## Short Interpregnancy Interval and Its Consequences: A call for utilization of

## Postpartum contraception.

Felix Chikaike Clement Wekere<sup>1,2\*</sup>, Gift A. Clement-Wekere<sup>3</sup>, Kenneth E. OKagua<sup>4</sup>, Ifeoma Nwadiuto<sup>2</sup>, Priscilla Ogbonda<sup>2</sup>

<sup>1</sup>Department of Population & Reproductive Health, School of Public Health, University of Port Harcourt, Rivers State, Nigeria.

<sup>2</sup> Department of Community Medicine, Rivers State University Teaching Hospital, Rivers State, Nigeria.

<sup>3</sup> Department of Paediatrics and Child Health, University of Port Harcourt, Rivers State Nigeria

<sup>4</sup>Department of Obstetrics and Gynaecology, Rivers State University Teaching Hospital, Rivers State, Nigeria.

\*Correspondence: Dr Felix C.C. Wekere Email: <u>fccwekere@yahoo.com</u> Phone: +234 8035492898

**Background:** Short interpregnancy intervals (SIPI)are associated with adverse foetal, perinatal, maternal and reproductive health outcomes.[1-3] It is one of the major consequences of high unmet need for family planning and of public health importance. Interpregnancy interval describes the duration between birth and the beginning of the next pregnancy. World Health Organization has recommended a minimum interpregnancy interval of 24 months as the normal IPI. However, due to the non-utilization of available methods of postpartum contraception, some women end up getting pregnant within a few months after delivery. Resulting in adverse pregnancy outcomes. For quite some time now, the importance of birth spacing has been a focus for perinatal researchers and policy-makers.[4] more so interpregnancy interval has received more attention in demography and public health as a result of its effects on fertility and maternal and child health. Globally, the prevalence of Short interpregnancy interval of 24.6% has been reported. A prevalence of SIPI as high as 65.9 has been reported in Nigeria. [3] In sub-Saharan African countries many adverse foeto-maternal outcomes have been attributed to short interpregnancy intervals. [5, 6]

We studied all the cases of SIPI among pregnant women who had caesarean section at the Rivers State University Teaching Hospital, Port Harcourt Nigeria to determine the prevalence, and perinatal and maternal outcomes to buttress the consequences of the unmet need for postpartum contraception.

**Methods:** A descriptive cross-sectional study design in which 78 cases of short interpregnancy intervals among women undergoing caesarean section (CS) were reviewed over 6 years. Data

were analyzed using Statistical Product and Service Solutions (SPSS) version 26.0 (Armonk, NY).

**Results:** There were 5126 cases of caesarean deliveries and 78 cases of short interpregnancy intervals during the period under review giving a prevalence of 1.5%. Of the 78 cases of SIPI, 38(48.7%) were less than 11 months while 40(51.3%) less than 15 months. The mean (SD) age of the participants was 30.7 (3.4), 95%CI: 30.0,31.5. Primipara (women with 1 child) SIPI occurred more among primipara. Majority of them had one previous caesarean section. The rate of Preterm birth was 10.5%.

Variable	Number	Percentages
Age group (years)		
20-24	1	1.3
25-30	39	50.0
31-35	32	41.0
36-40	6	7.7
Mean (SD)* age	30.7(3.4)	95% CI: 30.0,31.5
Mean (SD) gestational age (weeks)	37.8 (0.8)	95% CI: 37.5,37.9
Mean interpregnancy interval (months)	11.0(1.0)	10.6,11.3
Mean birth weight (Kg)	3.0(0.5)	95% CI: 2.9,3.1
Parity		
1	70	89.7
2	6	7.7
3	2	2.6
Gestational Age at delivery		
Preterm (<37 weeks)	8	10.3
Term (≥ 37 weeks)	70	89.7
Type of Caesarean section (CS)		
Elective	64	82.1
Emergency	14	17.9
Number of previous CS		

 Table 1. Sociodemographic /Obstetric characteristics of study participants

1	77	98.7
2	1	1.3

\*SD-Standard deviation

Conclusion: SIPI is not uncommon among women that had previous CS in Port Harcourt.

There is need to counsel women especially after first pregnancy on the uptake of postpartum contraception to reduce to the barest minimum the rate of short interpregnancy interval and its pregnancy complications. Utilization of postpartum contraception has the potential to reduce the rate of short interpregnancy intervals and their complications leading to improved maternal and child health in line with Sustainable Development Goal 3.

Keywords: Short interpregnancy intervals, family planning, reproductive Health

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## References

- 1. Shachar BZ, Lyell DJ: Interpregnancy interval and obstetrical complications. *Obstetrical & gynecological survey* 2012, **67**(9):584-596.
- Li Y, Gao S, Wang J, An H, Zhang L, Zhang Y, Liu X, Li Z: Effects of Short Interpregnancy Intervals on Adverse Pregnancy Outcomes—Haidian District, Beijing Municipality, China, 2017–2019. China CDC Weekly 2023, 5(35):767.
- 3. Bassey G, Johnson S: **Comparative study of interpregnancy interval and fetomaternal outcome in a tertiary health facility**. *Nigerian Journal of Medicine* 2019, **28**(4):475-480.
- 4. Gebremedhin AT, Regan AK, Malacova E, Marinovich ML, Ball S, Foo D, Pereira G: Effects of interpregnancy interval on pregnancy complications: protocol for systematic review and meta-analysis. *BMJ open* 2018, **8**(8).
- 5. Gonçalves SD, Moultrie TA: **Short preceding birth intervals and child mortality in Mozambique**. *African Journal of Reproductive Health* 2012, **16**(4):29-42.
- Lilungulu A, Matovelo D, Kihunrwa A, Gumodoka B: Spectrum of maternal and perinatal outcomes among parturient women with preceding short inter-pregnancy interval at Bugando Medical Centre, Tanzania. *Maternal health, neonatology and perinatology* 2015, 1(1):1-7.