



Integrated Reproductive Health Services: Evidence-based Approaches

Latin America and the Caribbean

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EXECUTIVE SUMMARY

Reproductive health services, including family planning, have long been recognized as a means to improve the health and economic well being of women and their families and have been a major focus of international development programming over the last 40 years. Indeed, health services can save women's and children's lives. As a result of development assistance programs, basic health indicators such as maternal and child morbidity and mortality have improved in many countries in Latin America and elsewhere. Many social and health indicators in Latin America are better than the global average but could still be improved. Optimal birth spacing and integrated reproductive health programming, two contemporary approaches in reproductive health, have the potential to increase the efficacy of reproductive health programming by empowering women and men to make informed choices about family planning, ultimately saving women's and children's lives.

An emphasis on optimal birth spacing is a programmatic strategy that can improve health outcomes of women, infants and children. Although the positive health effects of birth spacing have been widely recognized for over 40 years, spacing has not been given adequate attention as a public health measure and is less acknowledged in family planning counseling, where the focus is often on limiting the total number of births. Few international organizations or governing bodies have clear policies on birth spacing. The CATALYST Consortium's Optimal Birth Spacing Initiative (OBSI) is a model for integrated health programming, serving as a bridge between child survival, family planning and reproductive health programs. Birth spacing has tremendous potential to reduce unintended pregnancies, morbidity and mortality for mothers, infants, and children and reduce the social and economic costs of pregnancy-related illness and disability.

At the International Conference on Population and Development (ICPD) held in Cairo in 1994, world leaders reiterated their commitment to improving the health and well being of all the world's citizens. At the same time, conference participants expanded the definition of reproductive health beyond clinical services to include an emphasis on gender, rights and participation. This expansion of reproductive health and its linkage to broader development goals recognizes the fact that an unmet need for family planning and other essential reproductive health services persists – both in Latin America and elsewhere – because optimal reproductive health outcomes cannot be achieved solely through clinical services. The ability of women to act in the interest of their health and the health of their families is determined by broader social, cultural, political and economic realities, including socioeconomic status, normative gender roles, the status of women and level of education. Integrated programs seek to address these social barriers that can limit life options for women and inhibit access to critical reproductive health services, such as family planning and safe motherhood services.

In order to reach women with reproductive health services, integrated programs link two types of programming that are often viewed as distinct: *social services* and *health care services*. Social services such as literacy, economic empowerment and gender programs directly address social inequities. Health care services such as reproductive health, family planning and safe motherhood programs, directly address the health needs of women, men, families and communities.

This paper provides evidence of the importance of both optimal birth spacing and integrated approaches to health care delivery, with an emphasis on women's empowerment. First, using data from CATALYST-funded initiatives, the paper clearly shows the impact of optimal birth spacing on maternal and child morbidity and mortality as well as the demand for birth spacing services among individuals in four countries who participated in focus groups conducted with women, men and health care providers. Secondly, using three illustrative case studies, this paper shows how integration of social and health care programs strengthens the outcomes of both types of programs. Finally, a potential model for an integrated optimal birth spacing program is presented, highlighting how health care program planners can take steps towards integrated programming by training providers in client-centered approaches to service delivery; linking

reproductive health services to one another; linking reproductive health and other health services; linking clinical and non-clinical health programs; and linking health programs to social programs.

INTEGRATED REPRODUCTIVE HEALTH PROGRAMMING: A HOLISTIC APPROACH TO DEVELOPMENT

Integrated reproductive health/ family planning programs save women, children and men's lives and contribute to the empowerment of women, families and communities. These holistic approaches to reproductive health service delivery have long been recognized, notably in the International Conference on Population and Development (ICPD) Programme of Action, as both cost-effective and most likely to deliver a client-centered approach to health (UNFPA 2002, section 29). By focusing on clients' needs and social context, integrated programs have the potential to empower clients, thereby increasing their ability to make informed choices, including the choice to access health care services and to sustain healthful behavior changes. These programs are based upon the understanding that:

...improving the status of women also enhances their decision-making capacity at all levels in all spheres of life, especially in the area of sexuality and reproduction. This, in turn, is essential for the long-term success of population programmes. Experience shows that the population and development programmes are most effective when steps have simultaneously been taken to improve the status of women ... (Basis for Action, ICPD, Chapter 4)

GLOBAL REVIEW OF REPRODUCTIVE HEALTH TRENDS AND ISSUES

Reproductive health has been defined as "...a state of complete physical, mental and social well-being (not merely the absence of disease or infirmity) in all matters related to the reproductive system and to its functions and processes..." (ICPD Programme of Action, paragraph 7.2). This broad definition of reproductive health includes maternal health, family planning, childbirth care, sexual health and well-being, and HIV/AIDS/STIs. There are many factors that affect reproductive health, such as access to quality services, gender-based violence and the ability of women to make decisions about their own health.

In recent years, the international health community has re-emphasized global reproductive health goals, including lower maternal mortality, increased access to family planning information and methods, and quality services during childbirth. Maternal mortality is highest in countries where women are least likely to have access to modern contraceptives and reproductive health services. Although there have been great improvements in reproductive health on a global scale, a great deal of work remains.

In almost 50 population-based surveys around the world, 10 to 50% of women have reported being hit or otherwise physically harmed by an intimate male partner at some time in their lives. Gender-based violence in the form of physical and sexual abuse contributes to many reproductive health issues – unwanted pregnancies, abortions, HIV/AIDS and other sexually transmitted infections (STIs), and pregnancy-related complications. Violence perpetrated by an intimate partner and sexual coercion rob women of control over their own sexual and reproductive lives and severely endanger their health and the health of their children.

Table 1. Global Reproductive Health: Development Successes and Challenges

Reproductive Health Goal	Gains 1990-2000	Unfinished Business
<p>Maternal Mortality Reduce the maternal mortality rate by half.</p>	<p>- There has been heightened awareness about the leading causes of maternal mortality in the last decade.</p>	<p>- There is no evidence of a significant decline in maternal death rates. - An estimated 515,000 women die each year as a result of pregnancy and childbirth.</p>
<p>Family Planning Enable access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too many and too late.</p>	<p>- Contraceptive prevalence has increased by 10 % globally and has doubled in the least-developed countries in the last decade. - The total fertility rate has declined from 3.2 to 2.8.</p>	<p>- Every year 15 million adolescents give birth to 15 million infants. - Access to RH/FP education remains a challenge. - Women's lack of control in reproductive decision-making cannot be overcome by increased access alone.</p>
<p>Childbirth Care Enable access by all pregnant women to prenatal care, trained birth attendants and referral facilities for obstetric emergencies.</p>	<p>- Modest gains were made in both antenatal care and births assisted by birth attendants. - The international community recognized that survival of infants and children is closely tied to survival of the mother and began emphasizing programs that benefit the mother-child dyad.</p>	<p>- Emergency obstetric care services are lacking. - Lack of awareness of and preparedness for crisis situations.</p>
<p>HIV/AIDS/STIs Reduce new infections through targeted prevention efforts.</p>	<p>- HIV/AIDS was virtually unknown until 20 years ago, and now an estimated 40 million people are infected worldwide. - Thailand, Brazil and Uganda have controlled epidemics through effective intervention programs.</p>	<p>- The international community has set a goal to reduce HIV prevalence among 15-24 year olds in most affected countries by 2005, and worldwide by 2010.</p>
<p>Gender-based Violence Remove GBV as an obstacle to women's reproductive and sexual health and rights.</p>	<p>- Growing recognition of GBV as not only a critical public health issue but also a reproductive health issue. - In 1999, the UN Population Fund declared violence against women "a public health priority."</p>	<p>- Although reproductive health care providers are strategically placed to help identify victims of violence and connect them with other community support services, very few are trained to do so*</p>

Source: Adapted from UNICEF *State of the World's Children*, 2002

* Heise, Ellsberg and Gottemoeller, 1999.

REPRODUCTIVE HEALTH TRENDS AND ISSUES IN LATIN AMERICA

Despite the fact that the integration of family planning programming into national health systems occurred relatively late in the Latin America and Caribbean (LAC) region, the region has not experienced the explosive population growth characteristic of other less-developed regions such as Asia and Africa (Carty, 2002). In 1975, women in Latin America had an average of 5.1 children; by 2000, this number had dropped to 2.7 children per woman. **Table 2** shows that trends in Central American countries reflect this overall pattern; however, with a TFR of 3.1, fertility rates throughout Central America are higher than the LAC regional average. Table 2 also shows that the variation in the total fertility rate is accompanied by variation in contraceptive use. Contraceptive prevalence in Central America ranges from 31% use of modern methods in Guatemala to 64% in Costa Rica.

Latin America's average maternal mortality ratio, at 190 deaths per 100,000 live births, is considerably lower than the global average of 400 deaths/100,000 live births. Nonetheless, there is great variation among countries in the region. In Central America, for example, maternal mortality ranges from a high of 190 in Guatemala to a low of 29 in Costa Rica. Unsafe abortion is a major contributor to maternal mortality in the LAC region; it is estimated that 21% of maternal deaths are the result of an unsafe abortion, which is one of the highest proportions of maternal death due to unsafe abortion in the world.¹

Recent medical research has shown that the survival of infants and children is closely linked to the survival of their mothers. Decreased fertility rates and maternal mortality rates have been accompanied by increases in child survival. In 1975, the overall under five mortality rates in El Salvador was 162 deaths per 1,000 live births; in 2000, that number had dropped to 40 deaths per 1,000 live births, a decrease of 300%. Reductions by similar percentages have occurred in other countries as shown in Table 2.

Table 2. Health Indicators in Latin America

	Under 5 Mortality Rate M/F (per 100,000 live births)	Maternal Mortality Ratio (per 100,000 live births)	TFR (2000-2005)	CPR All Methods/Modern Methods
World	79/79	400	2.68	61/54
Latin America and the Caribbean	45/36	190	2.7	69/60
Belize	41	140	3.4	--
Costa Rica	15/11	29	2.8	75/65
El Salvador	38/31	120	3.2	60/54
Guatemala	58/51	190	4.41	38/31
Honduras	55/44	110	4.3	50/41

¹ Unsafe abortion is defined as "a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both." World Health Organization. 1992. The prevention and management of unsafe abortion. Report of a Technical Working Group. Geneva, WHO (WHO/MSM/92.5).

