

Hypothyroidism In Pregnancy ; An Overlooked Health Concern

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Introduction

- ❖ Thyroid disorders are the second most common endocrinological disorders in pregnancy after diabetes.
- ❖ If pregnancy is compounded by hypothyroidism, the possibility of adverse outcomes on the mother and fetus may be colossal (1,2).
- ❖ In addition, lack of maternal awareness regarding hypothyroidism and its effects, impedes their compliance with the treatment and follow up.
- ❖ Untreated hypothyroidism may be associated with miscarriage, preterm birth, birth weight disorders, IUFD, preeclampsia, post-partum hemorrhage, abruption placenta and anemia.
- ❖ In Qatar, with diverse nationalities of patient, there is a need to look into the prevalence of hypothyroidism and complications associated in pregnancy.
- ❖ This will be beneficial in reducing maternal and fetal morbidity by addressing them as high risk pregnancy and offering these patients early booking in the clinic.
- ❖ So, a retrospective trial was conducted to assess the fetal outcomes in hypothyroid pregnant women



Objective

- ✓ To study the prevalence of hypothyroidism in pregnancy in antenatal patients delivered at Al Wakra Hospital (HMC).
- ✓ To compare the maternal and neonatal outcomes in antenatal patients with and without hypothyroidism.
- ✓ To assess the post natal follow up compliance

