BIRTH SPACING GRANTS COMPILATION DOCUMENT

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CATALYST
consortium

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Descriptive Statement:

The CATALYST Consortium is a global reproductive health and family planning activity initiated in September 2000 by the Office of Population and Reproductive Health, Bureau for Global Health of the United States Agency for International Development (USAID). The Consortium is a partnership of five organizations: Academy for Educational Development (AED), Centre for Development and Population Activities (CEDPA), Meridian Group International, Inc., Pathfinder International and PROFAMILIA/Colombia. CATALYST works in reproductive health and family planning (RH/FP) through synergistic partnerships and state-of-the-art technical leadership. Its overall strategic objective is to increase the use of sustainable, quality RH/FP services and healthy practices through clinical and nonclinical programs.

Mission:

CATALYST's mission is to improve the quality and availability of sustainable reproductive health and family planning services.

Acronyms

ADAR	*Asociación para el Desarrollo Amazónico Rural*
AED	Academy for Educational Development
AGROVIDA	*Asociación de Promoción Agraria y Defensa de la Vida*
AIDS	Acquired Immune Deficiency Syndrome
BCC	Behavior Change Communication
BF	Breastfeeding
BPWN	Business and Professional Women Nepal
CBD	Community-based Distribution
CBO	Community-based Organizations
CEDPA	Centre for Development and Population Activities
CONOMUP	*Coordinadora Departamental de Organizaciones de Mujeres de la Libertad*
CPR	Contraceptive Prevalence Rate
DHS	Demographic and Health Survey
DISA	*Dirección de Salud*
DPHO	District Public Health Office
FG	Focus Group
FGD	Focus Group Discussion
FP	Family Planning
GP	General Practitioner
GTZ	*Gesellschaft für Technische Zusammenarbeit* (German aid organization)
HC	Health center
HIV	Human Immunodeficiency Virus
HMG/N	His Majesty's Government of Nepal
IEC	Information, Education, and Communication
IGWG	Interagency Working Group
IMR	Infant Mortality Rate
INEI	*Instituto Nacional de Estadística e Investigación*
INGO	International Nongovernmental Organization
JSI	John Snow Incorporated
KAP	Knowledge, Attitude and Practices
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
MOHF	Ministry of Health and Family
MRA	Men of Reproductive Age
MWRA	Men and Women of Reproductive Age
NGO	Nongovernmental Organization
OBSI	Optimal Birth Spacing Interval
OCESI	Education and Integral Health Community Organization
OD	Operational District
OSIDEC	Integral Health and Community Development Organization
PAC	Postabortion Care
PP	Postpartum
PROCOSI	*Programa de Coordinación en Salud Integral*

PSI	Population Services International
RACHA	Reproductive and Child Health Alliance
RFHI	Romanian Family Health Initiative
RH/FP	Reproductive Health and Family Planning
SECS	*Societatea de Educatie Contraceptiva si Sexuala*
SMC	Satisfied Male Clients
SNL	Saving Newborn Lives
STI	Sexually Transmitted Infection
SUMI	*Seguro Universal Materno Infantil*
TA	Technical Assistance
TBA	Traditional Birth Attendant
TOT	Trainer of Trainers
UNAP	*Unidad Nacional de Atención a Personas*
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
VHSG	Village Health Support Group
WDI	World Development Indicators
WHO	World Health Organization
WRA	Women of Reproductive Age

Introduction

Birth Spacing

For decades, health care providers have recommended two-year birth spacing. New research shows an association between longer birth intervals and improved maternal and child health outcomes. In response to this new data, CATALYST oversaw a series of systematic literature reviews and meta-analyses on optimal birth spacing intervals (OBSI) to complement existing research findings. *The optimal birth spacing interval (OBSI) is the time period between births associated with the healthiest outcomes for pregnancies, newborns, infants, children and mothers. The best evidence to date suggests that OBSI is between three to five years after the birth of the last child.* Furthermore, a recent study recommends that women use an effective family planning (FP) method for at least six months after an abortion (spontaneous or induced) to reduce risks for adverse health outcomes, such as anemia and health complications in their next pregnancy, such as preterm birth, low birth weight and premature rupture of membranes.[1]

The findings in table 1 below are important as they show birth spacing's potential to contribute to improvements in maternal, neonatal and child health. Counseling on the use of contraception for birth spacing can be integrated into existing health and nonhealth programs in both clinical and community settings at a low cost.

Table 1: Potential health benefits from practicing birth spacing of three to five years[2]

For Pregnancies:	For Newborns:	For Infants/ Children <5:	For Mothers*
Lower risk of fetal death	Lower risk of low birth weight	Lower risk of under-five mortality	Lower risk of third trimester bleeding
Lower risk of preterm births	Lower risk of neonatal deaths	Lower risk of stunting**	Lower risk of pre-eclampsia
	Lower risk of small for gestational age	Lower risk of being underweight**	Lower risk of premature rupture of membranes
		Longer breastfeeding period	Lower risk of puerperal endometritis
			Lower risk of maternal death

* Birth to birth intervals less than fifteen months apart pose the greatest health risks to mothers. Rutstein, S. O. (2005)

** In some countries.

[1] Conde-Agudelo, A., Belizan, J., Brockman, S., Rosas-Bermudez, A. *Effect of the interpregnancy interval after an abortion on maternal and perinatal health in Latin America.* International Journal of Gynecology and Obstetrics, March 2005.

[2] Agustin Conde-Agudelo. *Effect of Birth Spacing on Maternal and Perinatal Health: A Systematic Review and Meta-analysis.* Report submitted to AED and the CATALYSTConsortium, October 2004; Conde-Agudelo, A., et al. (2005); Conde-Agudelo, A. and J. Belizan (1998). *Maternal mortality and morbidity associated with interpregnancy interval: A cross sectional study. BMJ,* 321, 1255-1259. Razzaque, A., J. DaVanzo, M. Rahman, K. Gausia, M. Khan, AHM. Mustafa. (2005) *Pregnancy spacing and maternal morbidity in Matlab, Bangladesh. IJGO*, Spring 2005; Rutstein, Shea Oscar, Kiersten Johnson, Agustin Conde-Agudelo. *Systematic Literature Review and Meta-analysis of the Relationship between Interpregnancy or Interbirth Intervals and Infant and Child Mortality.* Report submitted to the CATALYST Consortium, October 2004: and CATALYST Consortium. *Optimal Birth Spacing Interval Reference Guide for Trainers.* CATALYST Consortium Washington, DC. 2004.

A considerable amount of research exists to document the extent to which couples express desire for spacing their births and the unmet need for family planning (FP) methods. Although essential to RH/FP, few countries have policies and norms on birth spacing. CATALYST's strategic approach aims to encourage OBSI by (1) creating international consensus on OBSI recommendations; (2) strengthening services and community programs with birth spacing messages and improved quality of service; and (3) educating individuals and communities about the benefits of optimal birth spacing behaviors. CATALYST works to integrate OBSI recommendations and messages based on the new evidence into national health guidelines, local community agendas and into health and nonhealth programs, to strengthen birth spacing activities, help improve RH/MCH/FP outcomes and reposition FP. CATALYST developed models for integrating birth spacing messages, which have been implemented in a variety of cultures and settings, including populations rarely reached through conventional outreach programs. CATALYST's small grants program provides funding, support and technical assistance to local NGOs to reach women, men, youth, and hard-to-reach populations with birth spacing messages.

Grants

The OBSI grants program was visualized as a tool for enhancing the capacity of local NGOs to provide culturally appropriate and community-based RH/FP activities including birth spacing messages.

Local nongovernmental organizations were the target recipients for the grants because they have strong investment in the local community and have knowledge of its needs, resources and strengths. CATALYST initiated activities with NGOs in order to utilize the networks of trainers, educators and community mobilizers that many of them have established for their own programs. The NGO grant activities were seen as "pilot" projects — small enough in scale to try new approaches, but large enough to demonstrate results. In order to develop and test a variety of models for implementing activities, CATALYST worked with both health and nonhealth organizations.

Working with health and non-health NGOs to integrate messages into nontraditional health activities and non-health projects provided CATALYST with direct experience in promoting birth spacing to many different populations and in a variety of settings. Such efforts have allowed CATALYST to have diverse programs in various countries like Nepal, Cambodia, Peru, Bolivia and Romania. The birth spacing grant projects and the NGOs who managed them are summarized in Table 2.

Table 2: Summary of the Birth Spacing Grants

Country	NGO	Model Used	Program Period	Program Intervention Summary
Bolivia	PROCOSI[3]	Health	01/03-12/03	Training of health providers to counsel postpartum (PP) women on benefits/risks of OBSI.
Romania	SECS[4]	Health and Non-health	06/03-06/05	Training of health providers to counsel postpartum (PP) women on benefits/risks of OBSI. Selection and training of Male and Female OBSI Champions to promote and support OBSI practices at community level.
Peru	ADAR[5]	Health	05/03-06/04	Training of public and private health providers and community health agents to promote and support OBSI practices among women and men.
Peru	AGROVIDA[6]	Health and Non-health	06/04-05/05	Training of health providers, health promoters and community motivators and students to promote and support OBSI practices among adults and youth
Nepal	BPWK[7]	Non-health	08/04-06/05	Training of trainers and dissemination activities to promote and support OBSI practices among women and men participating in micro-credit and community projects.
Cambodia	RACHA[8]	Health	07/04-06/05	Training of health providers to educate and disseminate information on benefits/risks of OBSI to male and female community members.

[3] Programa de Coordinacion en Salud Integral (PROCOSI) is a Bolivian health organization that consists of a network of 37 NGOs which provide health services in rural and marginalized urban areas.
[4] Societatea de Educatie Contraceptiva si Sexuala (SECS), is a Romanian RH/FP NGO that provides provider training, clinic and education services. SECS received 2 grants from CATALYST, which were integrated to create a comprehensive health/nonhealth project. The second grant awarded was a special initiative grant on Gender that was provided to CATALYST by the USAID Interagency Working Group (IGWG) on Gender to support gender-based community approaches.
[5] Asociacion para el Desarrollo Amazonico Rural (ADAR) is a Peruvian organization that implements health, education and community development activities in rural and peri-urban populations.
[6] Asociacion de de Promocion Agraria y Defensa de la Vida (AGROVIDA) is a Peruvian organization that provides health, education and community development activities.
[7] Business and Professional Women Katmandu (BPWK) is a Nepalese organization that trains women in capacity development skills such as micro-credit project development and literacy.
[8] Reproductive and Child Health Alliance (RACHA) is a Cambodian organization that supports and implements reproductive and child health interventions.

I. Synthesis Report for CATALYST's Birth Spacing Grants Experiences in Bolivia, Cambodia, Nepal, Peru and Romania

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1.1. Acknowledgements

This Synthesis Report has been compiled and shaped through a collaborative effort by the CATALYST Consortium's staff, however, we acknowledge that it is ultimately based on the activities of the many organizations and individuals in the field whose work it documents and whose achievements inspired it. In particular, the authors acknowledge the invaluable assistance of the communities, program staff, and local counterparts working with the following NGOs:

- Reproductive and Child Health Alliance (RACHA), Cambodia
- Business and Professional Women Kathmandu (BPWK), Nepal
- Programa de Coordinación en Salud Integral (PROCOSI), Bolivia
- Asociación para el Desarrollo Amazónico Rural (ADAR), Peru
- Asociación de Promoción Agraria y Defensa de la Vida (AGROVIDA), Peru
- Societatea de Educatie Contraceptiva si Sexuala (SECS), Romania

Special tributes are given to those who contributed to the field activities, evaluations and the individual birth spacing grant reports. Their willingness to share their insight and knowledge derived from years of experience was thorough and we are most grateful for their commitment to improving the health and well being of women and children.

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1.2. Summary

Catalyst is working to promote the optimal birth spacing interval (OBSI) as a proven means of improving maternal and child health. The optimal birth spacing interval (OBSI) has been defined as the time period between births associate with the healthiest outcomes for pregnancies, newborns, infants, children and mothers. The best evidence to date suggests that OBSI is between three to five years after the birth of the last child. This recommendation is based on extensive global research comprising studies on the effects of birth spacing on various maternal and child health outcomes. Results from the research indicate that spacing at least three years from the birth of the last child and less than five years is associated with the healthiest outcomes for pregnancies, newborns, infants, children and mothers.

The CATALYST Consortium initiated a birth spacing grants program in 2002, which was designed to provide funding, technical assistance and support to local NGOs in the implementation of community discussions and programs that engage health practitioners, community members and special interest groups such as males, youth and hard-to-reach populations in creating awareness of the health and social benefits of practicing and the risks of not practicing optimal birth spacing. Grants were awarded in 2003 and again in 2004. The countries awarded the grants were Bolivia, Cambodia, Nepal, Peru and Romania.

In this synthesis report an analysis of these OBSI grant activities was undertaken. Information was collected through a review of the individual country reports. This section provides a brief explanation of OBSI and its benefits as well as a discussion of CATALYST's role in disseminating information on optimal birth spacing. This section also discusses the mechanisms for the OBSI grant awards, the particular NGO and country situations and the interventions implemented. The report then draws upon similarities and differences in the interventions presented by the country programs.

The OBSI Grant interventions utilized three different models to promote the awareness and understanding of OBSI as a means of reducing maternal and neonatal mortality by increasing the awareness and understanding of risks posed by a birth interval of less than three and more than five years. The three models that were utilized include health model, non-health model and a combination health and non-health model. Each of the models had challenges and strengths that were important in determining the outcomes for the individual NGO and the model. CATALYST found that all three models were effective for implementing OBSI activities and recommends that they be utilized for replication and/or scale-up of similar projects.

Although birth spacing as a concept is at the heart of RH/FP, few countries have policies and norms on birth spacing. CATALYST has developed a strategic approach to encourage OBSI: (1) create international consensus on OBSI recommendations; (2) strengthen services and community programs with optimal birth spacing messages and improved quality of service; and (3) educate individuals and communities about the benefits of optimal birth spacing behaviors. CATALYST works to integrate OBSI recommendations into national health guidelines and local community agendas as functions of improving RH/FP outcomes and repositioning FP.

The findings listed in Table 1 are significant. They show birth spacing's potential to contribute to improvements in maternal and child health. Counseling on the use of contraception for birth spacing can be integrated into existing health and non-health programs in both clinical and community settings at a low cost.

CATALYST and other birth spacing supporters have used scientific and behavioral research to develop appropriate strategies to strengthen existing RH/FP programs and to mobilize health and non-health institutions and partnerships with birth spacing messages, services and practices. CATALYST also has developed models for integrating birth spacing recommendations, which have been implemented in a variety of cultures and settings, including populations that have not been traditionally reached through conventional outreach programs.

A considerable amount of research has now been accumulated to document the extent to which couples express a desire for spacing their births and unmet need for family planning (FP) methods.

1.3. Country Backgrounds

The target areas in the five countries presented in this report are very distinct in many ways, yet they share some common socioeconomic and RH problems. All of the countries that were included in the grant program are considered developing nations and most have a poor health infrastructure and limited access to health services by much of the population. The countries experience high rates of maternal morbidity and mortality,

infant morbidity and mortality and high unmet need for FP among rural and underserved populations. They also have patriarchal social systems, where there is little or no traditional male support and involvement in birth spacing and FP. Extensive information and data on the demographic, health and socioeconomic contexts of the five countries can be found in the country evaluation reports. Please refer to the individual project reports for more information on the country profiles and health indicators.

1.4. CATALYST birth spacing grant models

There is growing evidence worldwide of the benefits and effectiveness of investing in health promotion programs, through an integrated approach. Integrated RH/FP and OBSI promotion programs deliver benefits for the community through promoting positive well being, strengthening community capacity, improving sustainability and minimizing the risk of adverse maternal, newborn and infant health outcomes. To address priority RH/FP and well-being issues, the CATALYST grant projects worked in an integrated manner using a mix of health promotion interventions and capacity building strategies that were appropriate and effective for the target communities and populations.

The six OBSI grant projects had similar objectives, which were designed to reduce maternal and infant morbidity and mortality and unmet need for FP.

- promote the understanding of birth spacing
- increase awareness of the 3-5 spacing interval
- increase utilization of FP methods

Health NGOs, non-health NGOs and NGOs working in both the health and non-health sector used the objectives as a basis for their project plan and activities. CATALYST provided technical assistance to the NGOs in developing their project strategies and in the overall management of the projects. Both the NGOs and CATALYST carefully monitored the projects, in order to identify and document the attributes that could lead to the replication and/or scale-up of the models.