Nicaragua	50/40	150	4.3	60/57
Panama	26/22	70	2.6	58/54

Sources: UNESCO, 2000; UNDP, 20002; UNFPA, 2002

These indicators clearly illustrate the variation within the region. Furthermore, there are several regional trends that merit attention because of their impact on vulnerable populations.

1. **Adolescent pregnancy** is a critical issue for the LAC region. Adolescents² currently comprise 31.6% of the LAC population; by 2015, it is estimated that this percentage will be reduced to 26.3% (UNDP, 2002). The Pan American Health Organization (PAHO) recently estimated that among women between the ages of 20-24 years, approximately one-third had their first pregnancy prior to age 20. The proportion of adolescents giving birth by age 20 in most countries in Central America is much higher than the regional average - 46% in El Salvador, 45% in Guatemala, 49% in Honduras and 52% in Nicaragua (Boyd, 2000). According to PAHO (2002):

“...Many of these adolescent pregnancies are unwanted or mistimed; therefore, they are more likely to result in health problems for the mother, either because they lead to termination of pregnancy or because young women are less likely to seek appropriate care. Furthermore, the physical and psychological underdevelopment of young women under the age of 16 years of age makes them particularly vulnerable to complications that arise during pregnancy and childbirth...”

Around the world, complications of pregnancies, childbirth and unsafe abortion are responsible for the majority of deaths among 15 to 19-year-old women. Adolescents are generally much less likely to use contraception than their adult counterparts. In Honduras, the CPR among married adolescents is 28% for all methods (Boyd, 200); the comparable CPR for adults is nearly double that percentage - 48% (see Table 2).

2. Most Latin American countries have not experienced the same devastating impact of **HIV/AIDS** as other regions of the world; nonetheless, several countries in the Caribbean, including Haiti, Trinidad and Tobago and the Dominican Republic have prevalence rates ranging from 2.10% among men (2.76% among women) in the Dominican Republic to nearly 5% among women (4.06%/men) in Haiti. In Central America, rates in Honduras (1.20%/men and 1.50%/women) and Panama (1.88%/men and 1.25%/women) are the highest. In all of these countries (excluding Panama), prevalence rates among women are higher than among men, suggesting that women are particularly vulnerable to HIV infection. This is often attributed to sociocultural factors, specifically that women are often unable to negotiate condom use – even with their regular partners, but biological factors are also responsible such as an increased risk for infection. In all other countries in the LAC region, rates do not exceed 1% (UNFPA, 2002).

3. **Gender-based violence (GBV)** is prevalent throughout the LAC region. Violence by a partner and sexual coercion prevent women from having control over their own sexual and reproductive lives and can severely endanger their health. Almost 30 LAC countries have enacted legislation that criminalizes gender-based violence; nonetheless, surveys have shown that between 10 and 50% of women in the region have reported being physically assaulted by a partner. A study in 1990 in Guatemala found that 49% of a sample of 1,000 women in Sacatepequez reported that they had been physically abused by their partner; similarly, a 1995 study in Nicaragua found that of 378 ever-married women between the ages of 15 and 49 in the capital city of Managua, 33% said they had been physically abused in the previous 12 months (69% said they had been a

² The World Health Organization (WHO) defines “adolescence” as the period in human growth and development that occurs after childhood and before adulthood, from ages 10-19. World Health Organization (WHO), 1999. Programme for Adolescent Health and Development. Report of a WHO/UNFPA/UNICEF Study Group on Programming for Adolescent Health. WHO: Geneva, Switzerland.

bused at some point in their lifetime). In addition to the risks of infection posed by unprotected sex, women who have been assaulted are at risk for poor nutrition, brain trauma, miscarriage and other adverse pregnancy outcomes and death (Creel, Lovera and Ruiz, 2003).

Unmet Need for Family Planning and Birth Spacing

Despite the improvements that have been made in reducing maternal and child mortality, and the decline in fertility and increase in contraceptive use, there is still a need to further improve the health of women, men and children in Latin America. High rates of both adolescent pregnancy and unsafe abortion indicate that unplanned pregnancies continue to be a problem, and there is an unmet need for family planning and birth spacing. Demographic and Health Survey (DHS) data from Guatemala in 1998-99 showed that of all married women aged 15 to 49, 38% were using a contraceptive method, and that an additional 26% of women had an unmet need for family planning; 12% of these women had an unmet need for spacing their pregnancies, and 11% had an unmet need for limiting. A similar analysis of data collected in Nicaragua in 1997-1998 showed a total unmet need of 15%, with 6% need for spacing and an 8% need for limiting (Ashford, 2003). In his analysis of DHS data from Bolivia and Peru, Jansen (2002) found that 80% of the unmet need for family planning among women with less than two children and women under age 29 was specifically for birth spacing. Younger women, including adolescents, are therefore more likely to want to space their pregnancies.

WOMEN'S EMPOWERMENT

“Gender” is not just another word for women. It refers to the sociocultural roles that men and women play (mother/father, husband/wife, etc.) and the relations that arise out of these socially constructed roles. These roles, and the differing power imbued in them, affect both men’s and women’s access to and control over resources and opportunities, including those needed to achieve and maintain good reproductive health.

Women are more likely than men to experience “...poverty and economic dependence...violence, negative attitudes...racial and other forms of discrimination, limited power (over their sexual and reproductive lives) and lack of influence in decision-making... (that) adversely impact their health...” (Beijing Platform of Action, para. 92). Physical access to services in the absence of the power and control to make the decision to access those services renders their quality or mode of delivery irrelevant and unattainable. A recent study in Egypt reveals the impact of gender on women’s ability to act on unmet spacing or limiting needs. This research suggests that for 80% of the women in the study, gender issues rather than physical access were the main reasons for not using contraception. In order to empower women, programs must provide broadened, linked services that take into account the social, political, psychological, economic and sexual dimensions of women’s health and well-being, i.e., her enabling environment.

Table 3. The Status of Women in Latin America and Central American Countries: 1999-2000

Country	Life Expectancy at Birth (Years)		Adult Literacy Rate (% literate among those age 15 and above)		Combined Primary, Secondary and Tertiary Gross Enrollment Ratio		Estimated Earned Income (US \$)	
	Female	Male	Female	Male	Female	Male	Female	Male
Belize	75.4	72.7	93.2	93.3	72	73	2141	8975
Bolivia	64.2	60.8	79.3	92.0	67	73	1449	3358
Costa Rica	79.3	74.6	95.7	95.5	66	67	4609	12577

El Salvador	73.1	67.1	76.1	81.6	64	63	2347	6727
Guatemala	68.0	62.2	61.2	76.1	45	53	1836	5772
Honduras	68.9	63.2	74.5	74.7	63	60	1295	3596
Nicaragua	71.1	66.4	66.8	66.3	65	61	1431	3310
Panama	76.8	72.2	91.3	92.5	76	73	3960	8004
Peru	71.6	66.6	85.3	94.7	79	81	1950	7695

Source: UNDP, 2002

As shown in **Table 3**, women in all of the countries, especially Bolivia and Peru, have longer life expectancies than men in the region, reflecting a pattern similar to that found in developed countries. In the United States, the average life expectancy for a woman is 79.9 and for men is 74.1. In contrast, in the least-developed countries the life expectancy for women is lower than that of men; in Pakistan, the figures are 59.8 and 60.2 years, respectively.

There is significant variation in disparity between male and female literacy and school enrollment. In countries like Nicaragua and Honduras, for example, the male and female literacy rates are almost equal, and school enrollment is actually higher for women than for men. In other countries, such as Bolivia and Guatemala, the rates of male literacy are more than 10 percent greater than those for female literacy.

Educational disparities in Latin America are not as pronounced as those in other regions. Nonetheless, the disparity in earned income is strikingly low. In every country, women earn less than half of what men earn, and in most countries they earn less than one-third; on average, in Belize and Peru, men's salaries are approximately four times greater than women's. While great strides have been made in women's educational attainment, employment opportunities for women are still relatively limited.

FAMILY PLANNING SAVES LIVES: THE POTENTIAL IMPACT OF BIRTH SPACING

Birth spacing is a critical objective of family planning that is often de-emphasized in favor of the more common practice of using contraception to limit births. In many countries, contraceptive use for spacing has not been emphasized, and methods such as female sterilization are preferred by clients once desired family size has been reached. Demographic and Health Survey (DHS) data show that many women worldwide wish to space births, but their needs are met at a much lower rate than those of women who wish to limit births. This is typically due to perceived side effects attributable to spacing methods.

The CATALYST Consortium (CATALYST), in cooperation with researchers and international family planning organizations, has developed the Optimal Birth Spacing Initiative (OBSI) to revive birth spacing as a key reproductive health concept. The term "birth spacing," when used by CATALYST, refers to the use of family planning to obtain an interpregnancy interval that will achieve the most favorable health and non-health outcomes for mothers, children and their families.

Vital Statistics and Demographic Data

Groundbreaking new research from Latin America and the Caribbean by Dr. Agustín Conde-Agudelo commissioned by CATALYST has shown that both too short and too long birth intervals are a key risk factor for maternal and perinatal morbidity and mortality. Dr. Conde-Agudelo's findings are supported by DHS survey data analysis research from Africa, Latin America, and Asia by Dr. Shea Rutstein and research from North America by Dr. Bao-Pang Zhu and by Dr. Elena Fuentes-Afflick. This research indicates that spacing births for approximately three years has substantially more health benefits than the previously recommended

two-year spacing interval. These findings provide compelling evidence for creating birth spacing policy and strengthening birth spacing messages, counseling and programming.