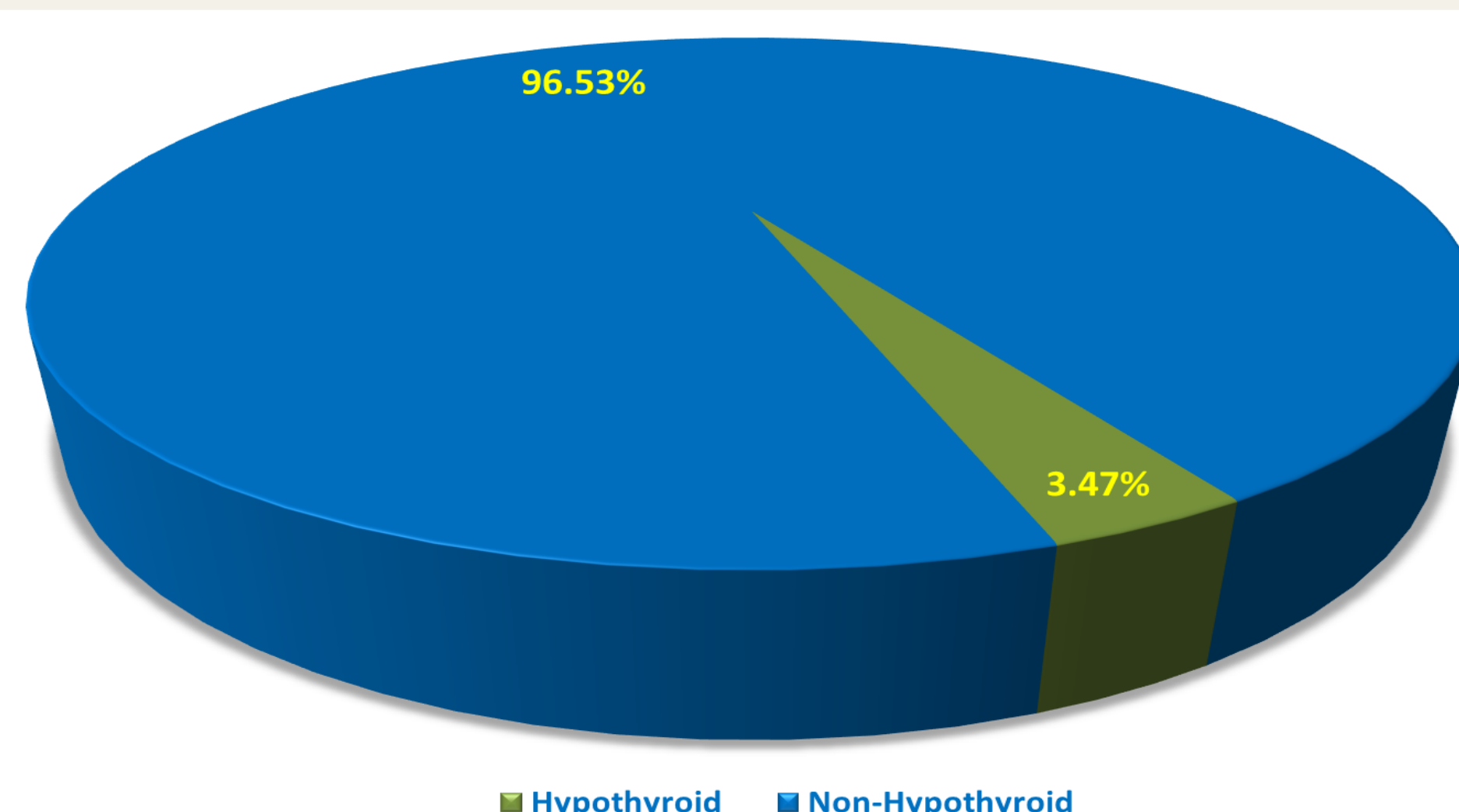


Methods

- The study was conducted as a retrospective chart review at Al Wakra Hospital Qatar.
- Inpatient records of all women who had delivered from Jan 2017 to May 2018 were reviewed. Study was approved by ABHATH in 2019
- 400 patients were by Simple random sampling.
- The study population was divided in two groups; Group A- Antenatal patients with hypothyroidism and Group B- Antenatal patients without hypothyroidism.
- Comparisons of quantitative data between two groups will be performed applying unpaired t test.
- Associations between two or more qualitative variables will be assessed using chi-square (χ^2) test.
- All P values presented will be two-tailed, and P values <0.05 was considered as statistically significant.