1.4.1. Health model

The health model was used by organizations that had strong backgrounds in health services/promotion and education and linkages with other health services and/or organizations. The NGOs that implemented the OBSI health model interventions built the capacity of their own health staff as well as the staff of health partners who would subsequently provide support and counseling to their clients on the benefits and risks of OBSI. The main focus of the health model was in providing health education and counseling services through health facilities or health outreach. This model utilized health education, partnerships and monitoring and evaluation activities (M&E) to strengthen and sustain project activities. This model was implemented by:

PROCOSI in Bolivia
ADAR in Peru
RACHA in Cambodia

1.4.2. Nonhealth model

The non-health model was implemented by an NGO that had experience in micro-finance and capacity building for women. The NGO trained their own staff and project members on OBSI, who in turn, disseminated information on OBSI to community members. The non-health model had linkages to health services and health organizations, in order to ensure that technical information and RH/FP services were available to the target audiences as needed. This model utilized micro-credit and literacy program outlets as well as partnerships and M&E activities to strengthen and sustain project activities. This model was implemented by BPWK in Nepal

1.4.3. Combined Health and Nonhealth model

The health and non-health model utilized both health and non-health approaches to promote and support OBSI training and education. Clinical and non-clinical health settings were utilized to train health providers and health outreach workers in providing OBSI/FP counseling and services. Simultaneously, community-based leaders, champions and residents were trained to provide awareness and support to peers and colleagues on OBSI by using community mobilization techniques. The health and non-health model implementers promoted both community- and clinic-based interventions and partnerships as well as a variety of activities to monitor and evaluate the different aspects of the project. This model was implemented by AGROVIDA in Peru and SECS in Romania

1.5. Summary of project interventions

1.5.1. Health model

PROCOSI in Bolivia

The PROCOSI project was centered around developing the capacity of health partners to counsel and educate on OBSI and FP. The objective of the project was to increase awareness of and educate on the risks and benefits of OBSI among PP women as a means of reducing maternal and neonatal mortality. Health providers from 137 municipalities in the Altiplano Mountains were trained on the OBSI interval, risks and benefits.

Project Activities

- Built support of OBSI among NGO health network, public health sector and community
- Developed BCC materials
- Developed training package for health providers
- Trained health providers, health educators and auxiliary nurses on OBSI and RH/FP
- Counseled antenatal and postpartum woman on OBSI and RH/FP
- Advanced understanding of OBSI among national authorities
- Established regular and continuous M&E activities
- Baseline and end-line surveys administered to antenatal and postpartum care clients

- Pre- and post-tests administered at training and education sessions
- Program activities monitored regularly
- Data collected on project activities
- Qualitative evaluation of interventions and materials administered to partner NGOs

ADAR in Peru

The ADAR project sought to improve the quality of life of women, children and families. Its objectives were to increase the accessibility, quality and efficacy of RH/FP services of women, men, and adolescents in 50 communities in the districts of Fernando Lores and Iquitos, in the Loreto region of Peru.

Project Activities

- Conducted situation analysis
- Built support of OBSI among NGO health network and public health sector
- Developed BCC materials
- Trained public and private health care professionals and community health agents on OBSI and FP
- Educated men and women of reproductive age (MWRA), male leaders, teachers and youth on OBSI
- Established regular and continuous M&E activities
- Baseline and end-line surveys administered to MWRA
- Program activities monitored regularly

RACHA in Cambodia

RACHA's objective was to reduce maternal and child morbidity and mortality due to closely spaced births and unwanted pregnancies. More specifically, the program aimed to raise awareness of the health risks of spacing children less than three years birth-to-birth by providing birth spacing information and education to villagers through existing information channels supported by RACHA in partnership with the MOH. Program activities took place in two operational districts (ODs), Angkor Chey and Kampot.

Project Activities

- Built support of OBSI among NGO partners, public health sector and community
- Developed BCC materials
- Trained TBAs, village health support groups and satisfied male clients on OBSI and FP
- Conducted health education sessions among community residents on OBSI
- Increased access to FP methods via partnership with NGO and public sector FP providers
- Established regular and continuous M&E activities
- Baseline and end-line surveys administered to MWRA
- Pre- and post-tests administered at training sessions
- Program activities monitored regularly
- Data collected on project activities

1.5.2. Nonhealth model

BPWK in Nepal

The objective of this project was to create awareness of the importance of OBSI among the micro-credit and development members as well as local health practitioners in order to disseminate OBSI information to community members. The project also increased access to FP counseling and methods by partnering with the local sub-health post staff.

Project Activities

- Built support of OBSI among the public health sector
- Trained trainer of trainers for members of BWPK on OBSI and FP
- Trained health staff from the sub-health post on OBSI
- Conducted educations session with MWRA on OBSI and FP
- Partnered with the district health office and the sub-health post
- Provided support and funds to sub-health post for health services and supplies
- Established regular and continuous M&E activities
- Baseline and end-line surveys administered to MWRA
- Program activities monitored regularly
- Data collected on project activities

1.5.3. Combined Health and Nonhealth model

AGROVIDA in Peru

The objective of the AGROVIDA project was to introduce the concept of optimal birth spacing and increase awareness of the three to five year birth spacing interval in order to improve maternal and child health among 17 communities in the department of La Libertad on the northern coast of Peru.

The project's main activities were:

- Built support of OBSI among health and non-health NGOs, public health sector and communities
- Developed BCC materials
- Trained AGROVIDA staff on OBSI, RH/FP, and Gender
- Integrated OBSI messages into AGROVIDA social and non-health program activities
- Trained DISA staff on OBSI, RH/FP, and Gender
- Trained members of non-health partner organizations on OBSI
- Trained female community leaders on OBSI, RH/FP, and Gender
- Trained students on OBSI, RH/FP, and Gender
- Trained health promoters on OBSI, RH/FP, and Gender
- Increased access to FP methods via CBD activities and partnerships with public sector health facilities
- Educated MWRA and youth on OBSI
- Established regular and continuous M&E activities
- Baseline and end-line surveys administered to MWRA

- Program activities monitored regularly
- Data collected on project activities

SECS in Romania

The SECS projects had several objectives. The project aimed to decrease the unmet need for RH/FP as well as improving MCH, while also improving partner communication and support surrounding FP utilization. To achieve these objectives they worked to improve the quality of RH/FP services that were provided by county health practitioners and trained and supported male and female community members to become OBSI champions, in which capacity they provided peer education on OBSI/FP.

The main activities were:

- Conducted Focus Group Discussions to assess knowledge, attitudes and practice of health providers and community residents to birth spacing
- Built support for OBSI among public health sector, health NGO partners, media and community leaders and residents
- Developed BCC strategy
- Developed OBSI training curricula
- Trained primary heath care providers from County Health Department
- Identified male and female Champions
- Trained community based male and female Champions
- Educated MWRA on OBSI and FP
- Conducted national OBSI information dissemination events
- Increased access to FP methods via CBD activities with partner NGO
- Established regular and continuous M&E activities
- Baseline and end-line surveys administered to MWRA
- Pre and post-tests administered at OBSI trainings
- Program activities monitored regularly
- Data collected on project activities

1.6. Summary and comparison of project components

The following section outlines the main service delivery elements of each model and project and also compares and contrasts the strengths, challenges and results for each.

All three intervention models involved:

- Capacity building of NGO and health/non-health partners adding to the sustainability of the programs
- Education on OBSI
- Building support with partners, community leaders and community residents
- Collaboration/partnering with other organizations and national health systems
- Development of M&E tools and activities
- Access to FP methods and counseling or referrals to FP service providers as part of their service delivery components
- Development of BCC materials

In addition, all program interventions involved, to a varying extent, support from CATALYST headquarters in the form of technical assistance and capacity development. CATALYST also assisted in trainings and in the development of BCC materials, training materials and M&E activities. Table 3 below provides an illustrated overview of the project components.

Table 3: Summary of Project Components

Model/NGO	Clinic-Based Provision of Contraceptives	Community Based Distribution of Contraceptives	Referral System	Focused on Youth	Focused on Male Involvement	OBSI/FP Training/ Education	BCC Strategy
Health Models							
PROCOSI	✓		✓			✓	✓
ADAR	✓	✓	✓	✓		✓	✓
RACHA	✓	✓	✓		✓	✓	✓
Non-health Model							
KBPW			✓			✓	✓
Combined Health & Non-health Model							
AGROVIDA	✓	✓	✓	✓		✓	✓
SECS	✓	✓	✓		✓	✓	✓

1.7. Summary Increasing access to contraceptives

As mentioned previously, all of the OBSI interventions placed emphasis on the education and awareness building of FP methods and concepts, including OBSI. They all also worked to improve access to FP methods by clinic based and/or community based distribution (CBD) of contraceptives. The OBSI health model projects all had clinic-based distribution of contraceptives as well as referral systems to ensure that clients had access to methods that were unavailable at the local levels (such as the intrauterine device or sterilization). ADAR had CBD of contraceptives through its health outreach workers and RACHA partnered with Population Services International (PSI) to provide OC's and condoms at the community level.

The non-health model project did not have direct access to contraception but educated its participants on the availability of contraception at the local sub-health post. KBPW also improved its participant's access to contraceptives by supporting the local health department in procuring and dispensing contraceptives by paying for the purchase of supplies and the time of RH health practitioners.

The projects that implemented the combined health and non-health approaches increased their project participant's access to FP through clinic based and community-based distribution of contraceptives, as well as referrals to health facilities. Both SECS and AGROVIDA utilized community mobilizers for CBD; SECS used their newly initiated Male Champions. They also established partnerships with other organizations to procure contraceptives and to sustain the availability of methods for the target populations;

AGROVIDA worked with PRISMA, a large-scale CBD organization and SECS worked with JSI.

All of the OBSI project models effectively increased access to FP information and methods in distinctive ways that utilized their individual organizational strengths and partnership skills to an advantage. Overall, the combined model had a wider reach than the other models due to its integration of the OBSI/FP information at clinic and outreach health activities as well as in non-health arenas such as peer education activities, agriculture and community development forums. As would be expected, the health models had natural strengths in providing access to FP and they utilized their potential avenues for information and product dissemination very well. A note of distinction goes to the non-health model for its innovative efforts to increase access to FP, though its micro-credit and development focused activities. BKPW had not managed a health focused project previously, but worked diligently with CATALYST to increase its organizational capacity so that project staff became educated on FP/OBSI and developed partnerships with government health agencies in order to facilitate the provision of FP counseling and methods. BKPW reported a 14% increase in “ever use” of FP methods from baseline to end-line.

1.8. Summary Male Involvement Activities

Male involvement activities were not specifically included in all of the OBSI grants or models. Due to the cultural situation and specific service delivery aspects of some of the projects, the intervention efforts were focused mainly at women of reproductive age. However, most of the grants and models did include men of reproductive age as secondary target populations.

The RACHA health model project and the SECS combined model were the only interventions that had specialized male involvement activities. RACHA identified “Male Satisfied Clients,” men (generally health workers) who supported OBSI/FP and trained them to disseminate OBSI/FP information to their male peers and health clients. RACHA included male involvement in its project because they felt that having men reach out to other men on the issues of OBSI/FP would be an effective way to increase the men’s awareness and involvement in RH issues.

SECS worked with community leaders to identify “Male Champions,” local men who were interested in OBSI/FP and agreed to attend training and perform peer education. The SECS Male Champions intervention was a distinct aspect of the SECS OBSI project that was funded by the USAID IGWG for Gender. Qualitative information gathered from health provider and community resident FGDs at the beginning of the project indicated that Romanian men were interested in learning about OBSI/FP and in supporting their partners with FP decision-making. Based on those results, SECS designed a male focused intervention that trained volunteers on OBSI/FP, community mobilization and peer education.

Involving men in the OBSI projects was an important part of their successes. All projects that involved men as target recipients of education and awareness expanded their reach of information dissemination and created the potential for increased partner communication on OBSI/FP and in improved male support of OBSI/FP decision-making. The SECS project garnered excellent outcomes from its pilot male involvement component. Men and women surveyed in the SECS project demonstrated significant

changes in their communication and intention to practice birth spacing as illustrated in the Table 4 below.

Table 4: Results of SECS Male Involvement Component

	Behavior	Baseline Results (%)	End-line Results (%)	P-Value
Male	Ever talked about contraception with partner	28	50	0.00
	Recently discussed BS with partner	2	46	0.00
	Decided to practice BS after discussion with partner	2	39	0.00
Female	Ever talked about contraception with partner	26	50	0.00
	Recently discussed BS with partner	39	76	0.00
	Decided to practice BS after discussion with partner	20	73	0.00

1.9. Youth Activities

Youth focused activities were not an element of most of the OBSI grant projects or models generally due to a lack of experience with working with youth on the part of the implementing NGO, or cultural factors restricting the involvement of unmarried youth in FP activities. All of the projects included young married men and women of reproductive age within their general activities, but only ADAR and AGROVIDA had interventions specifically for young people.

ADAR included youth leaders in its health outreach OBSI education/dissemination and support building activities as well as increasing the awareness of youth on birth spacing via information provided by high school teachers. The AGROVIDA project developed the capacity of youth leaders by training them to perform peer education with fellow students on OBSI. Involving youth in the OBSI projects was important because it resulted in increased awareness of OBSI among the young people as demonstrated among the AGROVIDA trained youth in Table 5 below. The youth-focused and youth-friendly activities are expected to lead to increased utilization of OBSI/FP among married young people as well as increased sensitivity to RH/FP issues. Examples of increased sensitivity to RH/FP are illustrated by results from the AGROVIDA research that highlights student's interest in the potential economic risks associated with not practicing OBSI such as loss of work and limited financial resources that may result from short spacing periods.

Table 5: Percent Change in Student Knowledge in AGROVIDA Project

Knowledge Demonstrated	Baseline Results (%)	End-line Results (%)	P-value
Correct Interval (3-5)	56	93	0.000
Risk of maternal death if OBSI is not practiced	3	59	0.000
Risk of being born small for gestational age if OBSI not practiced	13	46	0.000

1.10. Training and Education Activities

All three of the OBSI models included training and education activities as their main interventions. The models differentiated on the types of people that they trained and disseminated information to, however they all depended upon “Trainer of Trainer” (TOT) and “cascade” approaches for widespread education. The projects were assisted by CATALYST in the development or adaptation of curricula for their OBSI training. Many of the implementing NGOs also developed BCC materials to assist the TOT with training others and disseminating information.

The health model projects began with the training of health providers on the concepts of birth spacing, OBSI, FP and integrating OBSI into FP counseling. All of the health and combined model projects had internal capacity for reproductive health training because they were experienced health providers and promoters. They adapted their existing RH/FP and/or MCH training and information materials to create curricula for the OBSI components. They then trained a group health workers as Trainer of Trainers (from within their own organizations), who proceeded to train other health workers from different organizations, or from various segments of their own organization.

The combined health and non-health model projects also created training curricula and materials for their non-health OBSI trainees. AGROVIDA had strength in this area because they had integrated health concepts into non-health activities before, however, SECS needed support and assistance from CATALYST in order to design and create a training plan for its community based Champions. The training plans were different for the health and non-health activities. Activities that focused on NGO and public service health providers were more detailed and technical in their explanations of the benefits and risks of OBSI. Also, the health focused activities included emphasis on improving health provider skills in FP counseling and service provision, while the community based training activities had sessions on community mobilization and peer education.

The non-health project worked extensively with CATALYST to create a basic training curriculum for its TOT activity. The information contained in the BPWK training curriculum was less technical and more general than the curricula of the health and combined models (health interventions) because of the limited knowledge and experience that the micro-credit members had with RH and general health concepts. The result of the non-health project’s inexperience with health activities was that it took longer for them to begin training and education events and more time to complete and report on them in comparison to the health and combined models.

Following the development of the training curriculum, materials and the TOT, all of the projects utilized the cascade model of information dissemination to further spread the OBSI messages. The trainer shared the OBSI information either through formal training activities or informal education and awareness sessions with the primary target audiences of the interventions. The primary audiences were expected to educate others, and the next group would share the information with even more people, resulting in a large pool of informed people at the end of the cascade.

As illustrated in Table 6 below, all of the projects and models were effective at training and educating people. The amount of people that were reached through the projects depended a great deal on the number of TOT trained and the extent of the networks and

partnerships that the NGO utilized to promote OBSI. The greater the number of the TOT, the more secondary training and education sessions that could be performed, which would extend the reach of the cascade. NGOs that had strong and widespread networks reached many people because they increased the numbers of secondary trainers and providers or community residents that could be reached.

