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Extending Service Delivery Project
Country Profile: JORDAN

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Healthy Timing and Spacing of Pregnancy (HTSP) in Jordan

HTSP is an intervention to help women and families delay or space their pregnancies to achieve the healthiest outcomes for women, newborns, infants, and children, *within the context of free and informed choice*

Summary

Key research findings regarding the risks of closely spaced pregnancies:

- Recent USAID-sponsored research found that unhealthy pregnancy spacing is associated with multiple adverse outcomes for mothers and newborns.
- Becoming pregnant too soon after a previous birth, miscarriage, or abortion places mothers and newborns at a higher risk of health complications—or even death.
- Early pregnancy (when mother is younger than 18) the mothers and their newborns face increased risks of health complications compared to women 20-24 years old.

In Jordan:

- Among mothers 15-19 years old, more than 76% of births are spaced <2 years apart
- Among mothers between 20 and 29 years old, 58% of births are spaced <2 years apart
- Short pregnancy intervals have declined by 33% from 1990-2002
- 1 out of every 3 married women of reproductive age (MWRA) want to space their children

Considerations for program design:

- When women and their families are advised of the benefits of pregnancy delay and spacing, use of family planning increases substantially.
- How can improved HTSP advocacy, behavior change communication, counseling, and community outreach play a role in helping women achieve the longer intervals they want and reduce the risk of the adverse health outcomes?

Consider these findings in relation to the overall risks to mothers and newborns in Jordan.

Annual number of births*	150,000
Annual number of neonatal deaths**	2,600
Neonatal mortality rate*	17
Annual number of infant deaths (includes neonatal)**	3,380
Infant mortality rate*	22
Annual number of <5 deaths (includes both infant and neonatal deaths)*	4,000
Child mortality rate*	26
Annual number of low birth weight infants**	18,000
% of infants with low birth weight*	2,600
Annual number of maternal deaths**	1,930
Maternal mortality rate (UNICEF adjusted #)*	41
Lifetime risk of maternal death when a woman becomes pregnant*	1 in 450

Healthy timing and spacing of pregnancy may help reduce the consequences of these health risks for mothers and newborns.

Source: *UNICEF, 2007 State of the World's Children
** Calculated

Introduction

Recent research from developing countries shows that unhealthy timing or spacing of pregnancies is linked to increased risk of multiple adverse health outcomes. Table 1 shows how it can affect the health of the health of the mother and the newborn. Following a pregnancy that occurred quickly after a previous birth, the risk of a child dying is at least twice as high as that for longer intervals.

An infant born after a short interval has increased chances of:

- Being born pre-term
- Having below normal weight at birth
- Being small for gestational age

A woman who becomes pregnant too quickly following a previous birth, or induced abortion or miscarriage, faces higher risks of:

- Anemia
- Premature rupture of membranes
- Abortion
- Miscarriage
- Death

Table 1. Risks of Adverse Health Outcomes After Very Short Interval Pregnancy, Compared to the Reference Group Interval Used in the Selected Study

RISKS WHEN PREGNANCY OCCURS 6 MONTHS AFTER A LIVE BIRTH		
Adverse Outcome		**Increased Risk**
Induced Abortion		650%
Miscarriage		230%
Newborn Death (<9 mos.)		170%
Maternal Death		150%
Preterm Birth		70%
Stillborn		60%
Low Birth Weight		60%
RISKS WHEN PREGNANCY OCCURS QUICKLY AFTER AN ABORTION OR MISCARRIAGE, COMPARED TO RISKS AFTER WAITING 6 MONTHS		
Increased Risk After 1-2 Mos. Interval		**Increased Risk After 3-5 Mos. Interval**
Low Birth Weight	170%	140%
Maternal Anemia	160%	120%
Preterm Birth	80%	40%

Sources: Conde-Agudelo, et al, 2000, 2005, 2006; Da Vanzo, et al, 2004; Razzaque, et al, 2005; Rutstein, 2005.

World Health Organization (WHO) Recommendations

Based on a review of six USAID-supported studies, WHO produced a policy brief in 2006 on birth spacing which included the following preamble and recommendations:

Preamble
Individuals and couples should consider health risks and benefits along with other circumstances such as their age, fecundity, fertility aspirations, access to health services, child-rearing support, social and economic circumstances, and personal preferences in making choices for the timing of the next pregnancy.

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.

Recommendation for spacing after an abortion
After a miscarriage or induced abortion, the recommended minimum interval to next pregnancy is at least six months in order to reduce risks of adverse maternal and perinatal outcomes.

