

Importance of inter-pregnancy interval: the dire need of awarenessSimran Bhimani¹, Romaisa Rehman², Sameer Bhimani³, Rohan Kumar Ochani⁴

Dear Madam, Pregnancy is considered as one of the "stress tests" on the maternal metabolic and vascular system. During pregnancy, a woman is under varying adaptations of the body, which reside after childbirth, but there are chances of deleterious effects being exacerbated and indurated. These are chronic and irreversible vascular lesions leading to an early onset of cardiovascular disease on the maternal vascular system if it is repeated within a short interval of time. Furthermore, several studies have been conducted which highlighted different stressors such as physical, emotional or economic reasons of taking care of babies and social stress from families have a massive effect on woman's health.¹

Due to the afore-mentioned health conditions to the mother's health during the gestation period and also the infant, it is required for a specific interval between each pregnancy for the mother's health to return to base line and to provide proper nourishment to the new born. This is defined as the inter-pregnancy interval (IPI) which is the period between one pregnancy and the next pregnancy. A standard IPI is considered between 18months to 23months, below this is considered as short IPI while above this is long IPI.

Additionally, a recent analysis of nationally based data showed that, in Pakistan, 1 in 14 births to young mothers and mothers with short IPI lead to the mortality of a child within the first year after birth.² Furthermore, Pakistan is one of the five countries contributing to half of the world's infant mortality, short IPI being one of the critical factors contributing to this. In this survey, several significant factors were considered with higher and lower odds of child mortality. For instance, women who adhered to the recommended minimum 24 months IPI and belonged to higher household wealth were associated with lower odds. Whereas, higher odds of neonatal, infant and child mortality were amongst employed mothers and women

engaged in consanguineous marriages. Another reason which led to a higher risk of mortality in different areas of Pakistan was due to lack of education.³ Education is the key factor in fertility and infant health. For instance, education raises the woman's ability to process the information regarding the fertility options and pregnancy related health issues and thus leading to her choice in fewer offspring of higher quality.⁴

Literature has shown that there is an increased risk of preterm births if the gap between two consecutive pregnancies resulting in live births is less than six months. This may result in adverse perinatal outcomes like small for gestational age or low birth weight.⁵ There is also a great risk of neural tube defects in an offspring if the mother's body is not given enough time to recover from deficiencies, such as folate deficiency, due to any previous pregnancies. Another study showed that there is an increased risk in children to be autistic if the IPI is less than one year.⁶ It is also found out that IPI of greater than six years carries risks for early neonatal death and stillbirth.⁷

Along with above-mentioned effects of extremes of IPI on an offspring, there is also a huge risk of deterioration of maternal body affecting the cardiovascular health of mother if the recommended IPI is not maintained.¹

In Pakistan, there is a widespread culture which encourages early marriages at a young age, leading to multiple childbirths in a short span, in order to complete the family, and; therefore, reducing the IPI. This poorly informed practice makes it even more important for health care providers to counsel mothers at every birth and aware them of the adverse effects due to short or excessively long IPI on their future offspring. Mothers should be encouraged by midwives and obstetrician-gynecologist practitioners in Pakistan to maintain a healthy gap of 18-24 months to replenish and prepare their bodies for the next pregnancy.

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