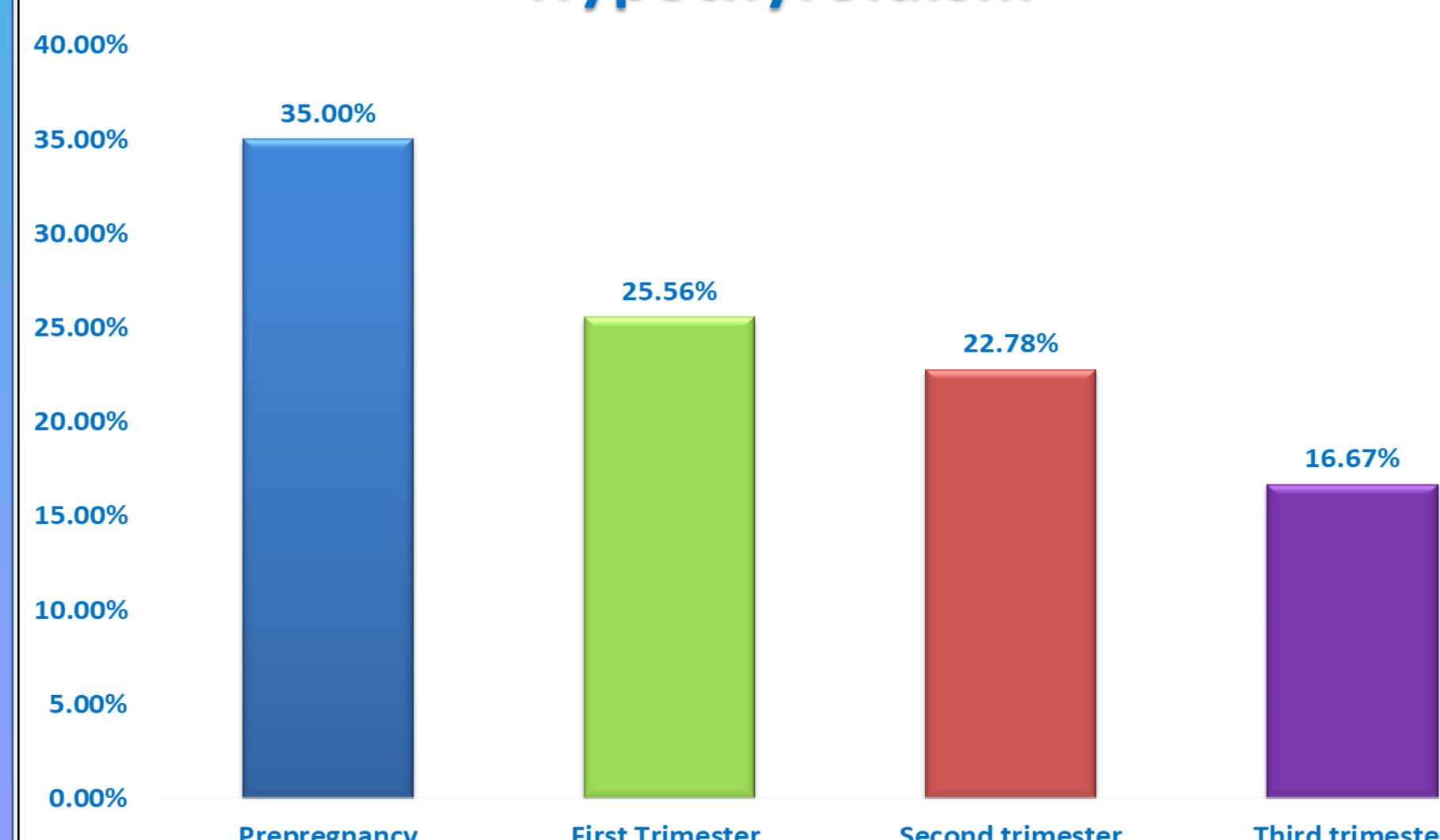
Results

Prevalence of Hypothyroidism



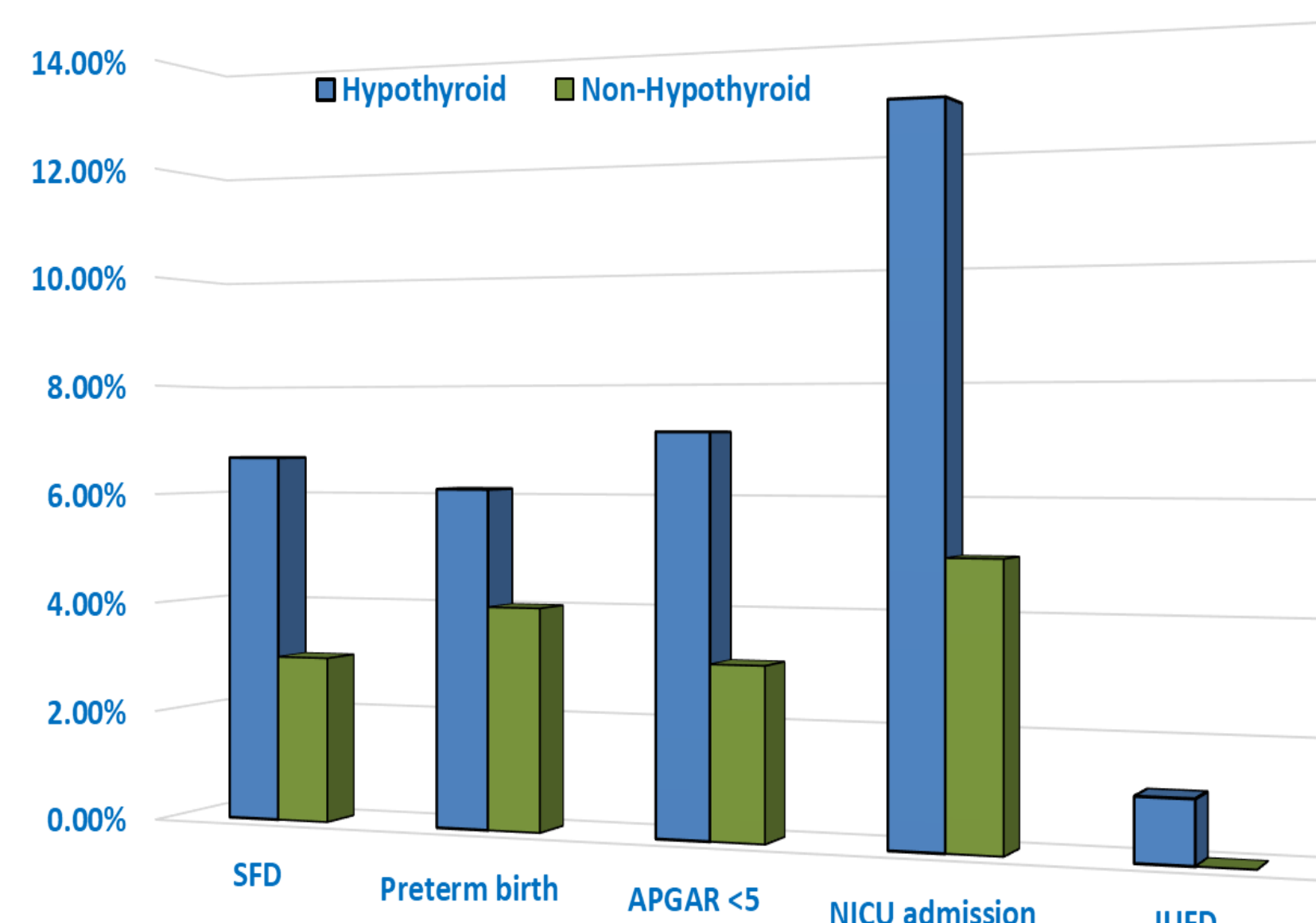
Timing of diagnosis

Timing of Diagnosis of Hypothyroidism



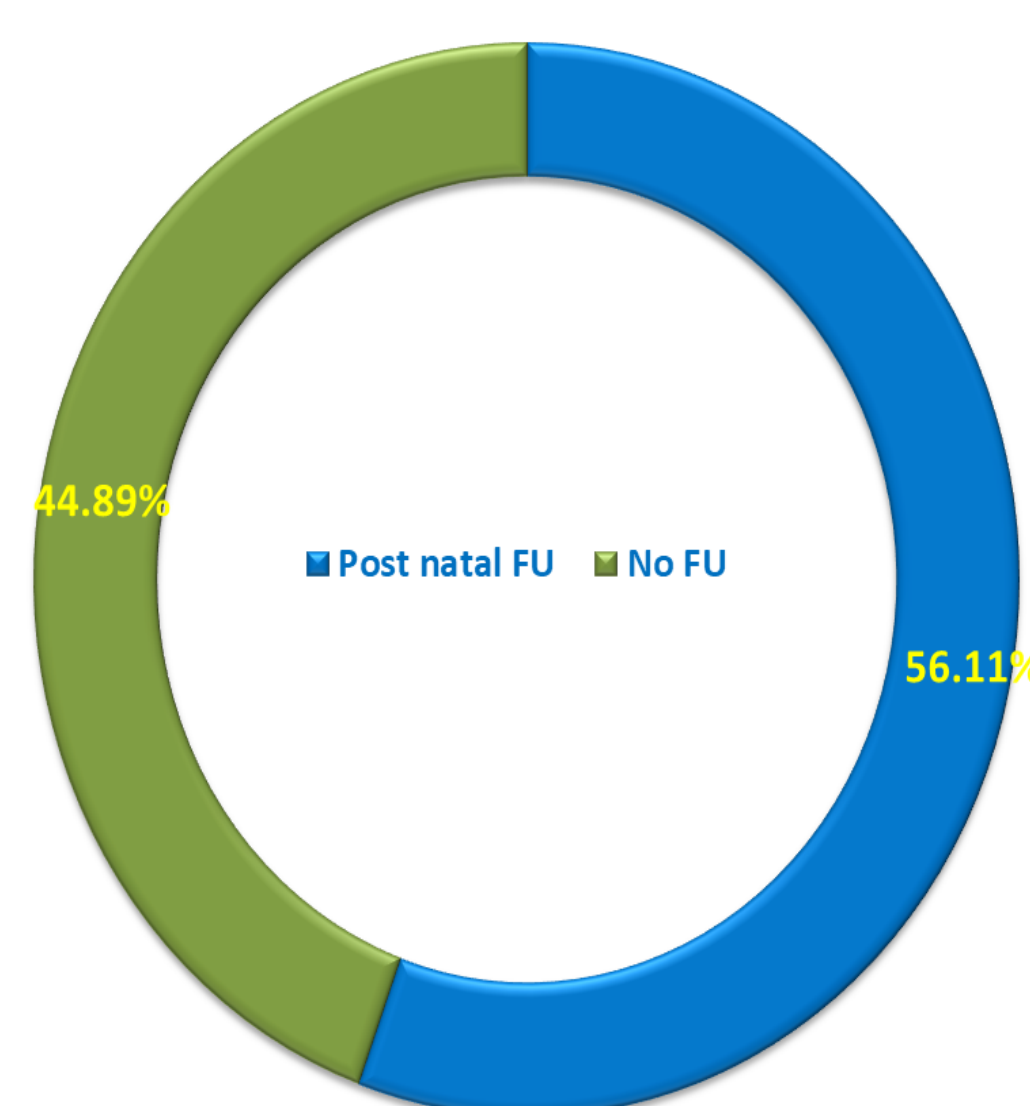
Neonatal Outcomes

Neonatal Outcomes in hypothyroid and Non hypothyroid women



Post natal Follow up after discharge

Post natal Follow-up after Discharge



Limitations of the study

- ✓ Pre-conception cases diagnosed in pregnancy might be missed.
- ✓ Women with subclinical hypothyroidism with no thyroid function evaluation would have been missed

Results

- The prevalence of hypothyroidism was 3.47%. 35% of women had hypothyroidism prior to pregnancy.
