**Statistics plane**

**Sample size**

The required sample size calculated using data from previous studies [15,16], and G Power software version 3.17 for sample size calculation (Heinrich Heine Universität; Düsseldorf; Germany), setting α -error probability at 0.05, power (1- β error probability) at 0.95%, and effective sample size (w) at 0.3. The effective sample ≥ 110 women needed to produce a statistically acceptable figure.

**Statistical analysis**

Collected data will statistically analyzed using Statistical Package for Social Sciences (SPSS); computer software version 20 (Chicago, IL, USA). Numerical variables will be presented as mean, and standard deviation (±SD), while categorical variables will be presented as number (n) and percentage (%). Student (t) test will used to compare the pre-treatment hemoglobin, ferritin, reticulocytes, MCV, and MCH by the 3 months` post-treatment values to evaluate the efficacy of the Optifer® in treatment of iron deficiency anemia during pregnancy. The significance level set as *P*<0.05.