

---

## Birth Spacing and Child Development

---

There is plenty of evidence in literature that discourages closely spaced births. Policy makers in both developed and developing countries have advocated healthy spacing between births as a means of improving maternal and child health. However there is limited research about the impact of smaller birth intervals on the cognitive development of children.

What is an optimal birth interval? In 2005, a technical consultation by WHO concluded that after a live birth, the recommended interval before attempting the next pregnancy is at least 24 months in order to reduce the risk of adverse maternal, perinatal and infant outcomes. A birth interval of less than 6- 12 months result in maternal and infant complications, including low birth weight<sup>1</sup>, preterm delivering<sup>2</sup>, placental abruption and placenta previa<sup>3</sup>, uterine rupture after a previous cesarean section<sup>3</sup>, maternal and child mortality.<sup>4, 5</sup> The data from Pakistan is no different. A study reviewed the retrospective data from the 1975 Pakistan Fertility Survey, looking at the effect of birth spacing on childhood mortality in Pakistan.<sup>6</sup> The length of the preceding interval between live births emerges as a major determinant of mortality in Pakistan.<sup>6</sup> This data alone is enough to convince couples about the importance of optimum birth intervals, but

unfortunately we have not achieved much in this area.

Sociological studies have shown an association of smaller birth intervals and various aspects of child development. The first-born child receives 20-30 more minutes of quality time each day with his or her parent than a second-born child of the same age from a similar family<sup>7</sup> and a shorter birth interval will plausibly impact the time spent with each child. There is also an association of birth spacing with maltreatment, behavior and development outcomes in the index child and concluded that women with short birth intervals are more likely to report neglectful parenting of the index child, child has more behavioral problems and lower cognitive functioning in first grade.<sup>8</sup> Family size<sup>9</sup> and birth order influence the intellectual environment of a household and educational performance of a child.<sup>9</sup> But the most shocking findings are that the second-born children conceived within 12 months of a previous birth have three times the odds of being diagnosed with autism than those conceived more than 36 months after a previous birth.<sup>10</sup>

Academic achievement of the child is a key ambition of every parent and we can bring focus on birth spacing by using this argument for parents who are planning a pregnancy. In addition the risk of autism can be conveyed to help parents

come to a conclusion that is informed and based on evidence.

**Prof. Shamsa Zafar**

**PhD, FCPS**

**Address of Correspondence:**

*Prof Shamsa Zafar*

*Prof. of Obs/Gynae,*

*Head of Department at Poonch Medical College,  
Rawlakot*

*Email: shamsazafar@gmail.com*

## References

1. Gribble JN. Birth Intervals, Gestational Age, and Low Birth Weight: Are the Relationships Confounded? *Population Studies* 1993;47(1):133-146.
2. DeFranco EA, Ehrlich S, Muglia LJ. Influence of interpregnancy interval on birth timing. *BJOG: An International Journal of Obstetrics & Gynaecology* 2014;121(13):1633-1640.
3. Conde-Agudelo A, Rosas-Bermudez A, Kafury-Goeta AC. Effects of birth spacing on maternal health: a systematic review. *American journal of obstetrics and gynecology* 2007;196(4):297-308.
4. Norton M. New evidence on birth spacing: promising findings for improving newborn, infant, child, and maternal health. *International Journal of Gynecology & Obstetrics*. 2005;89, Supplement 1:S1-S6.
5. Winikoff B. The effects of birth spacing on child and maternal health. *Stud Fam Plann*. 1983;14(10):231-245.
6. Cleland JG, Sathar ZA. The Effect of birth spacing on childhood mortality in Pakistan. *Population Studies* 1984;38(3):401-418.
7. Price J. Parent-Child Quality Time: Does Birth Order Matter? *Journal of Human Resources* 2008;43(1):240-265.
8. Crowne SS, Gonsalves K, Burrell L, McFarlane E, Duggan A. Relationship between birth spacing, child maltreatment, and child behavior and development outcomes among at-risk families. *Maternal and child health journal* 2012;16(7):1413-1420.
9. Downey DB. When Bigger Is Not Better: Family Size, Parental Resources, and Children's Educational Performance. *American Sociological Review* 1995;60(5):746-761.
10. Cheslack-Postava K, Liu K, Bearman PS. Closely Spaced Pregnancies Are Associated With Increased Odds of Autism in California Sibling Births. *Pediatrics* 2011;127(2):246-253.