SECS was able to educate many people because the project trained all available public RH/MCH health providers for the target county. This strategy ensured that most women and men seeking services from the health providers would receive the OBSI and FP information. The Champions from the SECS project were also effective at reaching community members and along with the media coverage and BCC campaign in creating an informed demand for the OBSI information.

Table 6: Summary of People Trained and Educated through OBSI Projects

Activity	**NGO/ Country**					
	RACHA/ Cambodia	**BPWK/ Nepal**	**SECS/ Romania**	**AGROVIDA/ Peru**	**ADAR/ Peru**	**PROCOSI/ Bolivia**
OBSI Training No. of participants	586	300	247	224	258	582
OBSI Education/ Awareness No. of participants	8,579	1,919	<49,000	<3,200	10,127	20,940
Total	9,165	2,219	<49,247	<3,424	10,385	21,522

1.11. BCC Activities

All of the OBSI projects contained elements of BCC, which was utilized to attract attention to the project messages and to help to ensure the involvement and commitment of the target audiences. The BCC materials were developed using the themes and messages that had been identified by the NGOs as effective for reaching the beneficiaries. Some of the BCC activities were large in scale and involved research and use of mass media, while others were smaller and focused on interpersonal communication.

Table 7: Summary of BCC Materials Produced

	Training Curriculum	Posters	Pamphlets / Booklets	Giveaways	Radio	FGD	Training Packet	Flipchart	Pocket Guide
HEALTH MODEL									
PROCOSI	✓	✓	✓				✓		
ADAR	✓	✓	✓		✓			✓	
RACHA	✓	✓	✓						
NON-HEALTH MODEL									
BWPK	✓								
COMBINED MODEL									
AGROVIDA	✓	✓	✓		✓			✓	
SECS	✓	✓		✓		✓	✓		✓

1.12. Summary and Comparison of Project Results

The extent and nature of the knowledge and behavioral change seen within the programs differ with the different intervention strategies utilized. In this section we will highlight key findings from the three models. Detailed information about the individual programs can be found in the results section of the individual OBSI grant program reports.

1.12.1. Health Model

In the programs that utilized this model the respondents demonstrated:

- A decrease in the number of survey participant's stating that there is no risk associated with a birth interval shorter than three years;
- An increase in the level of knowledge on risks to the infant with a short birth spacing interval and an increase in those acknowledging that there is an advantage to the mother.

1.12.2. Combined Health and Nonhealth Model

The grant intervention was successful in increasing the MWRAS's knowledge about:

- OBSI
- Specific risks associated with short birth intervals of less than three years to both mother and newborn
- An increase in the number of partners communicating about OBSI

Both of the programs utilizing this model were very strategic in involving the community and the regional and local health authorities in the activities throughout the program, this inevitably contributed to the successes and sustainability documented.

1.12.3. Nonhealth model

The findings in this model were successful in increasing the overall knowledge on practice of OBSI and its advantages as given below.

Though the knowledge level of FP in general remained the same (already at a high level of almost universal knowledge), the knowledge for individual methods increased remarkably.

There was also an increase of:

- Knowledge level for OBSI interval of 3 to 5 years
- The ever use of family planning method among married women
- The awareness level among women on risks of shorter birth interval for both maternal and infant mortality
- There was an existing high awareness level for risks associated with short birth intervals and this increased marginally by the end of the project.

All the health model program evaluations included questions that would identify level of the respondents' knowledge about the different types of contraceptives but from the program evaluations it was clear that not all the activities assisted participants in developing a better understanding of the advantages of a three to five year interval for infants.

1.13. Summary and Comparison of Project Sustainability

A sustainable program is able to make plans for the future, fulfill those plans, and develop diversified sources of income for its activities so that the program is not threatened by the loss of a single funding source.[9]

Table 8: Project Sustainability

Model/NGO	Community Support	Partnerships	Information Dissemination at Meetings/Conferences	Continuation within NGO	Replication & Scale-up
Health					
PROCOSI	✓✓	✓✓	✓✓	✓✓	
ADAR	✓✓	✓✓		✓	
RACHA	✓✓	✓		✓✓	
Non-health					
BWPK	✓	✓		✓✓	
Combined					
AGROVIDA	✓✓✓	✓✓	✓✓✓	✓✓	
SECS	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓

Scale 1-3:
✓ Basic ✓✓ Intermediate ✓✓✓ Advanced

[9]Family Planning Service Expansion and Technical Support (SEATS) Project. Integrating Reproductive Health Into NGO Programs Volume 1: Family Planning. Available at: http://www.initiativesinc.com/docs/rhii_hb/FPV1CVR_TOC.pdf

1.14. Lessons Learned

Programs should build in time for:

- Evaluating instructional capacity of staff through interviews and discussions with an evaluation team
- The production and delivery of materials
- Methods of program sustainability should be decided upon at the beginning of the program
- Any change in program design has an impact on the human and financial resources of the organization
- Separate surveys should be constructed for specific populations (e.g., women, men and youth each should have a survey tailored to the precise information the researcher is looking for in that specific population
- Alternative methods for reaching youth should be explored as school related OBSI interventions led to difficulties in reaching youth
- Program sustainability can be magnified by:
- Incorporating dissemination events, such as press conferences, interviews and national conferences
- Involving community residents and leaders
- The OBSI counseling should be incorporated into antenatal, postpartum and postabortion care as this population was more receptive to OBSI message and adopting of optimal birth spacing practices
- Use of existing channels for disseminating OBSI information is possible and cost effective
- The BCC and M&E strategies were very successful because they were thoroughly researched, planned and implemented (with monitoring and revisions along the way)
- Baseline surveys should be administered before the population is exposed to the intervention
- Coordination between public and NGO groups should be encouraged so that they can learn from each others lessons and enhance the integration of reproductive health, family planning, and OBSI interventions

Finally, longer grant periods are needed to have effective activity implementation to be able to capture project results.

1.15. Conclusion and Recommendations

1.15.1. Involving youth

Youth should be involved in developing policies and programs to help in meeting the needs of their community

1.15.2. Inform policymakers about the needs of the community and raising awareness on birth spacing

Policymakers, lawmakers, and stakeholders should all be adequately informed about the conditions and specific and special needs of the community and of the consequences of

not addressing them. Efforts to raise awareness must take into account various social, economic, cultural and religious points of view. This can lead to support by high-profile political figures leading to influential discussions and even change and is crucial in sustaining OBSI programs in a given community.

1.15.3. Communication

Facilitating communication among all stakeholders is key to comprehensive programming.

1.15.4. Education

Training is needed so that key individuals can adequately motivate and lead their constituencies and assist in disseminating OBSI information to other relevant groups

Educating policymakers, teachers, parents, community leaders, and young people to change public opinion about the need to space births

Channels of information through community clinics, mobile clinics, counseling, schools, peer education, and mass media should be encouraged.

1.15.5. Facilitate communication in families

Men and women need accurate OBSI information and to be comfortable discussing these topics with each other this may also facilitating dialogue about some aspects of relationships such as gender roles.

1.15.6. Build in more time

Programs should allow reasonable time for preparations especially when a non-health partner is involved as it will need more time to facilitate assimilation of the principals of health management and the use of health indicators. It is also recommended that the base line and end-line surveys to be identical so that evaluating the activities is facilitated and if programs are to compare then the surveys for these too should be standardized to aid in the comparison.

More time should also be built in for programs to allow determination of whether knowledge and understanding of OBSI messages translates to adherence and practice and follow up with the NGOs to explore if contraception rates have actually improved.

1.15.7. Work toward gender equity in all programs

Involving men in birth spacing program assists in increasing gender equity and positive gender norms around birth spacing and contraceptive choices.

1.15.8. Increase people's access to information and services to facilitate informed decision making

There is a great demand for increased and sustainable access to accurate and complete information on OBSI, contraceptive products and contraceptive services. The benefits of

OBSI should be fully explained to the clients during counseling or peer education sessions and utilize this opportunity to discuss the different methods of contraception and help clients in making an informed decision regarding when, if and how to space their births.

1.15.9. Birth spacing counseling

Focus should be given to incorporating this into antenatal, postpartum and post-abortion care, as this population is more likely to retain OBSI messages and adopt optimal birth spacing practices

1.15.10 Increase the program coverage area

This is important so as to expose a larger number of the population to the OBSI messages and services provided.

II. Birth Spacing Grants: PROCOSI/Bolivia

TABLE OF CONTENTS

2.1 Acknowledgements

This report is dedicated to the Programa de Coordinación en Salud Integral (PROCOSI) team and its 36 member organizations and partners in Bolivia. We acknowledge their technical expertise, dedication and commitment to the OBSI 3-5 Saves Lives project from 2003 to 2004, and extend our sincere congratulations for a successful activity, especially to Dr. Ignacio Carreño and Dr. Roger Dupois, who both served as Executive Directors of PROCOSI at the time the project was implemented, and Dr. Alejandra Villafuerte, the grant Project Manager. The support from Lic. Ximena Ituralde de Sanchez de Lozada, the Bolivia First Lady and President of Comité Interinstitucional por una Maternidad Segura, and the Bolivia MOH were instrumental in initiating and implementing the project, and will help sustain the activities in the future. Special appreciation is extended to the project beneficiaries and project implementers, including the women and men from the rural communities where the project was implemented, and the doctors, nurses, and health educators from the PROCOSI member organizations without whose interest and motivation the project would never have taken place.

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

2.2 Summary

In 2003-2004, the PROCOSI Network in Bolivia promoted optimal birth spacing with a "three-to-five years saves lives" message to improve maternal and child health.

Using a training module integrated into the MOH's maternal mortality reduction program, the Network introduced the "three-to-five" concept to 196 health care providers in March and April, 2003 and provided follow-up training in February and March, 2004 so that providers could integrate the "three-to-five" message into services for pregnant and postpartum women. Additional training sessions reached 386 more providers, for a total of 582.

The Network successfully carried out information activities to influence national, departmental and local policy. Among these achievements, the concept of OBSI was publicized by Bolivia's first lady and was emphasized in public health guidelines and technical manuals for the federal mother-and-child welfare program. Other international organizations and new Network members, such as Save the Children USA and The Bill and Melinda Gates Foundation, used "three-to-five" project materials to target issues of neonatal mortality.

The evaluation results demonstrated that antenatal and postpartum women's knowledge of OBSI and the risks posed by short and long birth spacing intervals increased significantly as a result of OBSI messages imparted during the antenatal and postpartum counseling sessions. The women surveyed also reported more interest in contraceptive use.

2.3 Country Profile

According to the last demographic and health survey (DHS) Bolivia's population reached 7.9 million in 1998. The great majority is Quechua Indian (30%), Mestizo (28%) and Aymara Indian (25%). The Bolivian population is one of the fastest growing in the region with about 2% per year population growth rate and 4.2% total fertility rate (TFR).

Bolivia is also one of the poorest countries in Latin America, and has some of the worst health statistics in the region. While the TFR fell from 5.0 to 4.2 between 1989 and 1998, women state

that they would prefer to have a mean of 2.6 children. Although 90% of women between the ages of 20 and 29 know about contraceptive methods, in rural areas only 11% of women in union use a modern contraceptive method.

The unmet need for FP was calculated in the Bolivia DHS 1998, which showed that 26% of women in union wanted to space their pregnancies or limit the number of children they had but were not practicing any form of contraception. This unmet need reaches 39% in rural areas and 19% in urban areas. In the Altiplano region where the PROCOSI grant is being implemented, the total demand for FP services among women in union (i.e., percentage of women that use contraception plus the percentage of unmet need for FP services) was estimated at 71%, 17% of which wanted access to FP services to space their births.

Bolivia has the highest maternal mortality rate in Latin America with 230 maternal deaths per 100,000 live births. Maternal deaths account for nearly one-fourth of total deaths among women of reproductive age (Source: WHO 2002). Many women do not have contact with medical personnel during pregnancy and delivery, nor do they have access to postnatal care services. At the national level, 70% of all pregnant women receive antenatal care and only 47% receive care in rural areas. At the national level, 56% of all deliveries occur in health facilities while only 30% occur in rural areas (Source: DHS 1998).

Table 2: Key RH indicators in 1989 and 1998

	1989 DHS	1998 DHS
Total fertility rate:		
National	5.0	4.2
Rural	6.6	6.4
Women of RH age using a modern FP method	8.0	16.5
National	5.2	11.3
Rural		
Maternal mortality:	373/100,000	230/100,000
National	41/1000	34/1000
Neonatal mortality	95/1000	67/1000
Infant mortality	142/1000	92/1000
Child mortality		

The Bolivian government's efforts to improve neonatal and infant health outcomes resulted in a 26% decrease in infant mortality between 1988 and 1998, and a 21% decrease in neonatal mortality. These figures remain high and vary across income levels and geographic regions. The neonatal and infant mortality rates in rural areas are still disproportionately higher than the urban (46/1000 and 90/1000 vs. 25/100 and 50/1000, respectively).

In 1998 the proportion of low birth weight newborns was 4.5%. (Source: DHS 1998) While breast milk is one of a baby's best protections against disease and death, many babies in Bolivia are not breastfed for the recommended two years because their mothers become pregnant again. Requests for postpartum FP are not common, so women are less likely to adhere successfully to OBSI.

2.4 Rationalization

2.4.1 CATALYST Consortium Birth Spacing Grants

The CATALYST Consortium initiated a birth spacing grants program in 2002, which was designed to provide funding, technical assistance and support to local NGOs for the implementation of community discussions and programs that engage health practitioners, community members and special interest groups, such as hard-to-reach populations, to create awareness of the health and social benefits of practicing birth spacing. The OBSI grants program was visualized as a tool for enhancing the capacity of local NGOs to provide culturally appropriate and community-based RH/FP and OBSI activities.

The Request for Proposals for the OBSI grants was made available via the CATALYST Consortium website, and was advertised by USAID country office staff and at the CATALYST Consortium Asia Near East conference in 2002. All NGOs that were registered with USAID and had the organizational capacity and desire to work in OBSI were encouraged to apply. Applications were reviewed by a panel at CATALYST headquarters and were assessed based on designated criteria that included components such as technical qualifications, organizational capabilities, justification of need, project design, workplan, monitoring and evaluation plan, budget and programmatic and financial reporting.

Four OBSI grants were awarded in 2003: two were awarded to organizations in Bolivia, one in Romania and one in Peru.

In January 2003, CATALYST awarded *Programa de Coordinación en Salud Integral* (PROCOSI), a health network of 37 non-profit organizations (NGOs) located in Bolivia, $30,000 in core funds to carry out BCC and counseling activities about OBSI in 137 rural municipalities in eight departments. The grant was implemented between January 2003 and May 2004.

2.4.2 Grantee Qualifications

PROCOSI develops and implements health programs in rural and marginalized urban areas of Bolivia. PROCOSI also seeks to improve the health of impoverished Bolivian populations, especially children and women, and supports policies that influence health and quality of life.

In 1988, three US based health NGOs were awarded an operational program grant to manage USAID child survival grants in Bolivia, which created PROCOSI. In 1991 PROCOSI became a legally incorporated NGO with the Government of Bolivia and registered with USAID.

In 1995 PROCOSI received a cooperative agreement by USAID to expand from child survival into RH/FP. The RH/FP Program provides information and community outreach on all components of RH/FP, including gender, domestic violence, antenatal care, care during delivery, postpartum care, contraception, adolescent health, abortion prevention, STI diagnosis and treatment, and prevention and early detection of female cancers.

Currently PROCOSI implements 17 health programs in nine departments and employs 187 staff that work primarily in rural areas.

2.5 Statement of Need

The Altiplano mountainous region has the highest rate of neonatal mortality with 44/1000 live births — more than two times the rate in the low altitude region. This difference is attributed to poverty, low practice of breastfeeding, harmful traditional community practices and hypoxia. Additional research shows that knowledge is low among pregnant and postpartum women and their partners regarding health risks that result from spacing births less than three years and more than five.

Under the USAID funded RH/FP Program, PROCOSI developed strategies to encourage pregnant women to seek antenatal care service, which included counseling, information about postpartum contraception and incorporated male partners in RH/FP decision making.

The PROCOSI grant activity was intended to benefit 208,000 WRA, including 16,000 pregnant women seeking antenatal care services at PROCOSI clinics. The grant targeted 137 rural municipalities, which were located in eight of the nine departments in Bolivia, representing each of the different geographical zones of the country. The majority of the population living in these communities is Aymara and Quechua, the country's two largest Andean ethnic groups, which traditionally have had limited access to health services.