Interpregnancy interval (IPI) and birth interval (BI) are two different measures used by researchers to measure birth spacing. IPI is defined as the time elapsed between the woman's last delivery and the date of the last menstrual period for the index pregnancy (Birth—Conception). The BI is defined as the time elapsed between one child's birth date and the birth date of the next child (Birth—Birth). USAID uses the birth interval to report on birth spacing. For ease of comparison, IPI can be converted to BI by adding nine months to the interval (assuming a full gestation). In this paper, CATALYST has presented the data as it was collected and reported by each researcher.

**Potential impact of optimal birth spacing on the health and well-being of mothers and children:
Summary of findings**

Table 4. The Health Benefits of Birth Spacing

Birth spacing for three to five years can have tremendous health benefits:	
For children:	For mothers:
<ul style="list-style-type: none">• Lower risk for fetal death• Lower risk for preterm birth• Lower risk for low birth weight• Lower risk for small for gestational age• Lower risk for neonatal death• Lower risk for infant mortality• Lower risk for under-five mortality• Lower risk for stunting and underweight	<ul style="list-style-type: none">• Lower risk for maternal death• Lower risk for third trimester bleeding• Lower risk for anemia• Lower risk for premature rupture of membranes• Lower risk for puerperal endometritis• Lower risk for eclampsia and preeclampsia (pregnancy induced hypertension)

Table 5. The Potential Impact of Longer Birth Intervals (27-36 months)

If births were spaced just 27-32 months...	If births were spaced just 36 months...	
<p>In Latin America:</p> <ul style="list-style-type: none"> • Perinatal mortality would drop 14.1% • Perinatal deaths would fall by 60,500 annually 	<p>In Egypt:</p> <ul style="list-style-type: none"> • Infant mortality would drop 35% • Under age five mortality would drop 45% • Deaths to children under age five would fall by 109,000 annually 	<p>In India:</p> <ul style="list-style-type: none"> • Infant mortality would drop 29% • Under age five mortality would drop 35% • Deaths to children under age five would fall by 1,434,000 annually

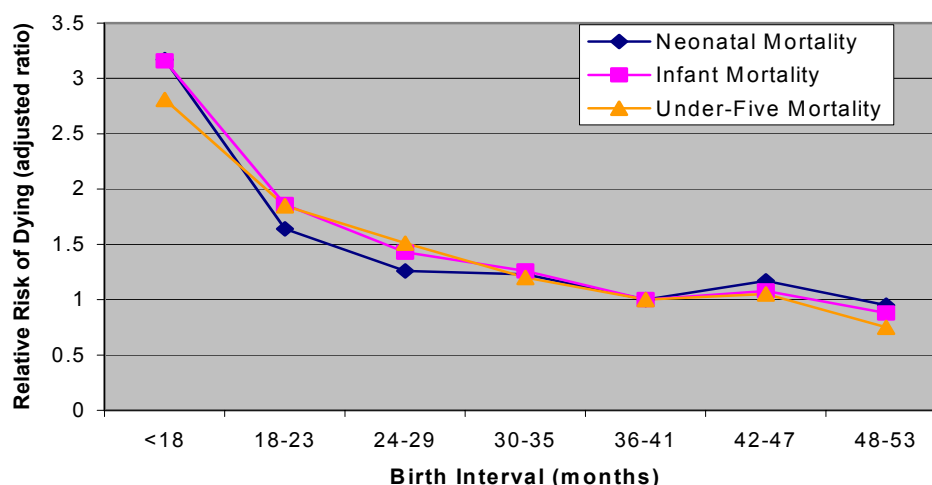
(Conde-Agudelo, 2002)

(Rutstein, 2002)

Impact on Child Health

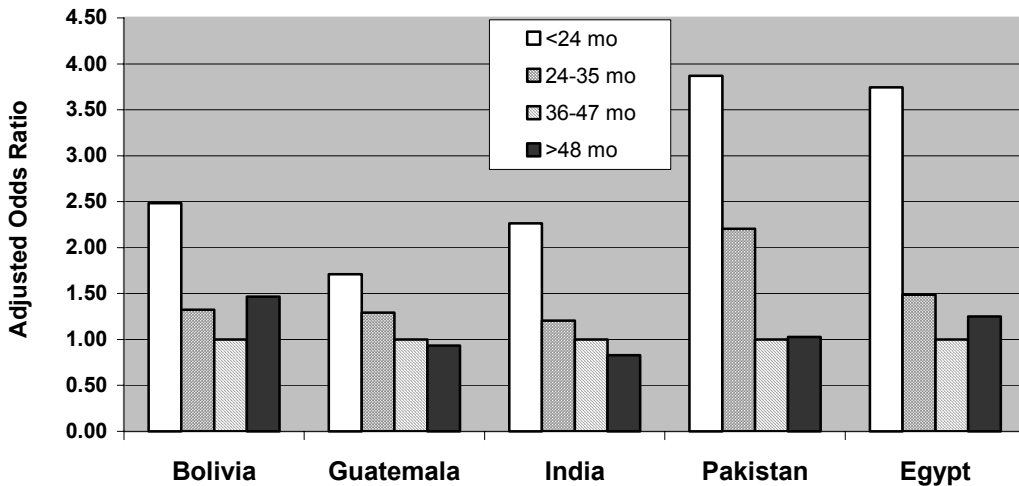
Using the most recent DHS data, Dr. Rutstein analyzed the relationship between birth intervals and child mortality in Bangladesh, Bolivia, Cote d’Ivoire, Egypt, Ghana, Guatemala, Kenya, Morocco, Nepal, Nigeria, Peru, the Philippines, Tanzania, Uganda and Zambia. A number of confounding factors were controlled for, including length of preceding birth interval (if not first born), sex of child, birth order, mother’s age at birth, survival of the preceding child by conception of index child (if not first born), type of provider of prenatal care and timing of prenatal care (if any), number of prenatal tetanus vaccinations, urban/rural residence, mother’s education, index of household wealth, type of person attending the delivery, “wantedness” of the child (wanted at conception, wanted later, did not want more children) and whether the birth resulted from contraceptive failure.

Figure 1. Neonatal, Infant and Under-five Mortality by Birth Interval: Seventeen DHS Countries, Most Recent Survey



Rutstein’s analysis in **Figure 1** shows that children born at least three years after a previous birth are more likely to survive all developmental stages through age five years. When compared to infants born after birth intervals of 36-41 months, infants born 24-29 months after a previous birth had 1.26 times the relative risk of neonatal death, 1.43 of infant death and 1.51 of under-five death. Children born less than 18 months after a previous birth are even less likely to survive.

Figure 2. Infant Mortality Associated with Birth Intervals: Bolivia, Guatemala, India, Pakistan, and Egypt, Most Recent DHS Surveys



After controlling for a host of potentially confounding variables such as education, income, access to services, mother’s age and residence, etc., findings as presented in **Figure 2** indicate that birth intervals of 36-47 months provide a lower risk for infant mortality, and as shown in some countries such as Guatemala and India, there is even a lower risk of infant mortality when birth is spaced more than 48 months. The highest risk is more likely to occur when the interval is less than 24 months.

Figure 3. Children's Nutritional Status by Birth Interval: Bangladesh, Bolivia, Guatemala, Kenya, Nigeria, Peru, and Zambia, Most Recent DHS Surveys

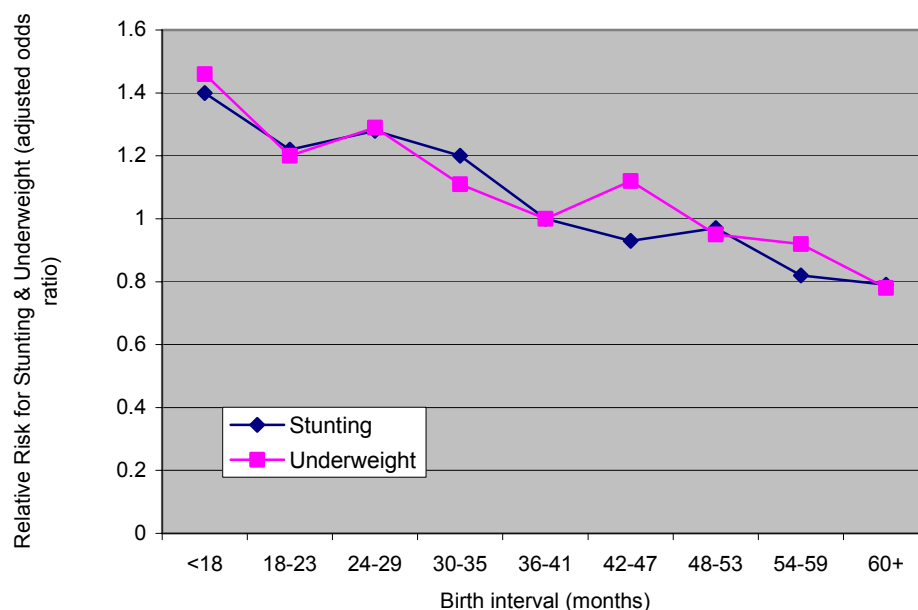


Figure 3 shows that the risks for poor nutritional status dramatically decrease when births are spaced at least three years apart and continue to decrease the longer births are spaced. Infants born three or more years after the preceding birth are less likely to be stunted and underweight. When compared to a birth interval of 36-41 months, children born after a 24-29 month birth interval are 1.3 times more likely to be stunted and underweight³.

Impact on Maternal Health

To determine the association between interpregnancy intervals and adverse maternal outcomes, Dr. Conde-Agudelo conducted a retrospective cross-sectional study using the Perinatal Information System Database (SIP)⁴. From 1985 to 2000, the database has been used to record the pregnancy outcomes of over two million women who were born in Uruguay, Argentina, Peru, Colombia, Honduras, Paraguay, El Salvador, Chile, Bolivia, Costa Rica, Panama, Dominican Republic, Nicaragua, Brazil, Ecuador, Mexico, Bahamas, and Venezuela.

Using the SIP database, Dr. Conde-Agudelo examined the relationship between interpregnancy intervals and adverse maternal outcomes. A total of 520,689 parous women who delivered singleton infants between 1985 and 1997 and who had a previous pregnancy of 20+ weeks were recorded in the study database. The final

³ The data for stunting were based on DHS results for five countries: Bangladesh, Guatemala, Kenya, Peru and Zambia. The data for underweight were based on DHS results from Bolivia, Guatemala, Kenya, Nigeria and Peru. Depending on the country and whether data were available, information was collected for children aged 0-3 or 0-5.

