = degree of freedom

THE HIGH
YIELD

الطب والجراحة
لجنة

MEDICINE