The PROCOSI Network promoted OBSI with the "three-to-five" message to improve maternal and child health.

The main activities of the intervention included:

- Training doctors, auxiliary nurses and health educators involved with the PROCOSI SRH Program about OBSI and how to counsel pregnant and postpartum women on key OBSI messages using an informational pamphlet
- Introducing the pamphlet on OBSI to women during antenatal and postpartum care visits and counsel them on key messages (during initial and follow-up visits)
- Supporting the use of OBSI messages in other programs related to maternal and neonatal health, as well as in national policy

Expected outcomes included:

- RH/FP personnel in all PROCOSI partner organizations are trained in OBSI through workshops with pre- and post-test knowledge evaluations and integrated information in routine antenatal and postpartum counseling;
- An increase in the proportion of pregnant and postpartum women who understand the concept "three to five" and the risks of maternal and neonatal mortality, and are involved in proactive reproductive decision making; and
- PROCOSI member NGOs include the concept "three to five" in antenatal care services and other related service delivery activities.

2.6 Intervention Summary

2.6.1 Intervention Objective

The intervention's general objective was to support the use of OBSI to reduce maternal and neonatal mortality rates in Bolivia.

The specific objectives were to:

- Train all clinic-based providers involved in PROCOSI's RH/FP Program on OBSI messages and to provide skills integrating messages into routine antenatal and postpartum counseling;
- Increase pregnant and postpartum women and their partners' knowledge about the health benefits for mothers and newborns of OBSI via clinic-based information, education and counseling; and
- Disseminate the "three to five" message among public and private sector institutions that provide maternal and neonatal care services.

The activities that comprised this project were conducted between January 2003 and May 2004. The funds were initially granted from January through December 2003, but PROCOSI requested and was awarded a no-cost extension through May 2004 to complete the described activities, including follow-up and supervision.

2.6.2 BCC Materials Development

Intervention activities centered on a 19-page evidence-based informational pamphlet on OBS, which was drafted, reviewed, edited, and printed during the first trimester of the grant period. The pamphlet relied on input from collaborating organizations: Bolivian Ministry of Health, USAID and CATALYST. Additional support was provided by PROCOSI and Saving Newborn Lives/Save the Children USA on the sections of the pamphlet related to neonatal health.

The pamphlet, entitled Embarazo Saludable, Seguro y Feliz (A Healthy, Safe and Happy Pregnancy), included culturally appropriate messages about how to ensure a safe, happy and healthy pregnancy and postpartum period.

A total of approximately 29,900 educational pamphlets were distributed. Initially, the pamphlets were distributed to all 37 participating PROCOSI NGOs in July 2003; however, during 2003 many facilities actively supported antenatal services, and demand for services and the pamphlet increased. Dissemination of the pamphlet to non-PROCOSI organizations continued through February 2004.

The pamphlet was used during antenatal care counseling sessions and during postpartum visits. A counseling guide also was developed and made available to providers as a resource to use during counseling.

A poster was also produced and displayed in health care facilities. The poster communicates that a healthy, safe and happy pregnancy results when a woman's previous child is between three and five years old. A total of 4,131 posters were distributed, the majority to PROCOSI NGOs and a few to organizations not participating in the intervention.

2.6.3 BCC Training Activities

OBSI trainings were integrated into ongoing RH/FP trainings for 582 health providers in the PROCOSI network. Also, in March and April 2003, 196 doctors, auxiliary nurses and health educators from PROCOSI member NGOs received training in OBS messages.

PROCOSI conducted six additional training workshops for 386 providers in Chuquisaca, Cochabamba, La Paz, Oruro, Santa Cruz and Tarija. These sessions were incorporated into PROCOSI's 2003 training program in coordination with the National System of Epidemiological Surveillance of Maternal Mortality and the MOH.

Each workshop lasted three days and included: (1) a definition of OBSI, scientific evidence supporting the "three to five" message, hypothesis of operations research, objectives of intervention and roles of participating NGOs; (2) instructions regarding the pamphlet; (3) counseling techniques; (4) strategies to personalize counseling; (5) services covered under SUMI; (6) correct use of reporting forms developed by CATALYST to report on service statistics; and (7) record keeping for monitoring purposes.

A packet of documents was prepared for the trainings.

Enhancing Knowledge and Understanding of Optimal Birth Spacing Intervals among Pregnant and Postpartum Women and Their Partners

Participating PROCOSI NGOs used trained staff to inform pregnant and postpartum women about OBSI during routine counseling both in initial and follow-up visits.

Counseling was always individual and respectful of client privacy. During initial visits, providers communicated OBSI messages to the women verbally using information included in the OBSI pamphlet. Additionally, providers explained that contraception is a strategy to space births and to limit them, and that through SUMI, postpartum women can obtain contraceptive services for free.

Each woman received a pamphlet so that she could refer to it later. The provider recommended to her client that she share the information with her partner and/or family. Follow-up visits allowed the provider to discuss and reinforce the key messages related to OBSI and postpartum contraception and to respond to any questions or concerns, which helped strengthen women's decision making about their parity and their ability to negotiate FP with their partners. Through this intervention, men's participation in his family is valued and requested.

A total of 9,692 pregnant women attended their first antenatal care visit during the project, and 4,824 of them received the informational pamphlet. In addition, 2,420 postpartum clients and 118 post-abortion care clients received pamphlets.

Also, OBSI messages were included in PROCOSI NGOs ongoing community outreach efforts to complement the in-service counseling. A total of 2,906 MRA and 10,790 WRA attended OBSI workshops, seminars and discussion groups in their communities.

The intervention's impact on women's knowledge and understanding of OBSI was assessed through baseline data collected prior to project implementation and end-line data collected upon its conclusion.

2.6.4 BCC Supervision and Monitoring

In each trimester following the initial workshops, PROCOSI performed facilitative supervisory visits to each implementing site to verify receipt and proper use of the materials. Supervisory visits were not conducted to observe sites that had received training through replications, only to sites that sent staff to the initial trainings. Using an observation guide, monitors observed the site and noted whether the OBSI poster was displayed in a noticeable place. They also sat in on antenatal and/or postpartum counseling sessions to observe routine use of the pamphlet and delivery of OBSI messages. All 135 providers of the 180 trained observed that they appropriately used the materials during counseling. Two-hundred-and-fifty-four sites were using the pamphlet in routine service delivery, and this number far exceeded expectations.

Table 3: Provider Feedback about Informational Materials

Strengths	Weaknesses
Gender perspective	Pamphlet and poster limited to literate audience
Incorporates the participation and support of women's partners	Clinic staff consider it as one more thing to do
The photos were appropriate, made the pamphlet and poster more realistic, and helped convey the messages	Photos are not appropriate for each region of the country (specifically Tarija)
Easy to understand for those who are literate	Some messages are not explained clearly
Good size	Late distribution of materials to focal centers
Motivates the participation of the partner throughout the pregnancy	Insufficient material for distribution according to geographical scope of project
Encourages follow-up and evaluation during future antenatal care visits	

Additionally, each participating NGO was requested to submit a report after every trimester with relevant service delivery statistics. The report form was standardized, so data from each site could be tabulated, analyzed and compared.

The reports also can be used as a baseline for other interventions or PROCOSI projects. Twenty-four of the 37 participating NGOs complied with reporting. Service delivery statistics from those organizations that did not routinely submit report forms were not included in the final analysis.

Providers from the participating NGOs also were requested to conduct a final evaluation that included a qualitative/narrative component expressing their perceptions of the intervention, feedback about the informational materials (see Table 3), and lessons learned for future interventions. Many indicated that the OBSI concept and messages were well received. Many women felt that the pamphlet should be disseminated among all women and men of reproductive age. Yet, the providers gave various examples of barriers presented by women and their partners that may impede the acceptance of OBSI in this population. See Box 1 below for examples.

Box 1: Perceived Barriers to Client Acceptance of OBSI

Socio-cultural beliefs
Women who use contraceptives are unfaithful to their partners
If a family does not have a lot of children, others will speculate about a man's virility or a woman's fertility
The number of children one has and when is up to God's will/plan
The more children a man has, the more macho he is
Cultural norms
Community acceptance of two-year birth spacing: belief that children should not grow up with more than two years between them
Tradition of having many children
Children are a way of keeping women occupied at home
Fewer children would result in less help to carry out household tasks and labor
Desire to have a male child
Partner Acceptance
Fear of abandonment by spouse/partner for bearing few children or even proposing birth spacing
Partners reject FP methods
Concern about bringing up the topic of birth spacing with partners
Health Concerns
Fear of using contraception methods
Belief that use of contraception can cause infections, cancer and sterility

2.6.5 Building Support for Birth Spacing

Efforts were made to disseminate the concept of OBSI among national authorities to achieve its inclusion in other public and private comprehensive health care projects, as well as in the government's national norms for maternal and child care through SUMI.

OBSI information efforts primarily targeted the *Unidad Nacional de Atención a las Personas* (UNAP: National Unit of Welfare) — a unit of the MOH — and departmental and municipal health and political authorities.

OBSI information packets were sent to all organizations in La Paz that conduct maternal health or neonatal health projects or interventions. Presentations about the OBSI concept and this operations research project were presented at meetings upon request, such as at the *Alianza por la Salud del Recien Nacido* (Alliance for Newborn Health).

Persistent information efforts and careful follow-up of potential opportunities to advance the OBSI initiative resulted in several significant achievements.

On International Women's Health Day (May 2003), First Lady and President of the *Comité Interinstitucional por una Maternidad Segura* (Inter-institutional Committee for Safe Motherhood), Ximena Iturralde Sánchez de Lozada, endorsed the OBSI message through a letter to Bolivian women, which informed women about maternal and neonatal mortality, and encouraged them to preserve their health and that of their children by spacing their births three to five years. Copies of the letter were distributed to all departmental and municipal political and health authorities.

Also in response to lobbying efforts, the UNAP adopted the OBSI messages and incorporated them in the SUMI Technical Guidelines, which all providers at MOH health care facilities can access.

The OBSI counseling and BCC materials developed for this project were adopted by numerous organizations that did not participate in the intervention. Non-PROCOSI organizations and programs have requested use of the materials, such as GTZ, UNFPA, Reducción Acelerada de la Mortalidad Neonatal and the referral hospital Hospital de la Mujer (Women's Hospital) through a project supported by CATALYST. Finally, five participating PROCOSI NGOs are incorporating OBSI in other programs.

2.7 Results

2.7.1 Evaluation of Training Activities

Methodology

At the beginning and end of each training workshop, all participants were administered a standardized test to assess changes in knowledge of OBSI and to determine the potential for incorporating OBSI messages in antenatal counseling services. The test consisted of 10 multiple choice and open-ended questions regarding birth spacing, the OBSI risks of shorter and longer birth spacing intervals, as well as barriers to the adoption of OBSI and perceived benefits of OBSI.

Results

The results of the pre- and post-tests (see Table 4) show that all workshops successfully increased the participants' OBSI knowledge with an average increase of 42%.

Table 4: Change in provider knowledge about birth spacing messages

Department(s)	n	Pre Test % Average Score	Post Test % Average Score
Chuqisaca	22*	31	88
La Paz	36	33	81
Cochabamba	39	35	78
Oruro	19	34	76
Tarija	28	40	76
Santa Cruz and Beni	33	53	79
Total average	177	38	80

* Includes participants from Potosí

2.7.2 Evaluation of BCC and counseling intervention on knowledge of inter-pregnancy intervals among antenatal and postpartum women

Methodology

Exit interviews with antenatal and postpartum care clients were conducted at baseline and end-line to determine knowledge of the association between inter-pregnancy, obstetric complications, maternal and neonatal mortality, contraceptive use and preference for contraceptive methods.

Baseline and end-line interviews were conducted at all intervention sites. Providers at each site were instructed not to initiate OBSI counseling or use the informational materials until baseline data was collected. Frontiers/Population Council provided technical assistance on the transcription, tabulation and analysis of the surveys.

A representative sample size was determined using a simple random sample and divided proportionally among seven of the nine departments where the interventions were conducted. A final sample size of 1,014 was calculated, with 95% significance and 3% margin of error. The end-line sample size was calculated the same way with some adjustments, giving a sample size of 645, maintaining 95% significance, but a 4% margin of error.

The study instruments consisted of a pre- and post-intervention survey questionnaire, as well as instructions for the interviewers. The multiple-choice questionnaires (with some questions allowing more than one response) included questions about the effect of inter-pregnancy intervals on the health and well being of mothers and children, ideal family size and intent to use contraception. Trained auxiliary nurses administered the baseline and end-line surveys. Verbal informed consent was required of all participants before proceeding.

Results

The baseline and end-line surveys yielded 1,007 and 649 responses respectively. The 35% decrease in end-line responses primarily is due to the closure of RH/FP projects at some intervention sites and a change in personnel at others.

Knowledge about OBSI of three to five years

The women surveyed demonstrated a statistically significant ($p=0.000$) increase in knowing that three to five years is the optimal interval for a woman who wishes to have another child (50% to 63%). The proportion of women who believed that a one- to two-year interval is sufficient decreased from 29% to 21%.

Respondents were asked if they planned to become pregnant again, and, if so, how much time they wanted to allow before their next pregnancy. More than 42% in both samples did not wish to have more children. Of those who did desire to become pregnant again, 29% at baseline and 31% at end-line preferred to wait three to five years. Few (7% at baseline, 6% at end-line) desired to wait six years or more. The differences in each category between baseline and end-line were not statistically significant.

Despite the women's desire to space births by three to five years, the majority of women interviewed at both baseline and end-line had pregnancies less than three years apart (55% and 65% respectively).

Knowledge about risks for mother if inter-pregnancy interval <3 and >5 years

When asked to identify the risks that short birth spacing intervals pose to a mother's health, correct responses improved significantly across all categories (see Table 5).

Table 5: Knowledge of risks to mother if inter-pregnancy interval <3 years

Risks	Baseline (%) n=1007	End-line (%) n=649	p-value
None	31	23	0.001
Hemorrhage 3rd trimester	16	30	0.0
Premature rupture of membranes	6	12	0.0
Puerperal endometriosis	8	16	0.00
Anemia	27	32	0.019
Others	15	18	0.116
No response	17	12	0.007

The proportion of responses that incorrectly stated that more than five years between births posed no risks to mothers was significantly reduced from 54% to 35% (see Table 6).

Table 6: Knowledge of risks to mother if inter-pregnancy >5 years

Risks	Baseline (%) n=1007	End-line (%) n=649	p-value
None	54	35	0.00
Eclampsia	5	14	0.00
Pre-eclampsia	11	29	0.00
Other*	14	19	0.006
No response	20	15	0.03

* This category includes vomiting, edema, etc.

Knowledge about risks for newborn if inter-pregnancy <3 and >5 years

The responses regarding risks for babies born within three years of a previous child demonstrate significant differences in knowledge before and after the intervention (see Table 7). Following the intervention, fewer women indicated that no risks are posed to babies as a result of short birth spacing intervals, decreasing the number of responses in that category by more than 50%.

Table 7: Knowledge of risks to child if inter-pregnancy interval <3 years

Risks	Baseline (%) n=1007	End-line (%) N=649	p-value
None	32	22	0.00
Premature birth	14	28	0.00
Low birth weight	36	48	0.00
Other	11	15	0.011
No response	18	9	0.00

The majority of baseline responses demonstrate that most women believed that babies do not face risks after a birth spacing interval of more than five years. Following the intervention, the proportion of responses in this category decreased from 56% to 36% (see Table 8).

Table 8: Knowledge of risks to child if inter-pregnancy interval >5 years

Risks	**Baseline (%) n=1007**	**End-line (%) n=649**	**p-value**
None	56	36	0.00
Premature birth	8	23	0.00
Low birth weight	11	29	0.00
Other	8	12	0.011
No response	20	13	0.00

Knowledge about contraceptives to space births

The majority of the women stated, before and after the intervention period, that use of contraceptive methods is a way to space births (82% and 78%, respectively).

Other ways to space births mentioned by women included “talking with your partner” (one of the messages included in the pamphlet) and “taking care of yourself.”10 The proportion of women that indicated these other methods for spacing births increased from 2% to 8% following the intervention.

Among postpartum women, 17% of those interviewed at baseline and 30% at end-line indicated using a contraceptive method. Table 9 shows that prior to the intervention, the majority of postpartum women surveyed used lactation as a form of contraception. At end-line, the number of postpartum women relying on lactation was statistically significantly lower.