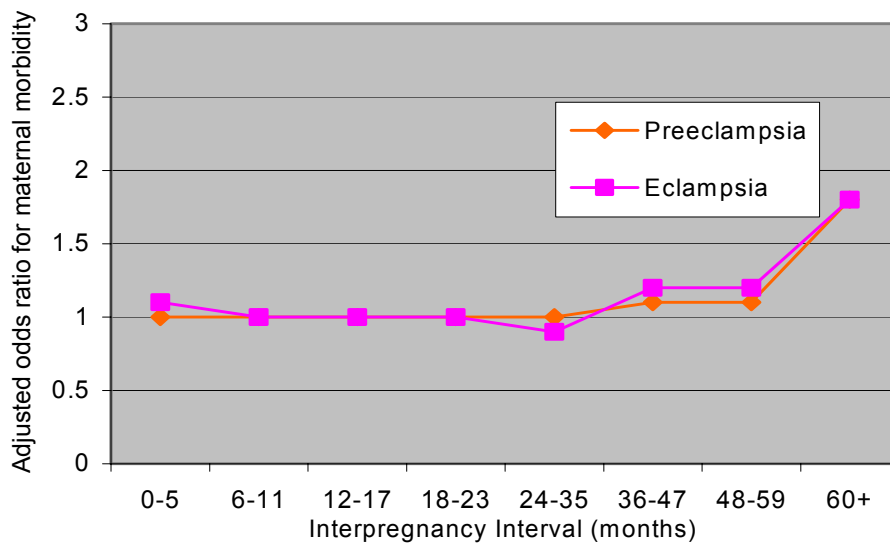
⁴ The SIP database was created in 1983 by the Latin American Centre for Perinatology and Human Development, Division of Health Promotion and Protection, PAHO/WHO, Montevideo, Uruguay.

study population included 456,889 women whose records contained complete data on interpregnancy interval and adverse maternal outcomes. The estimates of the findings were adjusted for the following confounding factors: maternal age, parity, mother's education, marital status, cigarette smoking, pre-pregnancy body mass index, history of miscarriage, history of stillbirth, history of early neonatal death, history of low birth weight, gestational age at first attendance for antenatal care, number of antenatal visits, geographic area, hospital type and year of delivery.

Dr. Conde-Agudelo found that the risk for maternal morbidity is greatest at the shortest birth interval. After controlling for major confounding factors, women with interpregnancy intervals of less than six months when compared to women with an interpregnancy interval of 18-23 months had increased risk of:

- ◆ **Anemia** (relative risk, 1.30; 95% confidence interval, 1.18 to 1.43)
- ◆ **Third trimester bleeding** (relative risk, 1.73; 95% confidence interval, 1.42 to 2.24)
- ◆ **Premature rupture of membranes** (relative risk, 1.72; 95% confidence interval, 1.53 to 1.93)

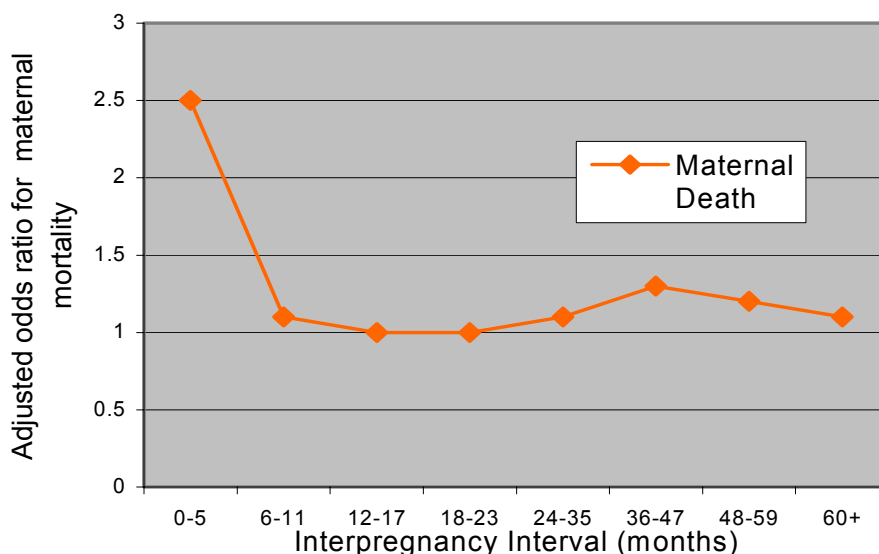
Figure 4: Risk for Maternal Morbidity by Longer Interpregnancy Interval –2: Eighteen LAC Countries, 1985-1997



Dr. Conde-Agudelo also found that there is an increased risk of maternal morbidity with too long birth spacing intervals. As **Figure 4** shows, women with interpregnancy intervals greater than 60 months had significant increased risks of

- ◆ Preeclampsia (relative risk, 1.83; 95% confidence interval, 1.72 to 1.94) and
- ◆ Eclampsia (relative risk, 1.80; 95% confidence interval, 1.38 to 2.32).

Figure 5: Risk for Maternal Mortality by Interpregnancy Interval: Eighteen LAC Countries, 1985-1997



The graph in **Figure 5** indicates that women who have interpregnancy intervals of less than six months are less likely to survive childbirth. When compared with women with interpregnancy intervals of 18-23 months, women with intervals of less than six months showed a relative risk of 2.5 (95% confidence interval, 1.2 - 5.4).

Although an interval of 18-23 months was associated with the lowest risks, the increase in risk of poor maternal outcomes associated with interpregnancy intervals of 12-17, 18-23, 24-35, and 36-47 months was not statistically significant. This suggests that the period of least risk is between 12-47 months.

Research Findings from The United States

Research from the United States supports the findings from developing countries reported by Conde-Agudelo and Rutstein, confirming the health benefits of birth spacing longer than the previously recommended two years.

A 1999 Centers for Disease Control and Prevention study evaluating interpregnancy intervals in relation to low birth weight, preterm delivery and small size for gestational age for almost 175,000 infants in the state of Utah concluded that the optimal interpregnancy interval for preventing adverse perinatal outcomes was 18-23 months (Zhu et al., 1999).

In a similar study, Zhu et al. (2001) analyzed birth records for over 400,000 white and black women in Michigan, evaluating the interpregnancy interval in relation to adverse perinatal outcomes. The researchers found that an interpregnancy interval of 18-23 months was associated with the lowest risk of adverse perinatal outcomes, confirming the results of the Utah study. Both studies controlled for several sociodemographic variables for the analysis of perinatal outcomes, including age at delivery, marital status, education, race or ethnic group, residence (rural or urban), utilization of prenatal services and self-report of tobacco and alcohol use during pregnancy.

An analysis of the relationship between interpregnancy intervals and the risk of premature infants was undertaken by Fuentes-Afflick and Hessol (2000) on almost 300,000 infants of both Hispanic and non-

Hispanic white origin in California. The researchers concluded that an interpregnancy interval from 18-59 months was associated with the lowest risk of very and moderately premature infants in both groups.

This new research shows that there is an optimal birth spacing window when the risks for **both** maternal and child morbidity and mortality are lowest.

Perspectives on Birth Spacing: Results of Focus Group Studies

The medical data above clearly illustrate the benefits of birth spacing for three to five years for both mothers and children. To gain an understanding of whether benefits of birth spacing are understood by providers and clients, CATALYST conducted focus groups in Bolivia, India, Pakistan and Peru. The focus groups provided important information about the extent to which women, their male partners and their mothers-in-law understand and subscribe to the concept of birth spacing; in addition, the study yielded culturally-specific information about the perceived benefits and drawbacks of spacing and beliefs about the use of different contraceptive methods as a means for practicing birth spacing. In all countries, the focus groups participants demonstrated overwhelming agreement regarding the importance of birth spacing.

Findings varied among countries, but there were a number of beliefs that were common across the cultures included in the study. The two most prominent reasons for spacing were economic considerations and concern for the health of both the mother and the baby. Economics was a significant factor in most countries; in some cases, economic factors were viewed as a barrier to spacing and in others they were not. In Peru, for example, an economic rationale was given as a reason for not spacing: economic dependence on men impeded women's decision to space because they feared their partners would leave them if they did not become pregnant. In other cases and in all countries, economic stability was offered as one of the primary reasons for spacing: with fewer children at one time, families would have more resources for each child.

In all countries, providers, women and men believed that spacing was of central importance for the emotional and physical health of women, children and families. Providers noted that children who were too closely spaced could suffer multiple deleterious health effects, including a deficit in meeting their emotional and nutritional needs. Women believed they would have more time to dedicate to their children and their own personal development if they had to care for fewer small children at one time. Men felt that their wives would have more time to care for their husbands and maintain the household if they spaced.

Two significant barriers to spacing that were common to all of the countries were gender inequity and erroneous beliefs about contraceptive methods. Gender inequity often inhibited the ability of women to decide to practice birth spacing. In Latin America, husbands and male partners exercised a great deal of control over whether a woman could space. In Bolivia, women said they were pressured into having sexual relations, and that men often did not consider the fact that they could become pregnant. In Peru, both providers and women commented that men had control over sexual decision-making and would also suspect their wives of infidelity if they used a birth control method. In all countries, the support of the husband was considered one of the most important enabling factors of spacing.

Local beliefs about contraceptive methods also proved to be a significant barrier to contraceptive use, whether it was a lack of accurate knowledge regarding correct use of birth control methods or a dislike of the side effects of various birth control methods. In Peru, one woman reported that she stopped taking pills while breastfeeding because she feared that it would affect her baby boy; providers in Peru also reported that postpartum women would not initiate use of a birth control method until after their period had returned – when they were already fertile. In Bolivia, some women believed that IUDs caused cancer.

