OBJECTIVE: Our study aims to determine if Metformin should be considered as first line treatment in infertility related to coexistence of PCOS, after considering that clomiphene citrate has been first choice in our protocols.

MATERIALS AND METHODS: This study included 71 patients diagnosed with PCOS, allocated randomly to clomiphene + metformin or clomiphene only, who also followed a 60 days diet regime.

RESULTS: Patients were 23-37 yrs old, with BMI calculated approximately 29.96 kg/m2. Both groups lost 6.1% of the body weight evaluated at the first visit (p=0.04). Patients reported infertility for a period of 2.61 yrs. Ovulation rate in Metformin+ Clomiphene group resulted 53.18% (p=0.02) vs 32.33% in Clomiphene citrate only group (p=0.07). 34% achieved a full term pregnancy on the Metformine+ Clomiphene group vs 13% in the Clomiphene citrate group.

CONCLUSION: Metformin is found to be an effective addition to clomiphene citrate in improving infertility matters in women with PCOS and achieving a full-term pregnancy. Therefore we advice it's use in secondary hormonal dysfunction due to PCOS coexistence.