[10] In Spanish, “cuidándose” can refer to using contraceptive methods.

Table 9: Postpartum women currently using a method of contraception

Method	Baseline (%) n=57	End-line (%) n=51	p-value
Lactation	46	14	0.000
Depo-Provera	25	31	0.430
IUD	14	35	0.010
Rhythm/Calendar	9	10	0.853
Oral pills	5	0	0.097
Fixed days/Necklace	3	0	0.177
Condom	2	6	0.257
Vaginal foam	2	2	0.937
Vasectomy	2	2	0.937
Withdrawal	2	0	0.342
Surgical sterilization	0	12	0.000
Other	5	2	0.364
No response	2	2	0.937

Some respondents provided multiple reasons for opting not to use contraceptive methods. The women who did not intend to use contraception following delivery reported at baseline that they were primarily concerned about side effects (26% of responses). Following the intervention, the proportion of this response increased to 41%; however, due to the relatively small number of respondents, this difference was not statistically significant.

Relationship between OBSI knowledge and contraceptive use (intent to use and actual use) among postpartum women

A separate analysis conducted by CATALYST looked at the relationship between OBSI knowledge and contraceptive use among 171 postpartum women at the end-line.

The analysis focused on postpartum clients because they are more likely than antenatal clients to pay close attention to FP messages. The analysis used the end-line sample only, as the knowledge levels about OBSI messages during the baseline would be too low to find any relationship. The analysis was done by adding the responses to the different knowledge questions and then creating a trichotomy: no knowledge, little knowledge and high knowledge.

Eighty-two percent of postpartum clients who have no knowledge of OBSI declared that they are or intend to use contraceptives. That percentage was 84% among clients with low OBSI knowledge and 99% among those with high OBSI knowledge. The relationship is statistically significant with p=.008.

2.8 Challenges

The production of the informational materials was intended to take place during the second and third months of funding. Since it was a participatory process, all collaborating parties were required to review and comment on the drafts. The time required for review and revision was underestimated. As a result, the distribution of the materials was delayed until July 2003.

Due to this delay, facilities were not able to use the materials until late August/early September. Consequently, fewer women than anticipated were exposed to the intervention as the end of the grant period approached. CATALYST approved a no-cost extension through May 2004, which prolonged the intervention and allowed increased exposure.

Since this was primarily a facility-based intervention, the number of pregnant women exposed depended upon the number of pregnant women who attended the service sites. As a result, the participating PROCOSI NGOs began to conduct community outreach to increase demand of services, and therefore demand of the pamphlets.

In September 2003, PROCOSI's RH/FP Program ended and half the PROCOSI partner organizations closed their projects and/or reduced staff, which affected the OBSI intervention as capacity for implementation was greatly impaired. Nevertheless, these organizations made efforts to include the intervention in the framework of other projects.

2.9 Lessons Learned

- OBSI messages can be integrated into existing service delivery systems by training health care personnel to offer personalized counseling and informational materials/job aids.

- OBSI counseling should be incorporated into antenatal, postpartum and postabortion care, as these women can adhere to OBSIs of three to five years and are covered for methods of contraception under SUMI.

- In addition to sufficient funding, the unwavering commitment of providers, health authorities and policy makers through information efforts is essential to support, establish and sustain effective programs to reduce maternal and child mortality.

- Informational materials should be field tested in all regions where it will be implemented. This feedback is important to enhance the appropriateness, acceptability and effectiveness of the materials.

- All key messages should be translated into Quechua and Aymara so that the information is accessible to a significant population who do not speak or read Spanish.

- Logistical difficulties should be anticipated and extra time should be contemplated for the production and delivery of materials to project sites.

- An effective intervention does not have to be complex and costly. Nevertheless, an intervention that involves the production of informational materials will increase the cost significantly and raise questions about sustainability.

2.10 Conclusions

The evaluation results demonstrate that antenatal and postpartum women's knowledge of OBSI and the risks posed by short and long birth spacing intervals increased significantly as a result of OBSI messages in antenatal and postpartum counseling sessions. In the end-line survey, when asked about the risks, women placed emphasis on those risks that were addressed in the informational pamphlet, suggesting receipt, high retention and good recall of the messages. Furthermore, the belief that birth spacing intervals less than three years and more than five years pose no risks to mothers and their children decreased.

The majority of women recognized at both baseline and end-line that contraceptive use is the principal way to space births. An increase in responses regarding the importance of discussing birth spacing with one's partner suggested receipt, retention and recall of the information presented in the pamphlet.

At end-line, women better retained messages regarding risks associated with birth intervals of less than three years. Yet, women exhibited relatively low knowledge about the adverse effects of longer birth spacing intervals. Therefore, OBSI counseling should place greater emphasis on imparting information about risks regarding birth intervals greater than five years. In addition, women expressed various concerns associated with use of contraception that would inhibit adoption of OBSI recommendations. Complete information should be provided on available contraception methods so that women can choose a method that is most appropriate for them, and men should be involved in the process.

This project was unable to determine whether knowledge and understanding of birth spacing messages translates to adherence and practice because of time restraints. It would be beneficial to follow-up with participating PROCOSI NGOs to explore whether rates of postpartum contraception and actual birth spacing intervals have increased since the intervention.

Furthermore, since this report primarily describes a facility-based intervention, a high proportion of women who do not attend the health care facility for antenatal care or delivery were less likely to be exposed to the OBSI messages. Community-based efforts need to be expanded to inform them about the importance of antenatal care and OBSI if maternal and neonatal mortality rates are to be successfully reduced.

III. Involving the Community in Birth Spacing:

CATALYST's grant in Cambodia

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3.1 Acknowledgements

We thank the Reproductive and Child Health Alliance (RACHA) and their staff for their hard work and dedication. Without their collaboration, the project in Cambodia would not have been possible. We also thank the United States Agency for International Development (USAID) for their support and involvement throughout the project intervention period. The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

3.2 Summary

Optimal birth spacing intervals (OBSI) is a modifiable risk factor that has the potential to create an impact on maternal and child health (MCH). The CATALYST Consortium initiated a birth spacing grants program in 2002, which was designed to provide funding, technical assistance (TA) and support to local non-governmental organizations (NGOs). CATALYST awarded an OBSI grant to the Reproductive and Child Health Alliance (RACHA) in Cambodia for a project involved with raising awareness on optimal birth spacing interval (OBSI).

The maternal mortality ratio in Cambodia of 437 deaths per 100,000 live births is one of the highest in Asia.11 Among the major contributing factors is the low contraceptive prevalence rate (CPR). The main objective of the project was to reduce maternal and child morbidity and mortality due to closely spaced and unwanted pregnancies. The OBSI grant project reached out to the community members, both men and women, through education on the benefits of birth spacing and the risks of not practicing a three to five year birth interval between children.

3.3 Introduction

This report focuses on the grant awarded to RACHA in Cambodia, for their project entitled, "Raising Awareness on Optimal Birth Spacing Interval in Cambodia Communities: Involving Men, Midwives, Traditional Birth Attendants, Health Center Chiefs and Village Health Support Groups."

3.3.1 Grantee Qualifications

RACHA has extensive experience collaborating with the Cambodian MOH in programs supporting reproductive and child health. RACHA was founded in 1996 as an alliance of three USAID projects: BASICS (Child Health), SEATS (Safe Motherhood) and EngenderHealth (Birth Spacing). RACHA moved from project status under EngenderHealth to become a local NGO in 2003.

RACHA has 125 staff members and focuses on health services: FP, safe motherhood, health communication, child health, sexually transmitted infection (STI)/HIV/AIDS and

[11] *Cambodia Millennium Development Goals Report 2003*. Ministry of Planning. Kingdom of Cambodia.

infectious diseases. RACHA's staff also has expertise in capacity building, information technology, finance and administration and monitoring and evaluation. RACHA has five field offices in different provinces: Kampot, Pursat, Battambang, Banteay Meanchy and Siem Reap.

Cambodia faces serious MCH issues12; most of them directly related to poverty, lack of knowledge about health issues and limited access to health facilities in rural areas. As a result of the poor access and understanding of MCH, many people either arrive too late to receive appropriate care or do not utilize health facilities at all. The government started a cost recovery plan for health services under the auspices of the Health Sector Reform Plan. However, many underserved people still do not utilize public sector institutes, because the plan's exemption system for the poorest clients does not work effectively; this results in them having to pay more than they can afford.

The maternal mortality ratio in Cambodia of 437 deaths per 100,000 live births is one of the highest in Asia.13 Although knowledge of contraception in Cambodia is high (92% of all women know at least one method), only 18.5% of married women of reproductive age (MWRA) currently use a modern contraceptive method. Most use temporary FP methods such as oral contraceptives (7.2%) and injectables (7.4%). A study conducted by RACHA in Siem Reap province found that discontinuation rates of both oral contraceptives and injectables are very high — up to 80% after one year of use14, which leads to unplanned and closely spaced pregnancies. Although the contraceptive prevalence rate (CPR) is low, the demand for FP services is high: 33% among MWRA. The study conducted in Siem Reap also shows that of the women who want FP, 17% would like to space their births and 15% would like to limit their births. However, less than 50% of women practice three-year birth-to-birth intervals, more than 20% space their births by only two years and 8% have only 1.5-year birth intervals.

The under-five mortality rate is 133 deaths per 1,000 live births for male children and 110 for female children. Infant mortality is 103 and 82 per 1,000 male and female live births, respectively. Strong evidence suggests that higher birth intervals protect children's survival as shown in Table 2.

Table 2: Relation of previous birth interval and child mortality

Previous birth interval	Mortality (per 1,000 live births)				
	Neonatal	Post-natal	Infant	Child	Under-Five
< 2 years	63	71	133	45	172
2 years	33	54	87	36	119
3 years	30	46	76	28	102
4 or more years	23	37	60	23	81

Source: Cambodia Demographic and Health Survey 2000

Chronic malnutrition among Cambodian children is high, with 45% of children moderately stunted and 31% severely stunted. The birth interval length is inversely related to stunting, but children with a birth interval of less than 24 months had the highest level of stunting (55%). Rural children are more likely to be stunted than urban

[12] Kenefick E. *Report on the Cambodian 1998 Joint UNICEF-WFP Baseline Survey of CASD Project and WFP Target Areas*. World Food Programme, Royal Government of Cambodia, UNICEF, 1998.
[13] *Cambodia Millennium Development Goals Report 2003*. Ministry of Planning. Kingdom of Cambodia.
[14] *A Study of Birth Spacing in Siem Reap Province: Dropout and Late Clients*. RACHA Studies #11, 2000.

ones. On average, 15% of children under the age of five exhibit signs of wasting — rural children more frequently than urban children, and severity increases with birth order.[15]

The Royal Government of Cambodia has fixed objectives for MCH, to be completed by 2015:

- Reduce child mortality rates by two-thirds
- Reduce maternal mortality rate by three-quarters, from 437 deaths per 100,000 live births to 140
- Achieve universal access to safe contraceptive methods (from 19% to 100%)

3.4 Intervention Summary

Until the OBSI project implementation with RACHA, birth spacing messages in Cambodia focused on a two-year interval between births. With recent information about the health benefits for mothers, infants and children of spacing births three to five years apart as well as the health risks of not spacing births for the optimal interval, RACHA developed strategies to increase awareness of OBSI among health authorities and health care providers in the public and private sector as well as within the general population of certain communities. RACHA also focused on teaching men about sharing responsibility and accountability with their spouses regarding FP methods.

3.4.1 Project Objectives

The project's main objective was to increase awareness on the health risks of spacing children less than three years apart by providing birth spacing information and education to villagers through existing information channels supported by RACHA and the MOH. RACHA also worked to improve couples' accessibility to long-term FP methods. Through the project, couples would receive information and counseling on how to prevent closely spaced and unwanted pregnancies through appropriate FP methods, while also receiving referrals to appropriate health facilities to obtain their desired method.

To disseminate the birth spacing and FP recommendations, RACHA trained village health support groups (VHSG)[16], traditional birth attendants (TBA) and satisfied male clients (SMC)[17] as disseminators of information within the villages.

3.4.2 Activities

In partnership with the MOH, RACHA used existing channels of information, education, communication and training in clinical and non-clinical settings to develop and implement appropriate health materials and strategies for two operational districts (ODs), Angkor Chey and Kampot. These activities included:

[15] Cambodia Demographic Health Survey 2000.
[16] VHSGs are community health networks composed of community members recruited through the cooperation of the MOH and the local authority. See appendix for recruitment criteria for VHSGs.
[17] See appendix for selection criteria for SMCs.

- Meeting with stakeholders to provide updated information on OBSI
- Adaptation of existing training curricula and information materials to incorporate the OBSI messages and concepts, with special emphasis on men's participation. The adapted materials include the birth spacing curriculum, refresher courses and counseling course
- Training of midwives, TBAs, VHSGs and SMCs using the revised curricula
- Health education about birth intervals during information sessions at health centers (HCs) and communities
- Close collaboration with Population Services International (PSI) to ensure that temporary contraceptive methods were available in the project intervention locations

The training for health care providers and community workers, including VHSGs, TBAs and SMCs, consisted of four main objectives:

- To review the importance and benefits of spacing births using available FP methods
- To increase awareness of OBSI
- To increase awareness of the importance of men's involvement in birth spacing and RH/FP issues
- To become familiar with the training session plan for community participants and develop an action plan after training

Once trained, with the assistance of MOH and RACHA staff, the health care providers and community workers conducted group discussions and individual conversations with target audiences (women aged 15 to 49 years and married men or men over the age of 18) in the communities. This was called "field practice."

RACHA also conducted quiz show style games, which HC staff and community health workers played with community members to help them retain information from the field practice sessions. Contest questions are based on the OBSI messages in the training curricula. Correct answers are awarded with small prizes, such as soaps and scarves.

3.4.3 Baseline

A baseline survey was conducted in the two ODs of Angkor Chey and Kampot. The ODs covered twenty HCs, with approximately 11 villages covered by each HC. The primary purpose of the survey was to identify existing knowledge and concepts within the target group. These concepts were comprised of: (1) awareness of OBSIs, (2) men's attitudes toward birth spacing and (3) frequency of male involvement in counseling sessions on birth spacing with their partners at HCs.

In the baseline survey, the five target groups were:

- Midwives
- TBAs
- VHSGs
- MWRA
- Men over eighteen years of age

Some of the main findings of the survey included:

- Many considered limiting the number of children in a family to be less important than spacing between children.
- Income generation and financial constraints are important concerns when considering more children and the need to space between children.
- The majority knew of FP methods. Pills, IUDs, injectables and condoms were the most well known methods.
- Knowledge of permanent methods of FP was patchier.
- Breastfeeding was not recognized as an FP method by most with the exception of midwives.
- Males tended to prefer the delay of childbirth, while females wanted to have their children at a younger age. Similar variations existed regarding the age to stop having children. Men preferred stopping later while women preferred earlier.
- The majority of respondents, both male and female, felt that men should be involved in birth spacing.
- The acceptance of men as "heads of households" was most prevalent among men themselves; however, this view occurred less among women and proportionally so among women with higher levels of education.
- The majority of women felt that men could contribute to birth spacing by using FP methods rather than always relying on women to do so.
- Knowledge of supply points where FP methods were available was sporadic.

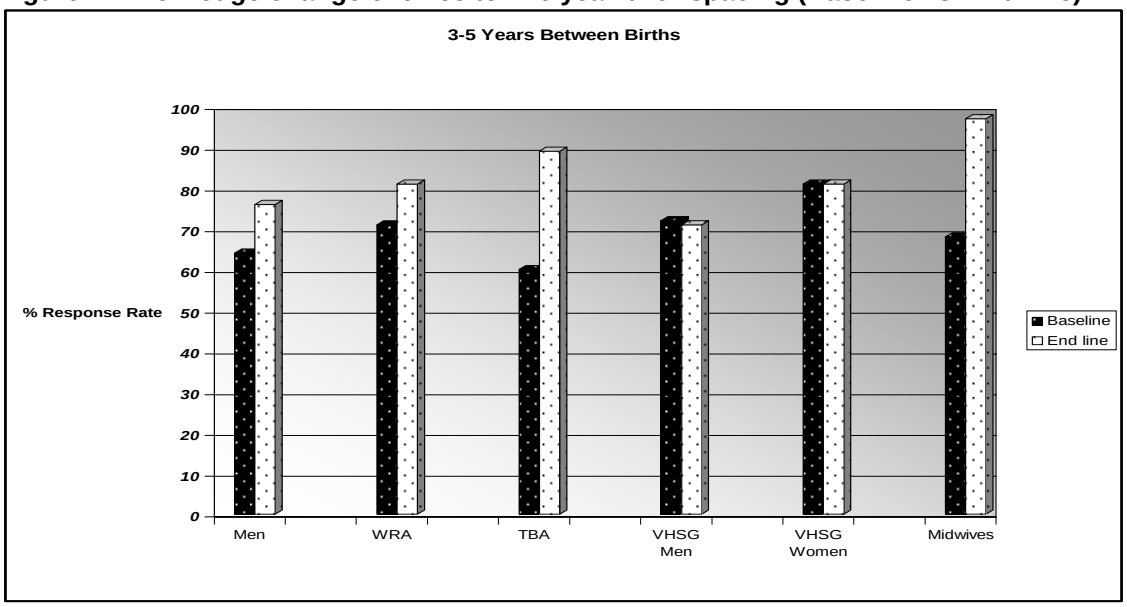
3.4.4 Endline

An end-line survey was conducted at the end of the project intervention with the same target groups addressed at the baseline.