Recommendations for Program Planners

Overall, the findings provide three critical implications for health care providers and programmers. First, particularly in Peru and Bolivia, health care providers stressed that there was a lack of counseling norms and protocols for them to follow; clients' views reflected this ambiguity about the appropriate spacing interval, stating that different providers often gave them different guidance. Secondly, in all countries, cultural and religious beliefs often contradicted the concept of family planning. In Bolivia, for example, women remarked that couples do not decide to have children, "it just happens." In Pakistan, one woman said of birth spacing and use of contraception: "It's not permitted in Islam. It happens with the will of God." Finally, findings from all countries indicate that husbands, partners and, in some cases, mothers-in-law, are pivotal influencers on the decision to space births, acting out gender norms that limit women's perceived ability to make decisions.

These conclusions yield important recommendations for those who plan birth spacing programs. First, in order to develop consistent birth spacing messages, it is important to establish clear guidelines for providers with regard to birth spacing counseling. Secondly, in order to address the impact of cultural and religious beliefs, birth spacing messages need to be designed in culturally appropriate ways. Program interventions need to address the determinants of *not* birth spacing in order to help facilitate the adoption of birth spacing norms. Finally, birth spacing messages and programming need to focus on changing the attitudes of significant others like husbands and other family and community members, and empowerment programs need to work with women to create an environment that enables women to make informed decisions to space.

THE PROGRAMMATIC RESPONSE: AN INTEGRATED APPROACH TO REPRODUCTIVE HEALTH

The results of the focus group discussions reveal that the reasons why women and men do or do not space reflect the complexity of their lives. Barriers and enablers range from education and socioeconomic status to gender roles. In order to be effective, the programmatic response will need to address the multiplicity of influencing factors or risk failure. As a synergistic combination of programming, an integrated approach provides a stronger response to reproductive health and family planning than vertical programs. Evidence-based best practices in clinical *and* non-clinical areas that have a direct impact on reproductive health and family planning service delivery should be included at every opportunity.

The development of the integrated approach to reproductive health programming stems from the recognition that optimal reproductive health outcomes cannot be achieved through clinical services alone. Years of development experience have shown that in order to reduce mortality and improve health outcomes, programs have to account for the broader *social* realities that influence people's lives. Social barriers to reducing mortality and achieving positive reproductive health outcomes include the following:

- **Socioeconomic status:** Many women and couples cannot access services because of lack of availability of services or awareness of those services, or lack of resources, including means of transportation and ability to pay for services.
- **Status of women:** Many women cannot access lifesaving RH and FP services (including contraception) due to lack of power to make and carry through decisions about FP use, health care services, their own mobility, economic autonomy and how household resources are spent.
- **Sociocultural factors:** Many women and men may not be able to access RH and FP services because of cultural beliefs that emphasize high fertility or prohibit use of contraception.

- **Educational attainment:** Many studies have shown a positive correlation between years of education and contraceptive use; women with more years of education are more likely to use contraception and to access RH services.

Integrated Reproductive Health Programs Link Health Programs to Social Programs

Social programs such as literacy, economic empowerment and gender programs directly address social inequities. These interventions are not nominally reproductive health programming, but they often incorporate RH components or provide linkages to RH programs. In addition to improving reproductive health outcomes, social level programs have the potential to effect broader social change by empowering women and their families.

Health programs directly address health, including reproductive health, as well as basic family planning services and Safe Motherhood programming. Effective integrated programming creates linkages *among* health programs and *between* health programs and social programs.

Health programs can be further sub-divided into clinical and non-clinical programs. Clinical services are typically provided at a hospital, clinic or other service delivery point, and include antenatal, delivery, neonatal and basic family planning services and screening for cervical and breast cancers. Non-clinical services are delivered outside of the clinic system and include service delivery such as family planning, Safe Motherhood and preventive health measures, such as behavior change communication campaigns and community-based health education, including community programs designed to involve men in reproductive health. Non-clinical programs can be implemented through a variety of networks, including peer educators, a cadre of female health workers or volunteers, community-based distributors, women's groups, non-governmental organizations (NGOs) or community-based organizations (CBOs). Non-clinical programs are especially important in expanding access, particularly in rural areas where government services may not be regularly available.

Whether health services are clinical or non-clinical, an emphasis on client-centered services is critical to creating linkages between reproductive health and other health programs, between clinical and non-clinical programs, and between health programs and social programs. When providers adopt a client-centered approach, they address social factors that may affect the client's ability to make decisions about RH and FP services and behaviors. In addition, they seek to identify other health and social services that may help the client improve her/his health, ultimately linking the client to those services. Every visit to a health facility is viewed as an opportunity to deliver essential health services that will benefit mothers, children and the entire family.

In order to meet the client's needs, an integrated programming approach relies upon established linkages and referral systems at both the health facility and outside the health facility.

Linkages at the Health Care Facility

Between RH services: Clients often seek health services for specific medical conditions in emergency situations. From the client-centered perspective, a visit to the health facility is viewed as an opportunity to identify and respond to multiple health needs for critical, potentially lifesaving services such as screening for STIs and HIV/AIDS; screening, treatment and referral for gender-based violence; family planning counseling and the provision of contraceptive methods to for postpartum/postabortion women.

Between RH and other Health Services: Women and men who seek medical services for specific health concerns may have other reproductive health conditions that are not typically addressed within the general

health context. Similarly, parents who seek services for their children, such as vaccinations, well-child exams, or emergency services like oral rehydration therapy, may have reproductive health concerns for which they have not sought treatment. A client-centered counseling approach and a functional referral system can help ensure that services meet not only the general health needs of the client, but also the reproductive health needs.

Linkages Between the Health Care Facility and the Community

Linking Clinical and Non-Clinical Health Programs: Non-clinical programs are often the first point of contact between the health system and community residents. They provide services in FP, Safe Motherhood, HIV/AIDS education and counseling, health education and social support, among others. They can also help ensure access to clinical services; for example, a community organization can help community members identify warning signs and seek clinical treatment in the event of an obstetric emergency; peer educators can refer people to voluntary counseling and testing (VCT) for HIV/AIDS, community-based distributors (CBDs) can refer women who choose tubal ligation to clinical services. These are just a few examples of how clinical and nonclinical services can complement one another.

Linking Health and Social Programs: Linking social programs to health programs addresses two areas that are critical to the success of health programs: *barriers* to health and *access* to services. There are a variety of barriers that impede the adoption of behaviors necessary for good health. Social programs can help lessen the impact of those barriers:

- Microcredit and microenterprise programs can address financial barriers; these programs often make financial resources available to women for the first time.
- Gender programs can address the power imbalances in relationships that affect decision-making ability, authority and autonomy).
- Democracy and governance programs, including legal literacy, are crucial in empowering individuals to know, claim and advocate for their rights.
- Literacy programs remove educational barriers that impede the ability to read and accurately use information.
- Behavior change interventions empower individuals to perceive the reproductive health benefits of specific behaviors, ultimately motivating them to adopt the desired behaviors.

Social programs can also be used to expand access to health services. Virtually all kinds of social programs can be used to provide health information and services:

- Literacy programs can have embedded health messages and health materials can be included in tin trunk libraries. Such “libraries” – a collection of books and materials enclosed in a portable tin trunk – are often the only source of written material available to the public in resource poor areas.
- A dairy cooperative or other micro-credit program that can be used to distribute contraceptives.

Anecdotal evidence shows that women in particular appreciate the notion of “one stop shopping,” in which multiple needs – ranging from health to finance to literacy – are addressed through one program and in one setting. In reality, many of these social programs address *both* barriers and access. The dairy cooperative example mentioned above addresses not only both a financial barrier to utilization of services but also expands access to services by providing contraceptives onsite, since members of the cooperative can buy their needed contraceptives with money gained from selling their milk through the cooperative.

Gender programs that train clinical staff in gender-friendly service delivery can remove gender barriers that prevent women from asking questions or receiving the necessary information to make informed decisions.

While gender programs can empower women as individuals, male involvement programs reach out to men, bringing them into areas that affect the well-being of their families, including birth spacing, HIV/AIDS prevention, and STI treatment. These programs also address the very real needs of men for health information and services.

Summary of the Integrated Approach: *A client's ability to act – to make decisions about life and health, to access services and to follow through with medical advice - is determined by social identity, including gender identity, which is influenced by family, community and broader social, cultural, political and economic factors. Integrated reproductive health programs seek to address these contextual factors.*

Integrated Approaches that Work: Evidence-based Case Studies

Client-centered Services

Traditionally, the relationship between providers and patients has been described as paternalistic; the provider facilitates the interaction by asking questions, but often they made a diagnosis or contraceptive decision for the client. Client-centered models of provider-client interaction are more egalitarian and dynamic, helping to facilitate the identification of physical and emotional health needs that extend beyond the client's immediate medical needs. This approach includes assessing the client's social status by inquiring about her ability to negotiate factors that impact upon her reproductive health such as contraceptive use, access to resources or services and communication about RH needs with her partner. Client-centered approaches can be applied in both clinical and nonclinical settings, and can help empower women through counseling, appropriate health education, information about follow-up services and referrals to other reproductive health and social services.

Client-centered Communication in the Clinic

In order to assess the feasibility and effectiveness of client-centered communication styles, Abdel-Tawab and Roter (2002) conducted a study on provider-client communication in **Egypt**, identifying statements of solidarity with the client, information-giving statements, and discussion facilitation as client-centered behaviors; in contrast, questions, instructions, directions and disagreement with the client were identified as physician-centered behaviors. Of a total of 112 consultations that were audiotaped and analyzed, approximately one-third were classified as client-centered.

The study results show that clients were more satisfied when interaction was more client-centered and when they participated more actively in the encounter. Clients were more likely to be satisfied by

- 2.8 times when the visit was classified as client-centered (rather than physician-centered).
- 2.2 times when there was a lower physician/client talk ratio (rather than a high ratio).
- 3.3 times when the client felt that she had chosen her contraceptive method (rather than the physician choosing the method).

In addition, women who received client-centered services were three times more likely to be using the same method seven months after the visit to the clinic, suggesting that client-centered services can have a positive impact on rates of method continuation.