Source: World Health Organization, 2006 Report of a WHO Technical Consultation on Birth Spacing

In addition to the two recommendations in the WHO policy brief, ESD operational messages include a 3rd message for adolescents – "for adolescents, the recommended time period for the first pregnancy is at least 18 years of age or older."

Within the context of informed choice about spacing or limiting future pregnancies, *for those who choose to space,* the above recommendations in the 2006 WHO Policy Brief, in conjunction with the preamble should be incorporated into counseling and behavior change communication messages.

Birth Spacing Trends and Demand and Unmet Need for Spacing

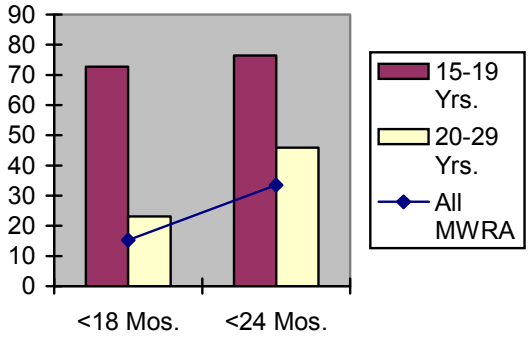
High percentages of mothers and newborns are at risk of adverse health outcomes due to too closely spaced pregnancies

In Jordan, about 1 in 3 births occur within less than 24 months after a previous birth. International data show that there is 170 to 300% increased risk of a neonatal, post-neonatal or infant death associated with birth-to-birth intervals of less than 18 months.

Jordan is making progress in addressing its birth spacing issues

The portion of births occurring less than 24 months after a previous birth, and associated with very high health risks, decreased by 33% between 1990 and 2002. During the same period the rate of adolescent pregnancies in Jordan also declined by 42%.

Figure 1. Percentage of All Births in Jordan Occurring After Higher-Risk Short Intervals (months) by Younger Age Cohorts (15-29 Yrs.) and All Married Women of Reproductive Age (MWRA) Source: 2002 DHS



In Jordan, younger women have unmet need for family planning

According to the 2002 DHS the portion of existing demand for spacing that remains unmet among 15-19 year olds is 44% (twice as high as the unmet demand from older women), however, only 13% of married women 15-19 year age use a family planning method. Use of modern contraceptives among zero-parity married women is only at about 1%; suggesting that the likelihood of pregnancy soon after marriage is high for most women.

Spacing Patterns and Programmatic Ramifications

A major reproductive health issue

All available data and information indicate that the higher risks of short birth intervals and early pregnancies represent a major reproductive health issue in Jordan. The problem of short birth intervals is even more pronounced in younger women, among whom the highest risks from very short birth intervals are more common. Although short spacing intervals have declined, there is still a high demand for spacing; especially among younger women which demonstrates how much further family planning services must progress to better address birth spacing needs.

Strategies are needed

To help couples space their pregnancies in a more healthy way, they will need easier access to spacing services that are responsive to their circumstances. Since most of the births occurring among women 15-19 years old are first births, the main issue for this age cohort is the timing of the first pregnancy. Communication, counseling and services for adolescents should focus on the health risks associated with the timing of a first pregnancy and birth.

Program research findings to date

Operations and survey research indicate that when women and their families are advised of the health and quality of life benefits of pregnancy delay and spacing, use of family planning increases substantially. One study conducted in India found that use of contraception for delaying the first child increased from 5% to 20% over 4 years in the intervention area and from 4% to 8 % in the control

area. The same study found that use of contraception for spacing the second child increased from 14 to 33% in the intervention area and from 10 to 20% in the control area. A project in Egypt, implemented from 2003-2005, which improved the quality of services, and included HTSP counseling and community outreach among influential leaders, was found to have increased the contraceptive prevalence rate from 50 to 80% among all married women of reproductive age and from 38 to 73 % among young, low-parity women. Similar studies are underway in Egypt, India, Yemen, Nepal, and Bangladesh.

Implications for Program Design

These statistics inform the following recommendations:

- **Present HTSP data to decision-makers**, to advance understanding of the role of pregnancy timing and spacing in the health of mothers and newborns in Pakistan.
- **Implement HTSP behavior change communication** and counseling interventions as an integral risk prevention strategy in all family planning, child and maternal health communications and client counseling protocols.
- Ensure that the two 2006 **WHO pregnancy spacing recommendations**, as well as information on the specific health benefits associated with the healthy timing and spacing of pregnancy are included in all communications and protocols.
- **Develop or strengthen** pregnancy delay or spacing services and communication activities for young (15-29 years) clients.
- To achieve a more balanced method mix, **help families understand** that long-acting and intermediate methods (IUDs and injectables) are safe, and can effectively help them achieve their spacing preferences.
- **Expand communications and service delivery efforts** among zero-parity adolescents that are oriented to health risks associated with the timing of a first and subsequent pregnancy.
- Use this HTSP Profile in advocacy with national policymakers and district health teams, to **advocate for increased resources for HTSP interventions**.