While a small percentage of men (6%) and women (1%) reported not hearing about birth spacing in the baseline survey, 100% of the end-line participants reported having heard about birth spacing. Most respondents understood birth spacing to be "the decision to space births between one child and another." The second most popular response was "the decision for a desired number of children (size of family)."

When asked about the optimal period of time between births, three to five years was the most common response (see Figure 1).

Figure 1: Knowledge change of three to five year birth spacing (Baseline vs. End-line)



The TBA's and midwives demonstrated a large change in their knowledge of the benefits of practicing OBSI. The knowledge increases of these two groups were 32% and 37% respectively. The three most commonly mentioned benefits of birth spacing to the community were that birth spacing contributes to community development and poverty reduction and reduces maternal and infant mortality.

When asked about FP methods used for birth spacing, the knowledge of different methods increased significantly for men; 34% for oral contraceptives, 25% for condoms, 24% for injectables and 23% for IUDs. There also were significant increases for MWRAs; 88% for oral contraceptives, 26% for condoms, 12% for injectables, 29% for IUDs, 36% for Norplant, 33% for tubal ligation and 26% for vasectomies. Knowledge of where to obtain FP methods also increased within the different target groups.[18]

The vast majority of respondents answered "yes" when asked whether they recently had discussed birth spacing with their partners. Nearly all survey participants reported that their partners supported birth spacing and 97% responded that men should be involved in birth spacing decisions.

The end-line study results found that the intervention was successful in raising the awareness of the three- to five-year spacing interval. The data also suggests that men made dramatic increases in understanding birth spacing, particularly in their sharing of decision-making responsibility for FP methods.

3.5 Results

In total, 76 HC staff was trained on OBSI; this included 20 HC chiefs and 56 midwives. The staff in the two ODs of Angkor Chey and Kampot was trained through five sessions. Pre- and post-tests were conducted on the HC staff to determine their knowledge change before and after the training. The average pre-test score was 78% (ranging from

[18] See Table A in appendix

49% to 95%). The average post-test score was 98% (ranging from 80% to 100%). This indicates that the training sessions increased the HC staff's knowledge of OBSI and the importance of men's involvement in birth spacing and RH/FP issues.

The HC staff also provided training to community workers, including VHSGs, SMCs and TBAs, in their catchments. They trained 690 community workers, of which 369 were VHSGs (154 men and 215 women), 184 were SMCs and 137 were TBAs.[19] VHSGs and SMCs were trained using the same curriculum; however, since many of the TBAs were illiterate, their trainings were conducted using simplified materials that included more pictures and explanations. Pre- and post-tests also were conducted among the community workers to determine their knowledge change.[20]

As a result of the field practice, the trained workers increased their practical skills and capacity, while the villagers involved received information on OBSI. Four hundred forty-five community workers conducted group discussions with 8,304 villagers, of whom 2,953 (36%) were men.[21]

At the end of the activities and training, 15,680 target community members were reached with OBSI messages. They received information regarding OBSI from the 690 trained community health workers through field practice, either in group discussions or individual conversations. Approximately 47% of the 15,680 persons receiving OBSI messages were men.[22]

For the quiz show contests, 288 group contests were conducted in 95 villages under the coverage area of 18 HCs. The total number of attendees at the contest was 4,721 (776 of which were men).

3.6 Challenges

Some of the specific challenges that RACHA reported during the implementation included the community members' limited resources, addressing misconceptions and rumors, difficulties in receiving regular reporting by community workers and the community members' availability to participate in activities.

There was limited access to contraceptives due to cost. RACHA expected that the men would be able to share the responsibility of FP with their partners through the use of condoms and non-surgical vasectomies (NSVs). However, since the cost of NSV is not affordable for most people, condoms are the only contraceptive choice for many men.

Dispelling rumors on FP and birth spacing was difficult. Educating community members on new information is far easier than trying to remove preconceived ideas and misconceptions. It is necessary to provide continuing education and refresher trainings to keep community workers abreast of new information to share with their communities.

RACHA experienced some difficulties in receiving regular reporting from the community workers due to their time constraints and limited access to transportation. Since the

[19] See Table B in Appendix.
[20] See Table C in Appendix.
[21] See Table D in Appendix.
[22] See Table E in Appendix.

community workers needed to submit their reports to HC staff, they only turned in their reports when it was convenient for them to go to the HC; thus, reporting was often late or irregular.

There also was difficulty in accessing community members. The community members' availability to participate in trainings and interviews was limited by their work hours and other commitments. Many of the community members had side jobs away from home after the rice plantation season; therefore, many were not home when RACHA staff came to interview them or ask them to participate in project activities. More time than expected was needed for RACHA staff to meet and work with community members.

3.7 Lessons Learned

Involving senior level staff from the MOH, especially at the national, provincial and OD levels, was particularly useful in gaining support and acceptance for the new OBSI concept.

RACHA found that the OBSI message should be integrated into the TBA training program through continuing education. Also, if a community-based service program exists, it is recommended that the OBSI message be integrated into that as well.

It is best if at least 50% of the total population of the communities, both men and women, participate in the VHSG. SMCs should participate in the VHSG and should be key points of contact to teach other men about sharing responsibilities in RH/FP.

Messages provided to the community workers and the target populations should be simplified and condensed to make them easier to retain and practice.

The quiz show contests were well liked by the community members and were one of the best ways to reinforce OBSI messages.

3.8 Conclusions

The OBSI messages and the importance of men's involvement in birth spacing have been accepted at all levels of the MOH and within the targeted communities.

RACHA found that it is important to make information easily accessible and for HCs to provide friendly service to men interested in RH/FP. By focusing on the needs of male community members as well as female members, more men were eager to participate in information sharing sessions and utilize their newly gained understanding about sharing the responsibility of FP and supporting their partners. Improving quality of care and client-specific services were integral to the success of the project activities.

Peripheral health facilities, also known as HCs, are integral in linking community members with health services related to RH/FP. Community volunteers also are important to create a network for sharing health information at the grassroots level. The best way to reach the target populations is through working with the community network. Community involvement fosters a sense of community ownership and increases interest and dedication to the activities and concepts.

The OBSI grant project in Cambodia reached out to the community members to educate them on the benefits of OBSI and the risks of not practicing a three to five year birth interval. The messages were accepted by the community, and a large number of the target populations were educated on the different methods of FP and where to obtain these methods. The project also successfully increased men's involvement in FP and encouraged them to share the responsibility of birth spacing.

IV. Birth Spacing Grant Documentation: Nepal

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4.1 Acknowledgements

The CATALYST Consortium gratefully acknowledges the work of Business and Professional Women, Kathmandu (BPWK), a local Nepal NGO, in implementing and following the program through to its completion. We are also thankful to the CATALYST/Nepal team for the support they provided to BPWK at every step. CATALYST also would like to thank the sub-health post staff and the district public health office for being open to suggestions and accepting the changes proposed by the project to strengthen the services at the sub-health post. Most importantly, thanks are due to the people of Balambu, whose active participation and whole-hearted support of the project assisted in creating awareness on optimal birth spacing interval (OBSI) and strengthening family planning (FP) messages in the project area, thereby, opening the possibility for scale-up activities for the OBSI initiative in Nepal. The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

4.2 Summary

The birth spacing activity in Nepal was implemented in partnership with the Business and Professional Women of Kathmandu (BPWK), a local NGO active in women's empowerment in the micro-credit sector. Health messages were integrated into BPWK programs allowing for dissemination of public health messages at the community level outside of the health sector. Training materials were adapted and translated into Nepali for training the local community. During the project period, participants trained in optimal birth spacing and disseminated FP messages to about three-quarters of the village's female population

Birth spacing messages have been integrated into BPWK's ongoing activities for the micro-credit project. The project also strengthened the sub-health post with essential instruments and supplies for primary health care and FP services. Specialist physicians and nurses provided free consultation to more than 400 women, men and children over a period of 15 days. This further increased community awareness on birth spacing and FP.

The project trained approximately 300 participants, mostly women and a few men, on concepts of birth spacing and FP. The messages were well accepted by the community and helped reinforce and update existing birth spacing concepts and advantages of OBSI. The community's knowledge of optimal birth spacing interval three to five years increased substantially. Conversely, the notion that optimal birth spacing was five to six years decreased as did the percentage of people who did not know about optimal birth spacing. Generally, people already knew that short birth intervals had a deleterious effect on the health of the children, although prior to project implementation, they were not able to mention the specific health risks.

4.3. Problem Statement/Country Profile

Nepal is a landlocked country with a population of 25.1 million (United Nations Population Division, 2003). Because of the difficult geographic terrain (situated in the Himalayan range of South Asia), the national infrastructure is poorly developed, especially in the hilly and mountainous regions. Less than one-third of the total land area is in the plains (flat land). The urban population is 14.2%, an increase of 10% in the last 30 years (DHS 2001). Nepal is among the poorest countries in the world, and more than 80% of its population lives in rural areas. The main occupation of the people is agriculture, which absorbs about 70% of the total work force (DHS 2001).

Since 1991, there has been political upheaval in Nepal that has negatively affected development work. This situation was compounded by the emergence of an armed insurgency propagated by an extreme leftist group in the mid-nineties. Rural districts, where development work is most needed, have been affected the worst.

Nepal's maternal mortality ratio (MMR) is 540/100,000 live births[23] which is one of the highest ratios in all of South Asia. The main causes of this high maternal mortality are postpartum hemorrhage, sepsis, obstructed labor and abortion related complications. The contraceptive prevalence rate (CPR) is 39% and antenatal coverage is 28%.

The present infant mortality rate (IMR) in Nepal is 64 deaths per 1,000 births (DHS 2001). The under-five mortality rate is 91 per 1,000 births (0–4 years preceding the survey, DHS 2001). This means that one in every 11 children born dies before reaching age five. The Ministry of Health (MOH) has a national long-term goal of reducing MMR to 250/100,000 live births by 2017 as part of its millennium development goal (MDG). Similarly, the government plans to reduce IMR to 34.4/1000 by 2017.

Yet, over the past few decades, efforts have fallen short in reducing the high MMR. Women's health continues to be underserved and life expectancy for women in Nepal is only 57.9 years while for men it is 58.6 years (WHO report 2002).[24] The Female literacy rate is only 41%.[25] Women's health receives the least attention in terms of family resource allocation because as long as women are able to fulfill their social responsibilities they are considered "healthy." Plus, there is little recognition of the underlying causes of disease in general, particularly for women. Clearly, the male-orientated social structure and the lack of education and awareness on RH/FP issues have contributed adversely to women's health.

Additionally, among the rural communities, there has been little adoption of FP methods (national CPR 39%). At the family level, very little planning goes into birth spacing decisions, but when couples do try to schedule their births, they are often limited by barriers such as the unavailability of the chosen method, absence of a service facility in the area or other medical barriers. There is a high unmet need of 28% for FP methods, which is compounded by inadequate knowledge of how these methods work. Previous programs have tried to teach the communities about birth spacing intervals but the messages were mixed and often did not adequately express why the recommended births spacing intervals are beneficial to mothers and children.

[23] http://www.unicep.org/sowc05/english/Table8_E.xls
[24] State of the World Children 2005
[25] State of the World Children 2005

Balambu village development committee (VDC), the area where the project activities were implemented, is situated approximately 12 kilometers west of the city of Kathmandu and is part of the Kathmandu district. The total population of the intervention area is 5,164, and 2,595 are females.

4.4. Rationalization

Nepal's OBSI grant project focused on disseminating OBSI messages to women involved in a micro-credit program in the hilly regions skirting the Kathmandu valley. CATALYST provided technical assistance (TA) that was based on international evidence regarding RH/FP.

Organizations working with women's groups on non-health programs (e.g., micro-credit programs) were considered a novel mechanism for the delivery of birth spacing messages to the non-health sector for multiple reasons. For one, local NGOs, being closer to the problem, were more able to structure programs and interventions that were realistic and pertinent to local needs. In addition to working with local communities, an effort was made to reach out to rural populations, particularly women, with the aim of increasing their awareness of RH/FP issues, birth spacing in particular. The micro-credit group provided a captive audience, and had the potential for continued dissemination of program messages after the end of the project.

Integration of health messages into non-health programs allows for a greater part of the population to benefit from public health interventions based on international research findings. This allows for local level capacity development of non-health sector programs on public health issues.

4.5. Intervention Overview

The general objective was to create awareness of the importance of optimal birth spacing and to make FP counseling and contraceptives available to the rural population. The project activities reached out to a population of 5,164 between August 2004 and June 2005 (female 2,595 and male 2,569):

- Translation of birth spacing materials to local language for local training
- The knowledge update was conducted through training interventions.
- Birth spacing and family planning messages disseminated by trained community members to the entire village population though one-on-one counseling.
- The supply of FP commodities was provided through the local sub-health post in collaboration with the district public health office (DPHO).

The project strengthened the sub-health post by involving the clinical staff in OBSI and RH/FP knowledge updates and filling in the gaps for certain supplies that were essential for providing high quality RH/FP services. It further strengthened the capacity of the NGO staff and members in relation to RH/FP topics, which empowered them to provide support to the project activities. A baseline and end-line study were conducted to demonstrate the achievements made by the project.

4.5.1. Baseline

The project conducted a baseline survey of the intervention district. From randomly selected households, 200 women (aged 15-49, one per household) were interviewed for the study. Of the surveyed population, 98% had prior exposure to the idea of birth spacing, and roughly 60% thought that it had some benefits for the health of the mother and child. They were, however, ignorant about specific health benefits for the mother or child. Similarly, respondents knew little about the risks associated with shorter birth intervals (less than three years). The contraceptive uptake was 65%, higher than the national average of 39%. This is mostly due to the intervention site's close proximity and reliable access to a major city. In general the CPR is higher for the urban areas. The knowledge of a three- to five-year optimal birth spacing was only 6%, while 44% said that the optimal birth spacing was five- to six-years, and almost 50% did not know about optimal birth spacing.

4.5.2. Intervention Implementation

- Birth spacing and family planning training materials were adapted and translated into the local language.
- Training of trainers was conducted to prepare trainers from the micro-credit program
- Second level training conducted for other members of the micro-credit members as well as for other women and men from the general population who were interested in the program
- The trained participants and the master trainers provided counseling on birth spacing and family planning to the residents of the village.

The core project members, along with other members of the NGO, also received training on OBSI and FP methods. This was part of the capacity building measure to empower BPWK on health topics.

As part of the project intervention:

- Networking was established with the local health facility in the village, a sub-health post and the DPHO, which supervised the sub-health post. BPWK negotiated a continuous supply of family planning methods (Depo-Provera injections, oral contraceptives and condoms) from the DPHO's office for the sub-health post.
- Training on birth spacing was provided to the two clinical staff, who worked at the sub-health post. Essential clinical equipment and supplies were also provided to the sub-health post to boost up services (blood pressure measuring instruments, vaginal specula, weighing scale, etc.),
- The project staff supervised and provided support to all trainings that were conducted by the lead group of trainers for the general participants. Once the trainings were completed, the participants provided birth spacing and FP counseling to their neighboring households and kept records of the events through tracking sheets.
- A two-week specialized service by gynecologist/obstetrician was provided at the sub-health post to encourage health-seeking behavior among the village residents. This encouraged many families to come for services, where they had a chance to receive FP and birth spacing counseling. Many community members also became aware of the range of FP services provided by the sub-health post.