The study also yielded important findings for program planners. On average, the client-centered consultations took only one minute longer than the physician-centered consultations, indicating that client-centered approaches do not necessitate additional human resources in health care settings.

Client-centered Services in the Community

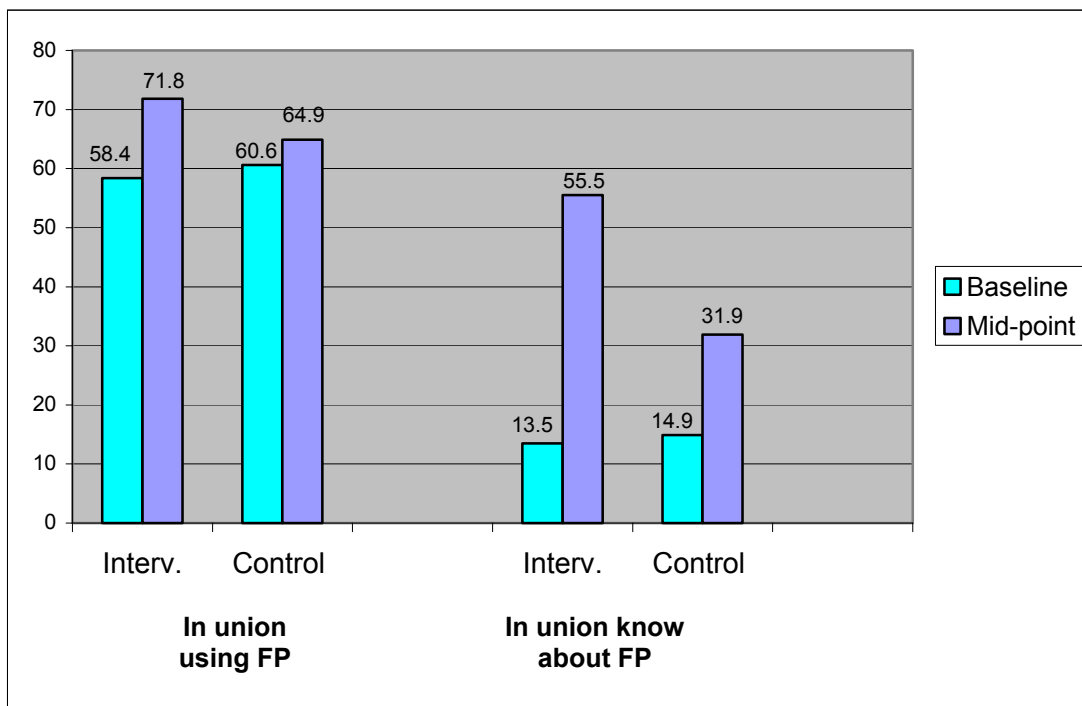
Non-clinical client-centered approaches are based on the premise that services must reach into communities in order to be most effective. **Peru** has some of the poorest reproductive health indicators in Latin America, including high rates of unwanted pregnancy, births and unsafe abortion, as well as high rates of STIs and infections of the reproductive tract. The reproductive health status in rural areas where health services are of poor quality or unavailable is even worse. Since 1995, an NGO, Movimiento Manuela Ramos, has implemented *ReproSalud*, a client-centered program that has succeeded in simultaneously empowering women and providing reproductive health education to both women and men.

The *ReproSalud* project has focused predominantly on clients in rural, mountainous areas in nine provinces of Peru. Prior research in these areas had shown that sociocultural barriers often distanced clients from the health services in these communities; clients were distrustful of reproductive health services, and also felt that providers displayed a lack of respect for their traditional cultural beliefs. Gender barriers in families and communities were also found to be a major contributing factor to poor reproductive health outcomes, since many women do not have the power to negotiate contraceptive use with their partners.

ReproSalud programmatic interventions in communities begin with facilitated workshops in which women analyze their sexual and reproductive health (SRH) problems in a participatory research process. The women are encouraged to determine the causes of the problems, identify their priorities with respect to SRH, and to develop programmatic solutions to these problems. The women identified the following as the most common problems: too many children; suffering during childbirth; encountering domestic violence; and experiencing ‘white menses’ (vaginal discharge).

In the first stage of the project activities (between 1997-1999 and 2000-2001), Manuela Ramos provided educational forums to increase community awareness about these problems, reaching 123,000 women and 66,000 men.

Figure 8. Percent change in FP Use and Knowledge about FP Among Women: Peru, 1997-1999 to 2000-2001



Source: Ferrando et al. 2002

Figure 8 compares data from 70 intervention communities and 25 control communities in the baseline period (1997-1999) and at the mid-point of the project (2000-2001). In the intervention group, the percentage of women who were in a union and using contraception increased from 58.4% in the baseline period to 71.8% at the mid-point; in the control group, the corresponding percentages were 60.6% and 64.6% respectively. While the changes in both groups were statistically significant ($p < 0.05$), the change in the intervention group was greater (13.4% in the intervention group vs. 4% in the control group). The evaluation also showed an increase in knowledge about FP; “in union know about FP” refers to whether women can explain how at

least one FP method works. For the intervention group, this percentage increased by greater than 40% (from 13.5% to 55.5%); for the control group, the percentage increased by only 17% (from 14.9% to 31.9%). Again, both of the changes were statistically significant, but the percent change in the intervention group was much greater.

Social Programs: Addressing Gender Barriers

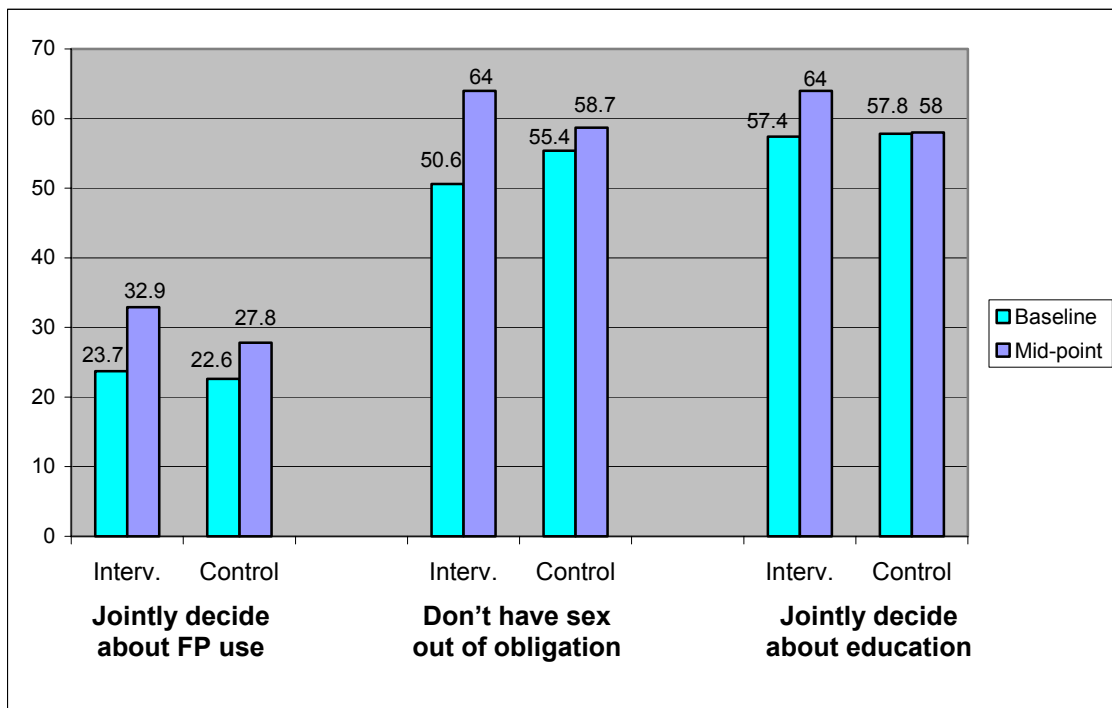
Gender programs focus on equalizing gender imbalances, such as improving access to education for girls and increasing women’s authority and control in decision-making. They can lead to development impacts across sectors by reducing fertility, improving health, increasing incomes and productivity. Programs that address differential opportunities, constraints, contributions and benefits have been demonstrated to improve health outcomes, increase access to services, improve communication, negotiating and advocacy skills, increase participation, and improve decision-making of diverse populations.

The programs described in this section reflect the nature of gender, that is the relationship between men and women. So, gender programs include those focused on women’s empowerment programs and men’s participation. Given that reproductive health problems are not just the outcome of male or female behaviors, solutions to these problems cannot be developed by working solely with men or women. Reproductive health programs must address the relationship and power imbalances between men and women to effectively achieve good reproductive health for all.

Women’s Empowerment

In addition to the SRH results, the ReproSalud project mentioned above measured broader gender results, as depicted in **Figure 9**.

Figure 9. Percent change in Empowerment Indicators Among Women: Peru, 1997-1999 to 2000-2001



Source: Ferrando et al., 2002

In the intervention group, the percentage of women in a union who reported that they jointly decided with their partner about sex, family planning and the number of children they would have increased from 23.7% to 32.9%; in the control group, the corresponding percentages were 22.6% and 27.8%. In the baseline period, 50.6% of women in the intervention group said they did not have sex out of obligation; this number increased to 64% at the midterm evaluation; in contrast, the corresponding percentages of women in the intervention group only increased from 55.4% to 58.7%, representing an increase of only 3.3% as opposed to a 13.4% increase.

In addition to the focus on reproductive health, the *ReproSalud* project also sought to create broader outcomes in the area of gender equity. The variable “percent of women in union who jointly decide how much education their children should get” (identified as “jointly decide about education” in Figure 8) aims to measure whether women feel that they can assume an equal role in decision-making about their children’s future. In the intervention communities this percentage changed from 57.4% to 64%, and in the control communities, the number changed from 57.8% to 58%; the change in the intervention group was statistically significant while the change in the control group was not.

