Association of interpregnancy interval and Primary Post Partum Hemorrhage

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Background

- Short IPI is important risk factor for both maternal and fetal complication such as preterm birth, preterm premature rupture of membranes (PPROM), anemia, third-trimester bleeding, puerperal endometritis and even early neonatal death .Post-partum hemorrhage (PPH) remained a leading cause of maternal mortality, accounting for nearly one quarter of all pregnancy related deaths, early neonatal death . Post-partum hemorrhage (PPH) is not well studied as a reason of short interpregnancy interval. To decrease PPH related maternal morbidity and mortality in our hospital our target remains to identify risk factors which are crucial to guide the interventions. Therefore, our study mainly aimed to assess the effect of interpregnancy interval on primary Postpartum hemorrhage.

Methods

- Retrospective case control study was conducted among 1477 pregnant women (541 cases and 936 controls), parous women delivering singleton infants and whose previous pregnancy ended in live birth were included in the study. Cases were women with short pregnancy interval <18 months and those with>18 months interpregnancy interval were taken as controls.
- Occurrence Of PPH in two groups was compared.
- The requested data was extracted from the patient's electronic medical records.

Results

- Logistic regression analysis was performed to estimate odds ratios (ORs) and to examine the predictive effect of each factor on risk for condition. Odds ratios and their 95% confidence intervals (95% CI) for associated factors was estimated. All statistical assessments were two-sided and considered to be significant when p-value < 0.05.
- The incidence of primary postpartum hemorrhage was 2.9%, 95%CI: (2.8%, 4%). More than half (56%) of primary postpartum hemorrhage was attributed to short inter-pregnancy interval <18 months (AF=56.1%, 95%CI: 6.5%, 79.5%). This could have been prevented if inter-pregnancy interval was increased to 24-36 months.

Interpregnancy interval	> 24 months (541)	< 24 months (936)
Nationality		
Arabic	382	554
Non-Arabic	159	382
Parity		
2	282	407
3	144	274
>3	115	255
Delivery mode		
Vaginal delivery	306	393
Elective Cesarean section	154	392
Emergency cesarean section	81	151
Previous CS		
YES	196	399
NO	345	537
Past contraception		
Not using of contraception	243	279
Using of contraception	298	657
Kind of pregnancy		
Planned	189	666
unplanned	352	270

Conclusions

- In this study interpregnancy interval was significantly related with postpartum hemorrhage. Above study drive us to the conclusion that more than half of primary postpartum hemorrhage can be prevented by spacing pregnancy for at least 18 months .Increasing awareness of family planning and offering various options of birth control among our reproductive age group can have a great impact in reducing PPH and its associated morbidity and mortality.

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