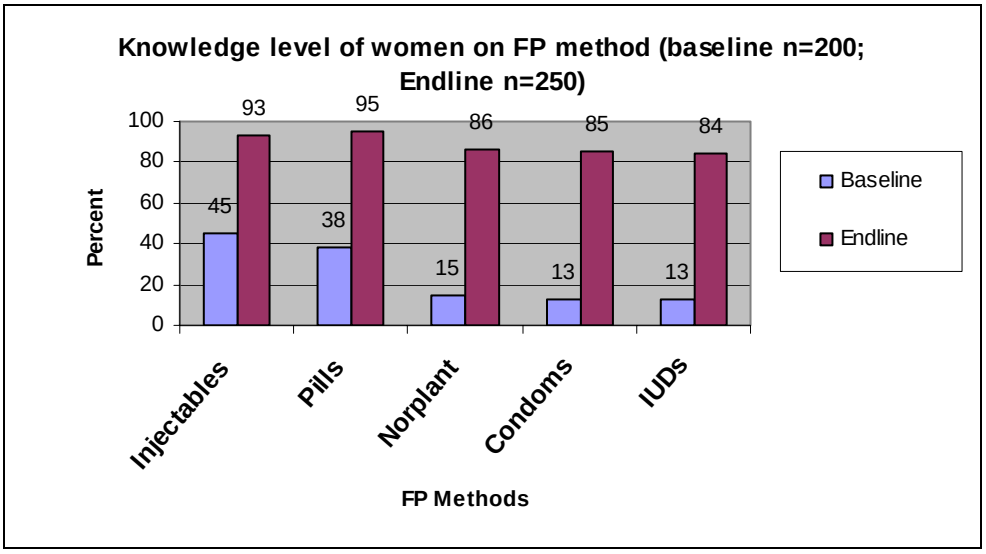
At the end of the project, BPWK integrated birth spacing and FP topics into their discussions during the organization's regular monthly meetings. The equipment provided to the sub-health post was handed over to the local authority in the presence of the DPHO. BPWK plans to provide technical support to the sub-health post as needed.

4.5.3. Results

The project directly trained approximately 300 women (and men) on birth spacing and FP counseling messages. These trained participants provided one-on-one counseling to 1,921 women (74% of the female population) regarding birth spacing and FP. The project conducted a baseline survey on knowledge of, attitude to and practice of (KAP survey) FP and OBSI at the beginning and end of the intervention. At the beginning, the population had fairly good knowledge of birth spacing concepts but knew little about optimal birth spacing interval or the health advantages of optimal birth spacing intervals.

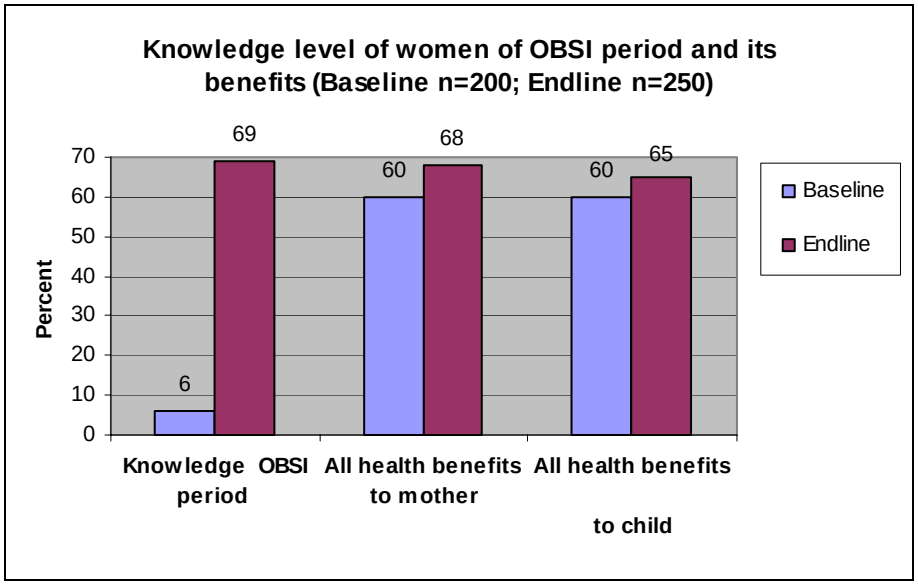
Though the knowledge level of women of any one FP method remained nearly universal over the project period, the method specific knowledge increased for all temporary family planning methods (table 1). The findings are statistically significant for all the methods at p = <.001)

Table 1: Knowledge level of women of FP method



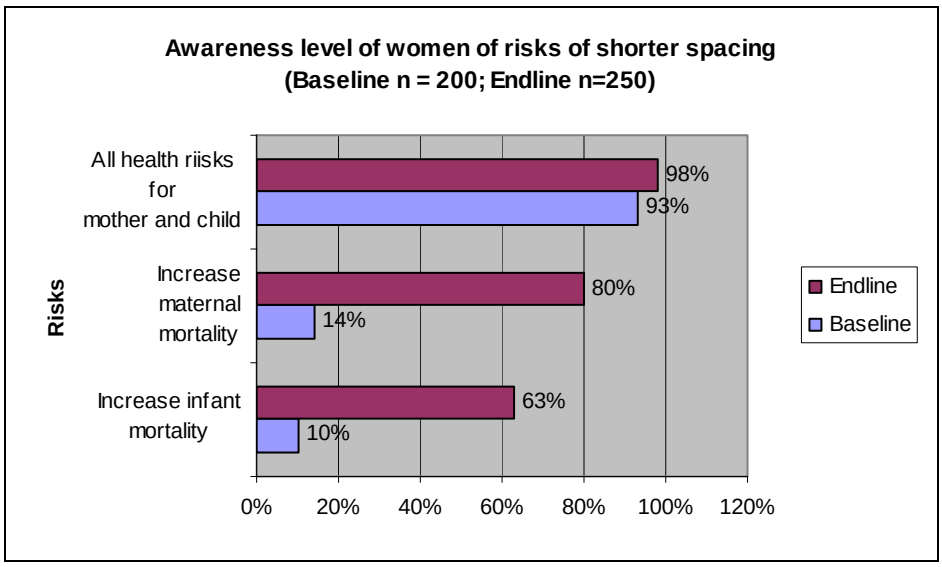
The baseline demonstrated that people knew there was danger associated with short birth intervals (less than three years) for the mother and child's health. However, people were unaware of the specific health risks associated with short birth intervals (less than three years). The end-line study demonstrated that the knowledge of a three to five year birth spacing increased from 6% to 69% (Table 2). This change in knowledge is statistically significant (p = <.001). While 44.5% thought that five to six years was an ideal birth interval at the baseline, only 4.6% of the people surveyed at the end-line believed it was the ideal interval. The change in knowledge for benefits to mother's and child's health was not significant.

Table 2: Knowledge level of women on 3-5 years birth spacing



There was only a marginal increase from 93.5% to 98.2% of knowledge of level of health risks for mothers and children before and after the intervention (p = <.01). The awareness level of women of risks of shorter birth interval increased from 10% to 63% for infant mortality (p = <.001) and from 14% to 80% (p = <.001) for maternal mortality (Table 3).

Table 3: Knowledge of risks for short birth interval



Depo-Provera continued to be the most popular FP method in the village before and after the intervention. The ever use of FP method among married women increased from 65% at the baseline to 79% at the end-line (p = <.001) (table 4). For the individual method use, the findings were not significant.

Table 4: Use of FP Methods among Married Women

Increased Ever Use of FP Methods among Married Women		
	Baseline (n = 200)	**End line (n = 250)**
Ever use of contraception	65%	79%
Injectable	73%	65%
Pills	14%	7%
Norplant	7%	9%
Condoms	5%	5%
IUD	1%	4%
Sterilization (limiting method)	12%	10%

4.5.4. Challenges

There were advantages and challenges of working with a purely non-health organization. The most significant advantage was the opportunity to integrate birth spacing and FP messages into new areas; however, it took more time to providing TA to integrate the basic health principles into their normal system. This was because it took longer than anticipated for BPWK to fully understand the health indicators and how to use them to monitor the progress of the program.

Another challenge was getting the grant off the ground because of the associated paperwork, resulting in valuable time lost for an already short-term project. The short time frame (of less than 12 months) proved to be difficult to get things established and still allow for an end of project evaluation study.

Political unrest and unforeseen events also made it more difficult for the program to follow predetermined, scheduled timelines and to accomplish its activities as planned.

4.6. Lessons Learned

At the community level, health-related projects usually create a good deal of interest. When this interest was expressed by other people from the community who were not directly associated with BPWK, the scope of the project was expanded to include members from the general community.

The project intervention allowed the integration of optimal birth spacing messages into a purely non-health program. Although it required a higher level of TA from the central level, it demonstrated that once the health messages were integrated into the non-health programs, it was well accepted by the community and helped increase the awareness of optimal birth spacing in the community. The intervention has a potential for being sustainable by integrating an RH/FP agenda into their ongoing project activities.

4.7. Conclusions

Including nonhealth organizations in health programs has allowed public health messages to be integrated into nonhealth programs and increase the outreach potential of health messages. BPWK has successfully integrated birth spacing and FP programs into their own programs. This has helped in reaching out to women on a regular basis with critical health information that positively affects the health of both mothers and children. This intervention was in a suburban area but demonstrates the potential for expanding into more rural areas with a similar partnership approach.

V. OBSI Individual Small Grant Documentation:

Asociación para el Desarrollo Amazónico Rural (ADAR)

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5.1. Acknowledgements

This report is dedicated to the Asociación para el Desarrollo Amazónico Rural (ADAR) team and their partners and collaborators in Loreto, Peru. We acknowledge their technical expertise, dedication and commitment to the Peruvian Initiative for Promoting OBSI project from 2003 to 2005, and extend our sincere congratulations for a successful activity, especially to Dr. Carlos Manrique de Lara Estrada, the Executive Director of ADAR and the grant Project Manager, and Maria Navarro Torres, Nurse Midwife and BCC and M&E Coordinator. The support and collaboration from the Peruvian Ministry of Health and the DISA staff from Loreto was instrumental in initiating and implementing the project, and will help sustain the activities in the future. Special appreciation is extended to the project beneficiaries and project implementers, including the women and men from the Fernando Lores and San Juan districts, the health promoters, the students, the teachers, and all of the providers and staff from ADAR and the health facilities in Loreto without whose interest and motivation the project would never have taken place. The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

5.2. Summary

In 2003-2004, the Peruvian based NGO *Asociación para el Desarrollo Amazónico Rural* (ADAR) carried out training and behavior change and communications (BCC) activities to increase awareness regarding the potential health benefits of practicing optimal birth spacing intervals (OBSI) of three to five years in two districts of the Loreto department in the Amazon region of Peru. ADAR intended to reach 9,200 men and women of reproductive age (MWRA) including 1656 adolescents.

ADAR trained 40 public and private health care providers and 218 community health agents in understanding optimal birth spacing messages and incorporating OBSI messages into the health care and counseling services they provide.

ADAR developed pamphlets, newsletters and posters and distributed them to providers and community health workers who used the materials to counsel men and women of reproductive age (MWRA) and school-based youths about the benefits of an OBSI of three-to-five years and FP. Through these activities, ADAR reached 7,100 MWRA and 3,027 school-based youths with OBSI messages.

ADAR successfully garnered support from district health officials from the Loreto DISA who signed a formal agreement to incorporate OBSI messages into FP services provided in public sector facilities in the two intervention districts.

Through ADAR activities, MWRA and school-based youth demonstrated increased knowledge about an OBSI of three to five years (27% and 21% respectively); increased knowledge about the potential health benefits associated with an OBSI of three to five years for mother and child; and increased use of a FP method (MRA: 29%; WRA: 14%; and youth: 6%).

Lastly, evaluation results show that it could be useful to determine if there is a relationship between correct OBSI knowledge and intention to use or use of an FP method among the target population.

5.3. Country Profile

Peru's population reached 27.6 million in 2004 and is expected to double in 34 years.[26] A great majority of the population is indigenous (45%) and mestizo (37%). About 7 million Peruvians maintain their native language, primarily Quechua or Aymara. Half of the population lives in poverty,[27] and the most common health problems are similar to those shared by many developing countries and include acute respiratory infections and diarrheal diseases. The Peruvian government's efforts to increase access to health care services resulted in improved health indicators, although with great disparities across income levels and geographic regions.

According to the last two DHSs, there is an unmet need for RH/FP services in Peru. The Peruvian DHS also showed that 10% of women in union wanted to space their pregnancies or limit the number of children they had, but were not practicing any form of contraception. This unmet need for FP reaches 15% in rural areas and 8% in urban areas. In Loreto, the total demand for FP services among women in union (i.e., percentage of women who use contraception plus the percentage of unmet need for FP services) was estimated at 82%, 24% of those wanting access to FP services to space their births.

Maternal mortality remains at an average of 185 maternal deaths per 100,000 live births, and infant mortality at 33 per 1,000 live births. Infant mortality in rural areas (62/1,000) is more than double the rate than in urban areas (30/1,000).

Lastly, 34% of the Peruvian population is under 15 years of age. This figure has important implications in terms of availability of RH/FP information and services that serve this population group. Moreover, research conducted on the demand for birth spacing using household survey data from 17 developing countries found that in Peru alone the demand for birth spacing is the most prevalent reason for an interest in family planning among the 15-19 years old zero-parity women, representing 34% of the total demand for FP.[28]

5.4. Rationalization

5.4.1. CATALYST Consortium OBSI Grants

The CATALYST Consortium initiated a birth spacing grants program in 2002, which was designed to provide funding, technical assistance and support to local NGOs for the implementation of community discussions and programs that engage health practitioners, community members and special interest groups such as males, youth and hard-to-reach populations in creating awareness of the health and social benefits of practicing and the risks of not practicing OBSI. The OBSI grants program was visualized

[26] Source: PRB 2003
[27] More than half the population earns less than two dollars a day per OXFAM Peru Country Profile 2002.
[28] Jansen II, W.H. *Existing demand for birth spacing in developing countries: perspectives from household survey data*, IJGO, April 2005.

as a tool for enhancing the capacity of local NGOs to provide culturally appropriate and community-based RH/FP and OBSI activities.

The Request for Proposals for the OBSI grants was made available via the CATALYST Consortium website, and was advertised by USAID country office staff and at the CATALYST Consortium Asia Near East conference in 2002. All NGOs that were registered with USAID and had the organizational capacity and desire to work on OBSI were encouraged to apply. Applications were reviewed by a panel at CATALYST headquarters and were assessed based on designated criteria that included components such as technical qualifications, organizational capabilities, justification of need, project design, workplan, monitoring and evaluation plan, budget and programmatic and financial reporting. Four OBSI grants were awarded in 2003; two were awarded to organizations in Bolivia, one in Romania and one in Peru. The objective of these grants was to conduct innovative activities in operations and formative research, training, counseling, and community outreach that would make a contribution to advancing the knowledge and practices of OBSI.

In May 2003, the CATALYST Consortium awarded the Asociación para el Desarrollo Amazónico Rural (ADAR), a Peruvian nongovernmental organization based in Iquitos, Peru, $51,452, split between CATALYST CORE and Field funds, to increase awareness about the health risks and benefits of practicing or not practicing an OBSI of three to five years among 46 communities in the Maynas province of Loreto, Peru. ADAR contributed an additional $23,850 of its own funds to carry out the activities.

The grant activity served 46 communities located in the Panguana Islands, the district of Fernando Lores, and along the Iquitos-Nauta highway, a district of San Juan Bautista. All are located in the Maynas province.

5.4.2. Grantee Qualifications

ADAR is a private nongovernmental organization that has been implementing health, education and community development activities in rural and peri-urban populations living in the Amazon River basin in Loreto and Ucayali, Peru since 1987. ADAR is one of the few local NGOs that have worked with indigenous groups, such as the Ashàninkas, Yines and Cashinahuas native populations, as well as populations that have settled along the Amazon River and its tributaries.

5.5. Statement of Need

The 2000 DHS found that women in the Amazon region of Peru — including the area covered by this activity — experience high total fertility, low levels of contraceptive use among WRA, first pregnancies at an early age and short birth intervals (see Table 2).