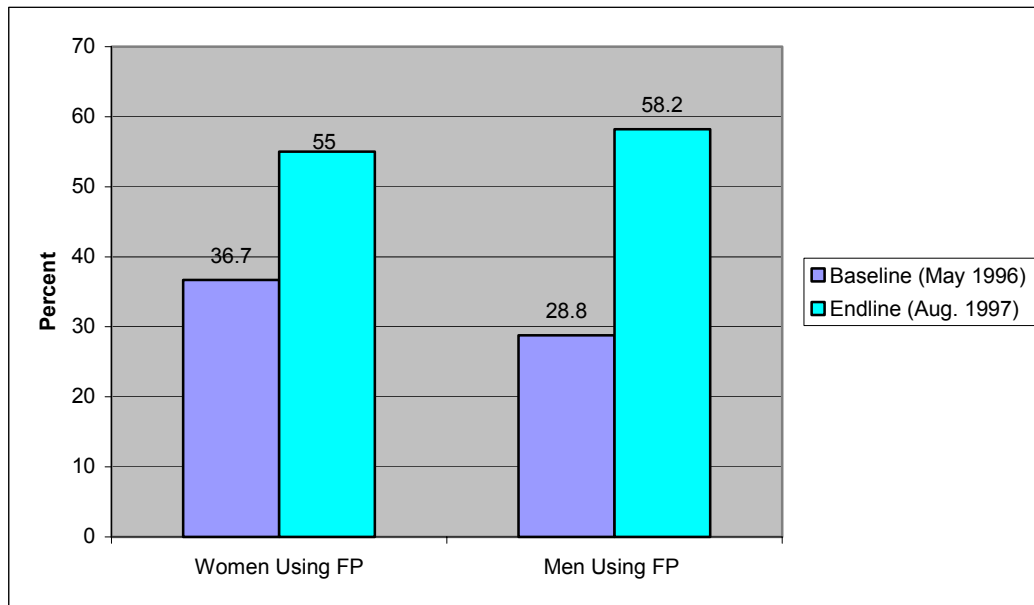
Male Involvement

When one thinks of reproductive health it is common to think of women – their health issues and the need to empower them to make informed choices. This exclusive focus has resulted in a disproportionate responsibility on women for reproductive health and family planning. However, especially when family planning is concerned, use of contraception is largely dependent on the attitudes and participation of men. Furthermore, the prevention of HIV and other STIs largely depends on the participation and involvement of male partners. Reproductive health programs that incorporate male involvement can save women’s and men’s lives by encouraging women’s equal participation in RH decision-making, increasing men’s support of women’s sexual and reproductive health and of children’s well-being, and meeting the reproductive and sexual health needs of men.

In **Honduras**, Care-Honduras and the Population Council INOPAL/III developed a project that sought to involve men in reproductive health decision-making by using an existent agricultural extension program (the Community Agriforestry Project or PACO) to reach those men (Lundgren et al. 1998). Prior to the intervention, an assessment had shown that only 42% of women in the rural communities included in the intervention thought that their partners would support their family planning decisions; the study also found that only 50% of the women who did not want to have another child in the next two years were using contraception.

The project included two different types of interventions that were carried out between May 1996 and August 1997. In one sector SRH education was provided during extension meetings using participatory activities, generating discussion on topics such as responsible fatherhood, safe motherhood and STIs. In the other sector, a “Family Management Plan” booklet was distributed to rural couples. The booklet led couples through the process of making decisions about family planning, discussing issues such as childcare, household resources, couple communication and maternal/paternal health. In the final evaluation, there was contamination across the two sectors and contamination between intervention and control areas; it was not possible to determine whether the outcomes of the two types of interventions were different or whether the outcomes in the control area differed from those in the two intervention areas.

Figure 10. Percent Change in FP Use Among Women and Men: Honduras, 1996-1997



Source: Lundgren et al., 1998

Figure 10 illustrates the increase in FP use during the intervention period in all areas. Since the intervention was targeted at men, it is not surprising that the increase in FP use was higher among men (from 28.8 to 58.2%) than among women (from 36.7 to 55%). Nonetheless, this study conclusively illustrates that men can play an active role in their own reproductive health and family planning, and that their participation can have a positive impact on the reproductive health of their partners. Although women were not the target group of the intervention, they increased their FP use by a statistically significant percentage as well. Involving men in decision-making about FP use therefore had positive outcomes for *both* men and women.

In addition to the increase in FP use, study participants demonstrated an increase in their knowledge about SRH in general. Among both men and women combined, knowledge about cervical cancer prevention increased from 62.7 to 82.5% and knowledge that use of condoms can prevent transmission of STIs increased from 35.7 to 62%.

APPLYING THE INTEGRATED APPROACH TO OBSI

The goal of an integrated FP/RH program is to address the multiple barriers that prevent women and families from practicing family planning, which is widely recognized as a means to improve the health and economic well-being of women and their families. Optimal Birth Spacing is a critical objective of family planning that is often overlooked in favor of the more common practice of limiting births to the desired number of total children. Demographic data confirm that many women worldwide wish to space their births, but their needs are met at a lower level than the needs of women who wish to limit births. Optimal birth spacing reduces morbidity and mortality among women, infants and children. Provision of family planning education and contraceptive methods, including options for both spacing and limiting, should be incorporated into integrated reproductive health programs. Reproductive Health programs should link to critical social programs to empower women to act on their desired reproductive health choices, such as for birth spacing.

Initiating and maintaining birth spacing for the optimal three to five years does not just require actions on the part of the individual woman; her partner/family and community as well as the service delivery and national policy levels must take and sustain correspondent actions if the individual woman's choice is to be realized. These different levels that impact upon a woman's ability to exercise her reproductive choices comprise the woman's enabling environment as shown in **Figure 11**.

Actions that are congruent and supportive of a woman's decision to space births can be taken at each level of the enabling environment, and are illustrated in the table below in relation to 1) knowledge about, 2) negotiation of, 3) access to and 4) maintenance of birth spacing behaviors. The desired individual behavior is listed in the individual column, and the ways in which the different levels of influence can support that behavior are listed in the other columns.

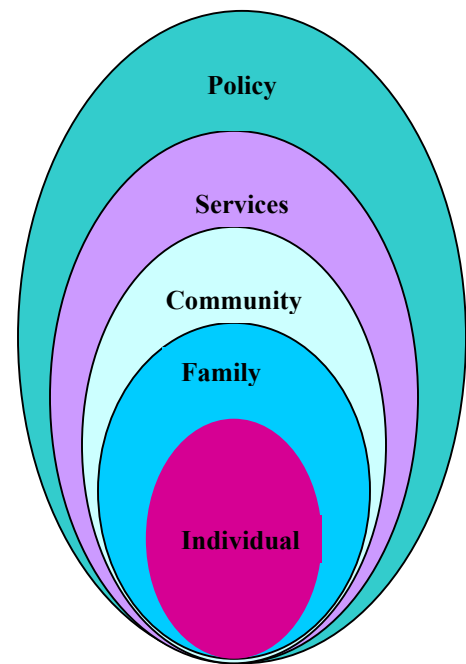


Figure 11. The Individual and the Levels of Her Enabling Environment
(Enable Project, CEDPA 1997)

Table 6. Birth Spacing Programming at Each Level of the Enabling Environment

	Individual Woman	Family	Communities	Services: Clinical and Nonclinical	Policies
1) Knowledge	Knowledge of benefits of OBS and different contraceptive methods; where to obtain a method; address misconceptions and myths	Need to know benefits of OBS, and support women	Need information on OBS and need to support OBS work in the community; address misconceptions and myths, have community analysis and discussions.	<p><u>Clinical</u>: Provide information at all levels of service provision on OBS and through different kinds of providers, including midwives (providers have to know and provide information to clients).</p> <p><u>Nonclinical</u>: Provide information through CBD programs in the community, including peer educators, female health volunteers, traditional birth attendants, Mothers Clubs.</p> <p><u>Social programs</u>: Provide information through schools, democracy and governance programs, literacy, day care facilities, employment-based programs, behavior change communication (BCC) programs on radio, TV, print media, community drama and movies.</p>	<p><u>OBS guidelines</u>: Adoption of Guidelines by the Ministry of Health, WHO, FIGO, PAHO and medical associations, and other related Ministries.</p> <p><u>Determine messages</u>: CAs and coalitions of CAs, donors, including USAID, UNFPA, other bilateral and multilateral donors.</p> <p>Adoption of OBS guidelines by other CAs.</p>

	Individual Woman	Family	Communities	Services: Clinical and Nonclinical	Policies
2) Negotiation	Able to negotiate timing and spacing of births with partners.	Male partner; need to encourage/facilitate negotiation with partner. Mothers-in-law (or other influential figures depending on the culture) need to support women's decision making	Peers and village elders need to support/respect decisions; male peers don't ridicule and female peers should not refer to women as infertile when they do not bear children in rapid succession.	<p><u>Clinical</u>: Providers need to respect/support partners' involvement: Counsel, educate and empower both men and women; encourage shared decision making through male involvement programs.</p> <p><u>Social programs</u>: Broader gender programs can renegotiate power relationships, which improve individual empowerment and self-efficacy. BCC interventions can help encourage development of negotiation skills and create new social norms with respect to joint decision-making.</p>	Develop policies/programs that encourage male and community involvement in and support of OBS and FP use.
3) Access	Able to buy/obtain services or products.	Provide money for services; allow women's mobility to access services; excuse women from chores or minding children to allow for time to seek services; men can buy commodities but reflect partners' RH choice and support method choice.	Play an active role in OBS services through financial support; allow OBS workers in community; request support, especially volunteers; provide a site or buildings for programs; support women and men accessing programs and buying	<p><u>Clinical</u>: Must have high quality services: culturally appropriate, gender sensitive, range of methods (consistent supply), competent providers, affordable and available (hours, locations) services.</p> <p><u>Nonclinical</u>: Community-based distributors, etc.: Have consistent supply, range of methods, provide access in rural areas and to women who don't have mobility, bring services to women.</p> <p><u>Social programs</u>: Address barriers, including financial (micro-credit), gender (empowerment), and literacy/education; use all of these to</p>	<p><u>Policy and procedures</u>: For improving quality of care, which includes accreditation programs and continuing medical education.</p> <p><u>Systems</u>: For procurement, logistics management, price control.</p> <p><u>Partnerships</u>: Involve the private sector.</p>

	Individual Woman	Family	Communities	Services: Clinical and Nonclinical	Policies
			commodities.	expand access. <u>Pharmacies:</u> Quality, affordable services and commodities.	
4) Continuation for 3 – 5 years	Sustain OBS behavior: Challenges could include side effects, method failure, lack of method availability, and cost.	Commitment to OBS: Allocation of resources, emotional support for three years and support to understand and accept side effects (if any are experienced); know when to refer to services.	Supports practice for three years. Community norms should not apply pressure on couples to initiate childbearing prior to that time.	<u>Clinical:</u> Provide counseling and support on possible side effects and contraindications of method use before methods are initiated and support women and provide counseling to those who may experience side effects once a method is initiate; also provide counseling in non-FP services (see Appendix A). <u>Nonclinical:</u> BCC messages, social marketing, etc.	Sustained policies and financial commitment to ongoing availability of services and commodities.

