**Original article:**

**Lung function tests in different trimesters of pregnancy**
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**ABSTRACT:**

**Introduction:** Pregnancy is associated with physiological changes in the control of breathing, in lung volumes, in the mechanics of respiration and in acid base balance. The static lung volume changes that occur during pregnancy rapidly normalize after delivery with decompression of the diaphragm and lungs. Our objective was to study the Lung Volume changes which occur in different trimesters of pregnancy using spirometry.

**Materials & Methods:** The study consists of recording the Pulmonary Function Tests of 4 groups of female subjects including pregnant women of various phases of gestational period i.e., 12 weeks (I trimester), 24 weeks (II trimester ) , 36 weeks ( III trimester) and control group of non pregnant women. The different static lung function parameters measured in this study were Expiratory Reserve Volume (ERV), Tidal Volume (TV), Vital Capacity (VC), Residual Volume (RV) & Minute Volume (MV).

**Results:** We observed a statistically significant decrease in Expiratory Reserve Volume, Residual Volume and a significant increase in Tidal Volume, Vital Capacity & Minute Volume in different trimesters’ of pregnancy.

**Conclusion:** From the results of our study, it can be concluded that significant changes in pulmonary physiology occur during pregnancy which are necessary to meet the increased metabolic demands of the mother and fetus.

**Keywords:** ExpiratoryReserve Volume , Tidal Volume , Vital Capacity