- 25.56%, 22.78 % and 16.67 % women were diagnosed in first, second and third trimester, respectively .
- The prevalence of preterm birth was 6.11% and 4% (OR 1.56, 95% CI: 0.613-3.974) in group A and B, respectively.
- Small for dates babies in groups A and B were 6.67% and 3.00% (OR 2.309, 95% CI: 0.848-6.287).
- Low APGAR score was noted in 7.14% in group A and 3.09% (OR 2.3095, 95% CI: 0.848-6.287) in group B. 12.78% and 5% (OR 2.783, 95% CI: 1.286-6.023) babies had NICU admissions in group A and B, respectively .
- 1.11% women while none in the control group had IUFD. Only 56.11% women came for post-natal follow up despite being instructed.

Recommendations

Hypothyroidism in pregnancy have adverse effects on fetal outcome emphasizing the importance of routine antenatal thyroid screening as well as the routine antenatal follow up for the proper management of the pregnancy and safe delivery.

Our Aim: Healthy mother and baby



References

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2. Männistö T, Väärasmäki M, Pouta A, Hartikainen A, Ruokonen A, Surcel H et al. Perinatal Outcome of Children Born to Mothers with Thyroid Dysfunction or Antibodies: A Prospective Population-Based Cohort Study. *The Journal of Clinical Endocrinology & Metabolism*. 2009;94(3):772-779.

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