

Editorial

Birth Spacing as a Health Intervention

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Birth spacing (practice of timing the period between births) has been identified as a pertinent lifesaving measure for mothers and children. Even though birth spacing as a concept is the focal point of reproductive health/family planning methodology, few countries have policies on birth spacing, and in many developing countries there is unmet need for birth spacing services.¹ A vast number of studies now show a clear relationship between lack of birth spacing and the high number of annual infant, child and maternal deaths, low birth weight infants and malnourished infants and children in developing countries.

Another study highlights several new findings on birth spacing relevant to these conditions: For infants and children under five years of age, births spaced at least 36 months apart are associated with the lowest mortality risk; Birth to conception intervals of less than 6 months, as well as abortion-pregnancy intervals of less than 6 months, are associated with increased risk of pre-term births, low birth weight and small for gestational age; The study also states that birth to conception intervals of less than 6 months are associated with increased risk of maternal mortality and morbidity. This study emphasizes the fact that birth spacing is an important, feasible and practical intervention to address these conditions and should be included in developing country health programs.²

Demographic Health Survey data from 18 developing countries in Asia, Africa, Latin America, and the Middle East show that children born after a three-year birth interval are more likely to be healthy and to survive all developmental stages upto age five years, where as compared to a 36-47 month birth interval, a birth interval of less than 18 months is associated with increased risk for Neonatal mortality- 3.17 times, infant mortality-3.16 times and under-five mortality- 2.81 times.³

To improve maternal and child health:

Women do not have adequate time to replenish nutritional stores when pregnancies and births are spaced too closely together. There is an additional physiological stress incurred when a short interval causes an overlap in gestation and lactation. This phenomenon is commonly called the **“maternal depletion syndrome”** and can lead to low birth weight children, pre-term birth, stunting, maternal malnutrition and changes in breast milk content. In addition, stopping breastfeeding is strongly associated with increased mortality for children in the first year of life and is still associated with increased mortality in the second year of life.³

Birth spacing (at least three years between births) is one way that a mother can have more time for her self and her children, particularly during the first three years that are so critical for the child's cognitive and social development. Different studies now show that pregnant women with birth spacing of less than one year and less than one and a half years usually have significantly lower mean Hemoglobin and higher prevalence of anemia.⁴

Low birth weight is a major cause of death for neonates and an important indicator of child health and survival. A comparison of data from similar studies in both developing and developed countries shows that the lowest risk for low birth weight occurs when the birth interval is greater than 21 months and less than 69 months. These findings indicate that the birth interval is a risk factor independent of socioeconomic status.⁵

Maternal Health – Economic development **Improved Maternal Health contributes to Economic growth by:**

Healthy mothers and babies would mean freeing the resources that would otherwise have to be spent

on treating illnesses. It would also allow the women to be able to enter the work force and develop and utilize skills and raise work productivity as well as it would increase number of years of productive lives. This would also lead to increasing the enrollment of healthy 5 year olds in school and making them better able to learn.

The linkages between Maternal and neonatal health, education, and economic growth are partly explained by a country's capacity to implement effective Birth Spacing policies.

Five guiding principles for developing optimal birth spacing strategies: To understand the socio/cultural/religious context of fertility behavior and Family Planning methodology decision-making. To be able to engage household and community "stake holders" and decision-makers in dialogue about family planning and optimal birth spacing. Programs should involve male partners and other individuals that can create a conducive environment for optimal birth spacing. To bridge the gap between the desire to space and the ground reality of birth spacing patterns (Family planning practices) by addressing the precursors to change at the individual, community and service delivery levels. The integration of birth spacing and family planning with other programs such as EPI, IMCI, well-baby, safe motherhood, HIV/AIDS prevention, breastfeeding, family planning) as well as women's empowerment programs. Monitoring, measuring and evaluation of current programs and use this information to improve future programming.⁶

Results of Focus Groups in Pakistan, India, Bolivia and Peru

Many women expressed concerns that their husbands do not share responsibilities for planning pregnancies or fully understand the health risks of short intervals or the health impact of optimal birth spacing and using contraceptives. Women reported that there is often no conscious dialogue between women and men regarding when they want the next pregnancy to occur; and that pregnancy often "just happens." Women and men reported that they are not getting family planning counseling through pharmacies and that they want to have health messages in contraceptive inserts and packaging. Participants in the focus groups reported that a woman's worth is viewed in terms of her fertility and is measured by her ability to become pregnant soon after marriage. Women in India and Pakistan reported that their mothers-in-law strongly influenced birth spacing decisions.⁷

Despite the advancement in understanding the relationship between birth spacing and adverse pregnancy outcomes during the last two decades, little information is available on the effects of birth spacing on

maternal morbidity and mortality or the understanding of mechanisms by which birth spacing might improve the health of mothers and their children. Therefore, more research is needed to understand the effects of birth spacing on maternal health. Also, more studies are needed on whether the effects of birth spacing on maternal and peri-natal health differ in developed versus developing nations. Finally, it is imperative to understand the causes for both short and long intervals in any population in order to interpret the data on health risks. The consequence of this may be that family planning policies and messages may need to be tailored for different populations.⁸

Conclusion

Health Education and Behavioral change communication strategies regarding the concept of Optimum Birth Spacing are the need of the day. Pakistan has its own set of unique problems regarding population explosion, its negative implications and the myriad conglomerate of the problems linked to poverty, increased fertility and down spiraling economy. The concomitant benefit of the effects of Optimum Birth Spacing (at least three years between births) on both the mother's health as well as the neonate's health is undisputable. We need to focus on this idea in terms of decreasing maternal and neonatal morbidity and mortality.

References

1. Marston C. Report of a WHO Technical Consultation on Birth Spacing, Geneva, Switzerland, 13-15 June 2005. Geneva, Switzerland, World Health Organization [WHO], 2006. 37 p.
2. M Norton. New Evidence on Birth Spacing: Promising Findings for Improving Newborn, Infant, Child, and Maternal Health. Vol.89, (April, 2005). Pp S1-S6
3. Rutstein SO. Effects of preceding birth intervals on neonatal, infant and under-five year mortality and nutritional status in developing countries: evidence from the Demographic and Health Surveys. *International Journal of Gynecology and Obstetrics*. 2005 Apr; 89 Suppl 1:S7-S24.
4. Okwu GN; Ukoha AI. Studies on the predisposing factors of iron deficiency anaemia among pregnant women in a Nigerian community. *Pakistan Journal of Nutrition*. 2008 Jan-Feb; 7(1):151-156.
5. 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 Apr; 196(4):297-308.
6. Espeut D. Spacing births, saving lives. Ways to turn the latest birth spacing recommendation into results. *Child Survival Technical Support Project*, [2002]. 12 p.
7. CATALYST. Birth spacing grants compilation document. CATALYST Consortium, [2005]. [123] p.
8. Razzaque A; Da Vanzo J; Rahman M; Gausia K; Hale L. Pregnancy spacing and maternal morbidity in Matlab, Bangladesh. *International Journal of Gynecology and Obstetrics*. 2005 Apr; 89 Suppl 1:S41-S49.