Definitions

Unmet need for spacing: The percentage of currently married women who want to wait before having their next birth and are not using any method of family planning. Included with the unmet need for spacing are pregnant women whose pregnancy was mistimed; amenorrheic women whose last birth was mistimed; and, fecund women who are neither pregnant nor amenorrheic, not using any method of family planning, and who want to wait two or more years for their next birth. Unmet need for spacing also includes fecund women who are not using any contraception and are unsure whether they want to have another child or who want another child but are unsure when to have the next birth.

Demand for family planning for spacing: The sum of current contraceptive prevalence for spacing (including currently pregnant or amenorrheic women whose pregnancy or last birth was the result of a contraceptive failure) and the unmet need for spacing.

References

Conde-Agudelo, A. and J. M. Belizán
2000 Maternal Morbidity and Mortality Associated with Interpregnancy Interval: a Cross Sectional Study. *British Medical Journal*, 321:1255-1259 (18 November).

Conde-Agudelo, A., J. Belizán, R. Breman, S. Brockman and A. Rosas-Bermudez
2005 Effect of the Interpregnancy Interval After an Abortion on Maternal and Perinatal Health in Latin America. *International Journal of Obstetrics and Gynecology*, Vol. 89, Supplement 1 (April), S34-S40.

Conde-Agudelo, A., A. Rosas-Bermúdez and A. C. Kafury-Goeta
2006 Birth Spacing and Risk of Adverse Perinatal Outcomes: A Meta-analysis. Journal of the American Medical Association, 295:1809-1823.

Da Vanzo, J., A. Razzaque, M. Rahman, L. Hale, K. Ahmed, M. A. Khan, G. Mustafa and K. Gauzia
2004 The Effects of Birth Spacing on Infant and Child Mortality, Pregnancy Outcomes, and Maternal Morbidity and Mortality in Matlab, Bangladesh. Rand Corporation: Rand Labor and Population Working Paper Series, WR-198 (October).

Demographic and Health Survey
1992 Pakistan Demographic and Health Survey 1990-1991. Columbia, Maryland: National Institute of Population Studies, Pakistan; and, IRD/Macro International, Inc.

2007 Pakistan Demographic and Health Survey 2006-07 Preliminary Report. Calverton, Maryland: National Institute of Population Studies, Pakistan; and, Macro International, Inc.

Federal Bureau of Statistics
2001 Pakistan Demographic Survey. Islamabad, Pakistan: Federal Bureau of Statistics, Government of Pakistan.

Jansen, W.
2005 Existing Demand for Birth Spacing in Developing Countries: Perspectives from Household Survey Data. *International Journal of Obstetrics and Gynecology*, Vol. 89, Supplement 1 (April), S50-S60.

Masilamani R., et al. Promoting Change in the Reproductive Behavior of Youth: Pathfinder International's Prachar Project, Bihar India, 2005. Available online at www.pathfind.org/publications.

National Institute of Population Studies
2002 Pakistan Reproductive Health and Family Planning Survey 2000/2001. Islamabad, Pakistan: National Institute of Population Studies.

Razzaque, A., J. Da Vanzo, M. Rahman, K. Gausia, L. Hale, M. A. Khan, A.H.M.G. Mustafa
2005 Pregnancy Spacing and Maternal Morbidity in Matlab, Bangladesh. *International Journal of Obstetrics and Gynecology*, Vol. 89, Supplement 1 (April), S41-S49.

Rutstein, S.
2005 Effects of Preceding Birth Intervals on Neonatal, Infant and Under-Five Years Mortality and Nutritional Status in Developing Countries: Evidence from the Demographic and Health Surveys. *International Journal of Obstetrics and Gynecology*, Vol. 89, Supplement 1 (April), S7-S24.

Tahseen Household Survey, Catalyst Consortium, Cairo, Egypt, 2005.

UNICEF
2006 State of the World's Children 2007: The Double Divide of Gender Equality. New York: United Nations Childrens Fund.

World Health Organization
2006 Report of a WHO Technical Consultation on Birth Spacing. World Health Organization, Geneva, Switzerland. Available at: http://www.who.int/makingpregnancysafer/publications/policybriefbirthspacing.pdf.

World Health Organization
2006 Policy brief on Birth Spacing – Report from a World Health Organization Technical Consultation. *WHO Department of Reproductive Health and Research and Department of Making Pregnancy Safer.*

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