The Impacts of Healthy Birth Spacing in Jordan

May 2013

Higher Population Council
Presentation Outline

- Birth spacing and the Qur’an
- WHO recommendations and definition of intervals
- Benefits of healthy birth spacing
- Consequences of unhealthy birth spacing
- Relationship between birth intervals and health outcomes in Jordan
- Trends in birth spacing in Jordan
- Impacts of increasing birth intervals in Jordan
- Interventions to improve birth spacing in Jordan
Birth Spacing and the Qur’ān

((وَحَمْلُهُ وَفِضْالَةُ تَلْهَتْنَ شَهْرَانًا))
سورة الأحقاف الآية (15)
“The period of pregnancy and weaning is thirty months”

((وَفِضْالَةُ فِي عَامَيْنِ))
سورة لقمان الآية (14)
“Weaning at two years of age”
WHO Recommendations for Birth Spacing

Recommendation for spacing after a live birth

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. In simple terms, couples are encouraged to wait to attempt a new pregnancy until after the 2nd birthday of their last child.

Recommendation for spacing after a miscarriage

After a miscarriage, the recommended minimum time to wait to attempt another pregnancy is at least six months in order to reduce the risk of adverse maternal and perinatal outcomes.

Definitions

Recommended Birth-to-Birth and Birth-to-Pregnancy Intervals

- **Birth-to-Birth Interval**: Period between two live births
- **Birth-to-Pregnancy Interval**: Period between a live birth and the next pregnancy

A 24-month birth-to-pregnancy interval is the approximate equivalent of a 33-month birth-to-birth interval.
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Why is Birth Spacing Important?

When pregnancies are too close together

- Newborns can be born too soon, too small, or with a low birth weight
- Infants and children may not grow well and are more likely to die before age five years old
- Mothers may die in childbirth
Who Benefits from Healthy Birth Spacing?

Newborns, infants, and children under five years old

Mothers

Men

Communities
Benefits to Newborns, Infants, and Children Under Age Five

Reduces the risk of

- Pre-term births, low birth weight, small size for gestational age, and, in some populations, stunting or underweight conditions
- Death for newborns, infants, and children under age five

Allows young children to experience the substantial health benefits of breastfeeding for longer periods

Benefits to Mothers

Gives mothers more time to prepare physically, emotionally, and financially for their next pregnancy, if they choose to have one.

Helps mothers avoid pregnancy-induced high blood pressure and associated complications like preeclampsia, obstructed and prolonged labor, iron-deficiency anemia, and maternal death.

Provides mothers with enough time before becoming pregnant again to focus on their newborns, husbands, and other children.
Benefits to Fathers

Helps fathers safeguard the health and well-being of their wives and children.

Allows fathers time to plan financially and emotionally for their next child, if the couple chooses to have one.

Contributes to a father’s sense of satisfaction from supporting his wife in making decisions that are in the family’s best interests.

Benefits to Communities

Benefits communities because it reduces the incidence of death and illness among mothers, newborns, infants, and children.

In doing so, it can contribute to poverty reduction and improve a community’s quality of life.

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Impact of Unhealthy Birth Spacing on Children’s Lives

Neonatal mortality

Postneonatal mortality

Under-five mortality

Photo credit: Jennifer Hayes

N = 17  p < .01
Impact on Postneonatal Mortality

Postneonatal Mortality (Weeks 5–52)

Adjusted Odds Ratio

Interbirth Interval

N = 17  p < .01

Impact on Mortality among Children Under Five Years Old

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Relationship between Birth Intervals and Health Outcomes in Jordan

Neonatal mortality

Infant mortality

Under-five mortality

Photo credit: © Karen Kasmauski/Corbis
Relationship between Birth Spacing and Neonatal Mortality

Mortality Rate by Length of Birth Interval

Deaths per 1,000

Birth Interval

<24 months 24–35 months 36–47 months 48–60 months >60 months

24 22 9 11 16

Relationship between Birth Spacing and Infant Mortality

Mortality Rate by Length of Birth Interval

Deaths per 1,000

Birth Interval

Relationship between Birth Spacing and the Mortality of Children Under Five Years Old

Mortality Rate by Length of Birth Interval

Deaths per 1,000

<24 months: 41
24–35 months: 32
36–47 months: 15
48–60 months: 23
>60 months: 33

Birth Interval

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Trends in Length of Birth Interval

Trends in Median Birth Interval

Current Birth Intervals

## Median Birth Intervals by Background Characteristic

### Characteristic Related to Median Birth Interval

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>MBI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>15–19</td>
<td>18.7</td>
</tr>
<tr>
<td>20–29</td>
<td>24.0</td>
</tr>
<tr>
<td>30–39</td>
<td>35.8</td>
</tr>
<tr>
<td>40–49</td>
<td>48.7</td>
</tr>
<tr>
<td><strong>Birth Order</strong></td>
<td></td>
</tr>
<tr>
<td>2–3</td>
<td>26.4</td>
</tr>
<tr>
<td>4–6</td>
<td>37.8</td>
</tr>
<tr>
<td>7+</td>
<td>38.0</td>
</tr>
</tbody>
</table>

### Characteristic Not Related to Median Birth Interval

#### Region
- Central: 31.5
- North: 31.0
- South: 30.4
- Badia Area: 27.9
- Other: 31.7

#### Education
- None: 31.6
- Elementary: 28.4
- Preparatory: 33.8
- Secondary: 30.7
- Higher: 32.0

#### Badia Area
- Badia: 27.9
- Other: 31.7

#### Residence
- Urban: 31.7
- Rural: 29.6

#### Sex of Preceding Child
- Male: 31.7
- Female: 30.7

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Impacts of Healthy Birth Spacing

![Anticipated Infant Deaths Graph]

### Infant Lives Saved through Healthy Birth Spacing

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total Number of Infant Deaths (2010–2040)</th>
<th>Lives Saved (Difference from No Change Scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Change</td>
<td>211,329</td>
<td>0</td>
</tr>
<tr>
<td>No Births &lt;2 Years</td>
<td>192,460</td>
<td>18,869</td>
</tr>
<tr>
<td>No Births &lt;3 Years</td>
<td>112,266</td>
<td>99,064</td>
</tr>
</tbody>
</table>

Projections computed using the DemProj module of the Spectrum Model, Futures Group.
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Interventions

Policy Environment

- Conduct advocacy with decisionmakers to gain their support of related policies and programs.
Interventions

Education

- Educate married women about the benefits of waiting at least 24 months before becoming pregnant again after a birth, and the health consequences of short birth intervals.

- Educate engaged and newly married couples about the benefits of healthy birth spacing and use of modern family planning methods.

- Educate all family members (e.g., husbands, mothers, mothers-in-law, children) about the benefits of healthy birth spacing.

- Engage the media and civil society to help raise the awareness of the benefits of birth spacing.
Interventions

Service Delivery

- Train healthcare providers on the benefits of healthy birth spacing and encourage them to counsel women of reproductive age on those benefits.
- Counsel women to shift to more effective modern family planning methods to avoid closely spaced births.
- Integrate and provide services to assist mothers in attaining healthy birth spacing.
- Allocate sufficient human and financial resources to ensure that women and men’s contraceptives of choice are available when needed.
Summary

More than one-half of all births in Jordan occur less than three years after the previous birth.

Neonatal, infant, and child mortality in Jordan is closely associated with the length of birth intervals, and extending the length of birth intervals will save the lives of infants and children.

Encouraging women to space births at least three years apart will improve maternal and child health and support healthy childhood development.
Thank You!

Higher Population Council