Note: All of these behaviors are easier if the individual knows and can articulate and demand her rights and families, communities, organizations and policies respect and respond to these rights.

The appendices include two tools that can be used to put an integrated approach to OBS into practice. Appendix A addresses critical questions that program planners should ask when planning to integrate birth spacing into existent programming. For example, some preliminary topics for discussion include an investigation of the magnitude of the problem of non-spaced pregnancies, a discussion of what women and men want to achieve in terms of birth spacing, and what the determinants of birth spacing are in the country context. Appendix B offers a list of possible means for integrating birth spacing into existent health services and programs, such as HIV/AIDS prevention and Maternal and Child Health programs, and social programs, such as literacy, micro-credit and male involvement programs

CONCLUSIONS FOR PROGRAM PLANNERS

Traditionally, governments and NGOs have been responsible for providing all health care and other social services. The cost of providing basic health care for an entire population can be staggering and requires the pooling of resources from the public, private and commercial sectors. The participation of the commercial sector, including the pharmaceutical sector, is crucial to increase access to quality products and services in a sustainable fashion. Corporate social responsibility addresses the need to reach out to businesses to support social investment. Nongovernmental organizations (NGOs), including not only health organizations but also those working in other sectors such as agriculture, education, youth and social program, can vastly extend the reach of reproductive health programs, especially to difficult-to-reach areas and populations. The present and future health of people will be shaped by the ability of governments to partner with all three sectors.

Optimal birth spacing is just one type of RH programming that can be implemented through integrated programming. In order to be most effective, all reproductive health and maternal and child health interventions, including emergency obstetric care (EOC), postabortion care (PAC), gender-based violence and HIV/AIDS screening and prevention programs, and expansion of access to contraceptive methods should be implemented in an integrated fashion. The 2002 UNFPA State of the World's Population specifically identifies investments in health, education and gender as equally vital to improvements in global reproductive health. Creating linkages between different types of programming serves to strengthen the outcomes of both social and health programs.

Considerations for Action:

In order to integrate reproductive health programs, program planners at the service delivery level should:

Develop partnerships with communities and social program planners by:

- Understanding the social context of the service environment, including the impact of gender, socioeconomic status, educational level and other factors affecting reproductive health;
- Identifying social organizations;
- Creating linkages between reproductive health services and social programs that address barriers to reproductive health; and
- Utilizing existing social networks (literacy groups, micro-credit corporations, etc.) or, where none exist, creating them to reach women and men in more supportive environments.

Train providers in a client-centered approach to reproductive health so that they:

- Are familiar with interventions such as PAC (postabortion care), EOC (essential obstetric care), OBS (Optimal Birth Spacing) and EMM (expanded contraceptive method mix). Providers should also be gender sensitive and trained to recognize signs of gender-based violence;
- Can work with the client to determine if she can resolve some of the barriers to her reproductive health on her own or in collaboration with members of her social network; and

- Can provide referrals to appropriate RH services and other health or social services that meet identified needs.

For Additional Information, please access www.rhcatalyst.org.

Appendix A: What Questions Should Program Planners Ask?

Magnitude of the Problem (Policy)	<p>What percent of births are spaced < 6 months, < 24 months, <36months? What percentage of births are spaced longer then 60 months? What percentage of short BI/IPs occur with adolescents? What is the MMR, IMR and under five MR in the country/region.</p>
Knowledge (All levels and all groups)	<p>What percent of women, especially young, low-parity women and their families, know that spacing births three years or longer reduces the risk of mortality and morbidity for both mothers and their children?</p>
What do women want? (Individual level)	<p>What intervals do women want? How is this different from what they are achieving? Is there an unmet need for FP and for BS? Are there variations in unmet need by age and parity or other SE and SD characteristics?</p>
What are the determinants of birth spacing behavior? (All levels)	<p>What are the religious or cultural beliefs related to childbearing and family planning? What are the fertility preferences (desired number and timing or children) of both women and men? Who makes the FP and BS decisions in the family? What role does the sex of a child play in a couple's decision to use FP? Do women have the negotiation skills to OBS? Is there a supportive environment to OBS?</p>
Program Linkages (Institutional and policy levels)	<p>Do counseling, education and service programs for family planning, post-abortion care, HIV/STI prevention, immunization, safe motherhood, postpartum, antenatal care, MCH, nutrition, child survival and outreach (male, youth and married adolescents) currently inform individuals about the health benefits of OBS and the risks of repeat closely spaced pregnancy?</p> <p>Are key groups for BS addressed? : Postpartum, PAC, LAM, STI/HIV, MNH, well child visits.</p>
Education and Training Programs (Institutional and policy levels)	<p>What messages on optimal birth spacing are included in medical and public health curricula, and other education, mass media and training programs?</p>
Programs and Services for Youth	<p>Are there youth-friendly services for married and unmarried adolescents? Do these programs address both delaying onset of childbearing and OBS for those who have already started childbearing?</p>
Access to Quality Services	<p>Are there available and accessible quality FP and OBS services? Have providers and counselors been trained to provide OBS counseling and in the new OBSI recommendation?</p>
Continuation Rates (Institutional level)	<p>What are contraceptive use/discontinuation rates for all women and also low-parity women and youth?</p>
Method Mix (institutional)	<p>Is the available method mix conducive to achieving desired spacing (i.e., ensured availability of pills, condoms, injectables, IUDs, LAM, etc.)? Are there strategies that address supply and demand of contraception for FP and OBS?</p>
Estimates of Potential Impact (Policy level)	<p>Have host country analyses been undertaken to estimate infant/child mortality reductions (estimated annual percentage mortality reductions and numbers of deaths averted) if birth intervals were lengthened?</p>

Policymakers' Awareness (Policy level)	<p>Are policymakers and program planners aware of the magnitude of potential reductions in infant/child/maternal deaths in their country, if more births were spaced at three-year intervals? Are there initiatives at the national level?</p>
Monitoring and Evaluation (Institutional and policy levels)	<p>To what extent do planners monitor key outcome, knowledge or behavioral indicators related to FP and OBS? Indicators: % of women whose youngest two children are born at least 36 months apart; % of women and men who can name at least three methods for OBS; % of women and men who approve of using contraception for spacing; % of women and men who are not using FP, but what to wait at least three years before the birth of a child; % of people that live near (a reasonable distance from) a FP facility; % of PP and PAC that report discussing FP and OBS with a provider.</p>

Appendix B: How to integrate Optimal Birth Spacing (OBS) into Health and Social Programs

Health Programs (Clinical and Nonclinical)	Programmatic Responses
Family Planning/Reproductive Health Service Delivery	Include counseling on the health benefits of OBS in FP/RH services for all women of reproductive age, including young and low-parity women. Monitor continuation rates of methods used for OBS. Train health care providers at all levels about the OBSI recommendation. Include counseling for men in order to increase men’s support of women’s reproductive health and to address the needs of men.
MCH Neonatal	Include counseling on the health benefits of OBS for child and maternal health and nutrition into all EPI and well-baby visits, as well as general clinic. Increase community awareness about the health benefits of breastfeeding and optimal birth spacing.
Maternal/Neonatal Health	Include counseling on the health benefits of OBS into ANC, Postpartum, and LAM services.
HIV/AIDS/Infectious Diseases	Include counseling on the health benefits of OBS and dual protection messages in STI/HIV prevention programs.
PAC	Include counseling on the risks associated with a too short birth spacing interval following an abortion.
Social Programs	
Community Mobilization	Use participatory methodologies to involve communities in the research, design, implementation and evaluation of OBS programs. Educate community leaders on the benefits of OBS and the health risks of closely spaced, repeat pregnancies, and the way in which to access FP and OBS information/services. Mobilize communities to support OBS. Include OBS messages into outreach programs. Community-based programs can help identify women at need for FP/RH and OBS counseling and services and refer for services.
Gender Programs: Women’s Empowerment Men’s Participation	Address constraints that affect communication and decision making including regarding FP and OBS. Involve husbands and male partners in OBS to create an enabling environment to practice OBS. Use communication tools to encourage dialogue both at the household and community levels.
Literacy	Include counseling on OBS into literacy and other educational programs for women and offer non-clinical methods.
Democracy and Governance	Include counseling on OBS in Democracy and Governance and other leadership programs for women and offer non-clinical methods.
Micro-credit/Micro-enterprise	Include counseling on OBS in economic empowerment programs for women such as micro-credit and micro-enterprise and offer non-clinical methods.
Social Networks	Identify key opinion leaders in the community to include OBS in social-network based communication programs. A social network approach reaches into the community and provides a safe atmosphere for women to discuss their FP needs.
Gender-based Violence	Include GBV screening in OBS programs.

Health Programs (Clinical and Nonclinical)	Programmatic Responses
BCC Strategy/Intervention	Address lack of knowledge of negative health impacts of too-close pregnancies on mothers, infants and children; modify social norms that encourage early and frequent pregnancies as a sign of virility/fertility and pressure women to become pregnant quickly after bearing a daughter so that they will have sons.

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