Table 2: Summary of RH indicators

	Loreto	Peru
Total fertility rate	4.6	2.9
Contraceptive use among women 15-49 yrs (modern and traditional methods)	63%	69%
Women age 15-19 yrs that have been pregnant	34%	13%
Median birth intervals (months)	32	37
Newborn mortality	23/1000	23/1000
Infant mortality	53/1000	43/1000
Child mortality	79/1000	60/1000

Source: Peru DHS 2000

The main activities of the intervention included:

- Training district health officials, public and private health care providers and community health workers, including midwives and lay health promoters, to understand the three to five year OBSI messages and practices, incorporate it into their health education efforts, and champion it as a way to minimize maternal and infant morbidity and mortality
- Helping MWRA make more informed decisions with regard to their reproductive intentions
- Sharing information about using modern contraceptive methods as a way to achieve a three to five year OBSI

Expected outcomes included:

- District health authorities, members of associations of health professionals and public and private sector health providers are informed champions of OBSI and integrate the optimal birth messages into the maternal and child health programs and services they provide.
- Community health agents trained by ADAR communicate OBSI messages to residents of the two districts.
- A greater proportion of WRA plan to space their births three to five years apart, and indicate their intention to use modern methods of contraception to achieve optimal birth spacing.

5.6. Intervention Summary

The grant's objectives were to increase awareness and practice of OBSI to improve maternal and child health outcomes in two districts of the Loreto province.

The specific objectives were to:

- Incorporate OBSI messages into maternal-child health programs.

- Involve the mass media and community health agents in efforts to increase understanding and practice of three to five year OBSI.

5.6.1. Building support for the birth spacing initiative

Census

The census activities were planned to alert community authorities and inhabitants of the start of the project and to inform them about its intended objectives. ADAR proposed working with 46 communities that were more populous and organized

5.6.2. OBSI Regional Conference

ADAR organized an OBSI Regional Conference for regional health authorities, health associations, health care providers, and local health organizations. The purpose of the forum was to raise awareness about the OBSI project and to garner support from the public and private sectors, NGOs, CBOs, and educational institutions in disseminating OBSI messages.

ADAR reported that participants in the conference were interested in learning about and understanding the OBSI strategy for improving the health conditions and quality of life of women and children in the region.

5.6.3. OBSI Committee of Loreto

From the beginning, ADAR intended to form the OBSI Committee of Loreto, a supportive group made up of local leaders, who would endorse the OBSI messages and disseminate them. ADAR was frustrated in its efforts to enlist the support of prospective members due to the political situation in Loreto.

5.6.4. Agreement of mutual cooperation between the DISA-Loreto and ADAR

The DISA-L and ADAR signed an agreement of mutual cooperation to ensure the inclusion of the three to five year OBSI message in public health services. The agreement formalized what ADAR had already taken steps to achieve, i.e., that the staff of health facilities in the two districts regularly integrate OBSI as a part of their everyday activities.

5.6.5. Community self-assessment

ADAR facilitated a community self-assessment on maternal-child health in the 46 communities of interest. The purpose of the survey was to gain insight into the community members' beliefs about maternal and child health, which allowed program operators to adapt training and BCC content accordingly.

The ADAR survey consisted of three separate questionnaires designed for women, men and adolescents based on qualitative data collected from WRA on the topic of birth spacing. Eight women and eight men in each of the eight communities were then interviewed, as well as eight young women and eight young men from each of the three educational institutions in the San Juan district.

5.6.6. BCC materials development

BCC Materials

ADAR designed educational materials on OBSI messages and provided them to public and private sector health services providers, community health agents and the general public. Materials were used in training workshops. Much of the BCC material was translated or adapted from existing materials provided by CATALYST.

One such educational material developed was a technical bulletin named El Tibe, which introduced the OBSI project by outlining the principal advantages of a three to five year birth spacing interval.

ADAR distributed 1,000 copies of the bulletin and used them as educational materials during training activities for health care professionals and community health agents. Likewise, health professionals and social agents used the bulletins as educational tools for talks, presentations and counseling sessions.

ADAR also designed a brochure, flipchart and poster. These materials facilitated understanding and retention of the OBSI content. The flip chart outlined the advantages of OBSI and the brochure reinforced the presentations and counseling sessions. The poster advertised the “three to five” message.

Radio spots disseminating information about OBSI and FP in the province of Maynas
As a complement to the BCC activities, ADAR produced and aired four radio spots in October 2003 and again in December 2003 and January 2004 to reinforce the birth spacing messages.

5.6.7. Training activities

A training workshop on OBSI was conducted for ADAR technical staff, including a nurse-midwife, two auxiliary nurses, a support person and three volunteer medical students. The training’s purpose was to present research results on OBSI; explain the potential health benefits of OBSI for mother, child and family; provide training in basic contraceptive methodology; and impart strategies on how to communicate the OBSI three to five message to illiterate populations.

5.6.8. Training workshops for public and private sector health professionals

ADAR conducted trainings for approximately 40 public and private health care providers. The purpose of the training was to present the potential health benefits of OBSI for mother, infant and child and to work with the providers to identify ways to incorporate OBSI messages into the health care services they provide.

ADAR used a “Trainers Guide on Optimal Birth Spacing” developed by CATALYST to facilitate the trainings with the health professionals. The guide presented up-to-date research on OBSI, the health implications of a three to five year OBSI and key messages on OBSI outreach activities.

5.6.9. OBSI/FP training workshops for community health agents

ADAR conducted OBSI/FP training workshops for community health agents, which covered RH/FP counseling and imparted strategies for working with community residents.

The first multi-community training workshop on OBSI for community health agents took place in June 2003. Thirty-three community health agents took part in educational activities that introduced them to OBSI content. Participants also reached consensus on the motto for the project: “An optimal birth spacing interval of three to five years saves lives.” In October 2003, ADAR conducted a second multi-community workshop on OBSI for 16 additional members of OSIDEC and community health agents.

Also, ADAR held three training workshops with male members of OSIDEC and OCESI. The trainings followed the agenda and OBSI content of previous workshops and allowed ADAR to better understand the socio-cultural and religious aspects of male attitudes toward the practice of OBSI. ADAR identified some of the barriers to successfully involving men in the practice of OBSI.

5.6.10. OBSI/FP sessions for men and women of fertile age (MRA, WRA)

ADAR technical staff organized 16 mini-workshops and 20 talks that reached 411 MWRA and offered 24 mini-workshops and 26 talks on OBSI and related topics to community health leaders, school leaders, young people and the general population.

Trained male leaders from the two district health organizations OSIDEC and OCESI also replicated the OBSI training by organizing at least 50 educational sessions on OBSI for MWRA. Community health promoters and midwives also offered 16 educational talks on OBSI/FP. Male participants in three of the third-quarter OBSI trainings carried out similar sessions for community members in 24 communities per month, covering every community in the project region during the third quarter.

In all cases, ADAR staff and community health agents emphasized the benefits of OBSI. FP was mentioned as a way to achieve an OBSI.

5.6.11. OBSI/FP sessions for teachers and youth leaders.

Community health agents from OSIDEC and OCESI carried out sessions on OBSI/FP for teachers and youth leaders in rural and peri-urban high schools. ADAR also held 12 information sessions for 280 youth leaders and made 31 presentations reaching 548 students.

5.6.12. Additional ADAR clinic activities

In addition, ADAR integrated OBSI messages into other activities, such as 311 personal counseling sessions for WRA and adolescents. The counseling sessions addressed the advantages associated with OBSI for pregnant women, as well as modern methods of FP and risks associated with early pregnancy.

The mobile and permanent ADAR clinics also provided antenatal care to 32 pregnant women. The clinics served 39 new contraceptive users and 375 continuing users.

In the second quarter, ADAR made 251 home visits to WRA with the mobile clinic and ADAR health posts saw 284 clients with general medicine, pediatric, and OBGYN concerns. In addition, ADAR offered 575 counseling sessions, 101 of which were with adolescents. Finally, in the second quarter, ADAR saw 558 women using modern methods of contraception, 101 of which were new users. In all cases, ADAR team members discussed OBSI with clients.

In the third quarter, ADAR gave 273 personal counseling sessions (209 women and 64 men) on OBSI advantages and the importance of FP. The ADAR team saw 182 people regarding FP.

5.6.13. Supervision and monitoring

Follow-up/supervisory visits to health professionals

ADAR conducted an average of two follow-up visits per month to each of the 12 public health service professionals and the three ADAR health post auxiliary nurses. These visits ensured the quality of the integration of OBSI into the provision of both public and private health services. Visits were made after the training workshops.

Follow-up/supervisory visits to community health agents

The ADAR team, composed of the Project Coordinator, ADAR's nurse-midwife and heads of OCESI and OSIDEC, made a total of 192 follow-up visits to 46 community health agents to ensure the successful integration of the OBSI message into community health services. In some cases, the ADAR team carried out informational sessions alongside community health agents, helping them with information and participatory teaching methods.

5.7. Results

5.7.1. Evaluation

Baseline – End-line Study

The CATALYST Consortium conducted a baseline survey to measure and understand the knowledge, attitudes and behaviors of the population with regard to birth spacing. CATALYST carried out a nearly Identical end-line survey after the project period to measure changes in knowledge and attitudes.

CATALYST designed three instruments to collect baseline data:

- A household questionnaire for women ages 15 to 49 and men ages 15 to 59
- A questionnaire for students in secondary school aged 15 to 18
- A questionnaire for health care providers (doctors, nurses, nurse-midwives) and community health workers

With the exception of one, all questions were “closed,” though in all cases “other” was an option. The proportion of male to female respondents was weighted to reflect the population, (i.e., more women were interviewed than men). The sample size for the baseline (pre) and end-line (post) surveys was distributed as follows:

Table 3: Sample Sizes for CATALYST’s three questionnaires

Target population	Baseline Sample Size (n)	End-line Sample Size (n)
MWRA in 46 communities	716	908
Students 15-18 yrs from 10 schools	301	334
Healthcare providers and community health workers	18	20

In collecting baseline data, interviewers had trouble with the single “skip pattern” questionnaire in which they had to omit questions not relevant to their interlocutor (based on gender). To solve this problem — and to ensure better quality data — CATALYST separated the questionnaire into one for men (27 questions) and one for women (47 questions). The questions themselves were not altered. The questionnaire for students included 26 questions.

In addition to collecting information pertaining to OBSI awareness and knowledge, the household survey collected demographic and RH/FP data as well.

MWRA were asked about: number of pregnancies; reproductive intentions; knowledge of the advantages and disadvantages for mother and child of optimal birth spacing; knowledge of risks to mother and newborn of a birth interval shorter than three years; and knowledge of contraceptive methods and contraceptive use.

Male and female students were asked about: age; year of study; reproductive intentions; perceptions on birth spacing in their communities; knowledge about OBSI; knowledge of risks to mother and newborn associated with a short interval; perception of the advantages and disadvantages of a three to five year interval; personal opinion about the intervals at which he or she will plan to have children; and knowledge and use of contraceptive methods.

5.7.2. Knowledge of OBSI of three to five years

There was a 27% increase in the proportion of MWRA who identified three to five years as the OBSI (see Table 4).

Table 4: % MRA/WRA identifying the appropriate OBSI

Interval length	Baseline (n=716)	End-line (n=908)
1 to 2 years	35	15
3 to 5 years	52	79
6 or more years	13	6

Among adolescents, there was a 21% increase in those identifying three to five years as the OBSI (see Table 5).

Table 5: % Adolescents identifying the appropriate OBSI

Interval length	Baseline (n=301)	End-line (n=334)
Less than 3 years	21	8
3 to 5 years	66	87
6 or more years	12	5

5.7.3. Knowledge of risks to mother and child

CATALYST saw an 8% decrease in the proportion of men and women saying that there was no risk associated with an interval shorter than three years, as well as a 10% decrease in the proportion saying they did not know (see Table 6).

Table 6: % MRA /WRA reporting risks to mothers spacing <3 years

Risks	Baseline (n=716)	End-line (n=908)
Anemia	11	15
Prolapse/bleeding	6	20
Postpartum complications	3	12
Death	10	21
No risk	14	6
Does not know	14	4

Among adolescents, there was a small decrease in the proportion responding that there was no risk to the mother associated with a birth interval shorter than three years (see Table 7).

Table 7: % of adolescents reporting risks to mothers spacing <3 years

Risks	Baseline (n=301)	End-line (n=334)
Anemia	13	22
Prolapse/bleeding	28	47
Postpartum complications	4	9
Death	4	2
No risk	4	3
Does not know/no response	8	7

Respondents demonstrated increased levels of knowledge on risks to the infant with a short birth spacing interval (see Table 8).

Table 8: % MRA/WRA reporting risks to infants if spacing <3 years

Risks	Baseline (n=716)	End-line (n=908)
Underweight	16	31
Born prematurely	15	16
Small	12	25
Death	4	2
No risk	16	6
Does not know	12	5

Adolescents also appear to have absorbed messages from radio spots and talks with regard to risks to the infant associated with a birth interval shorter than three years (see Table 9).

Table 9: % adolescents reporting risks to infant if spacing <3 years

Risks	Baseline (n=301)	End-line (n=334)
Underweight	26	46
Born prematurely	14	23
Small	13	20
Death	4	0
No risk	3	2
Does not know	8	7

5.7.4. Advantages and disadvantages of OBSI of three to five years for mother

The proportion of respondents who saw no advantage for mothers to have an OBSI of three to five years decreased by 5% as did the proportion that did not know (10%) (see Table 10).

As for disadvantages of a three to five year interval, the proportion of MWRA responding "no disadvantage" increased by 17%. Those who do perceive a disadvantage most commonly mentioned, "starting everything all over" (19% increase) and "re-learning how to take care of a child." (15% increase).

Table 10: % MRA/WRA reporting advantages to mother of three to five OBSI

Advantages	Baseline (n=716)	End-line (n=908)
Better health/healthy life	16	37
More time for kids	19	27
More time to recuperate	10	24
Can work/study/get ahead	26	19
Can rest	13	15
Healthy pregnancies/fewer miscarriages	8	13
Less risk of hemorrhage	3	8
Healthy births	4	5
No risk	13	8
Don't know	14	4

Advantages of a three to five year interval to the mother mentioned by the adolescents included less risk of dangerous deliveries (27% increase) and deliveries without complications (18% increase) (see Table 11).

Table 11: % adolescents reporting advantages to mother of three to five year OBSI

Advantages	Baseline (n=301)	End-line (n=334)
Less risk of complications during birth	17	35
Fewer dangerous births	13	40
Less risk of abortions	4	17
More time to take care children	42	50
Can rest	13	16
Better health	4	-
Healthy life	2	1
Can work	1	-
Can raise her children well	3	-

5.7.5. Advantages/disadvantages of OBSI of three to five years for infants

At baseline, advantages dealing with personal development were cited more often than health-related advantages of three to five year OBSI. At end-line, on the other hand, health advantages were mentioned more commonly as demonstrated in Table 12, a finding that is consistent with the health messages conveyed in the OBSI project's activities and materials.

Table 12: % MRA/WRA citing advantages to infant of three to five year OBSI

Advantages	Baseline (n=716)	End-line (n=908)
Receives more attention	33	31
Better education	16	4
Gets more affection	16	19
Is healthier	15	43
Develops better	7	12
Is bigger	4	10
None	11	7
Do not know	10	4

Adolescents displayed a slightly better understanding of the advantages of OBSI for infants often citing health-related advantages as shown in Table 13.

Table 13: % adolescents citing advantages to infant of three to five year OBSI

Advantages	Baseline (n=301)	End-line (n=334)
Better weight	10	30
Better size	3	20
Receives more time	16	26
Gets more affection	13	24
Less risk of death	6	15
Receives better care	20	20
None	3	2
Do not know	5	4

5.7.6. Knowledge about preventing undesired pregnancies

MWRA were asked, "After the birth of a child, what can a woman do in order to not become pregnant again soon?" Based on results from both the baseline and end-line studies, respondents clearly identify contraception as the way to prevent undesired pregnancies (96% and 98%, respectively).

Similar to the adult respondents in the baseline and end-line studies, adolescents citing modern contraceptives as the way to prevent unintended pregnancies increased 5% (see Table 14).

Table 14: % adolescents citing methods to prevent pregnancy

Method	Baseline (n=301)	End-line (n=334)
Contraceptives	77	82
Natural methods	19	16
No method	2	1
Do not know	2	2

5.7.7. Knowledge about contraceptives among adolescents

The ADAR final evaluation report found that the overwhelming majority of students surveyed know about or have heard of methods of contraception. Yet, both males and females show a slight increase in knowledge over the year in which ADAR implemented its OBSI activities (see Table 15).

Table 15: % adolescents who have heard of contraceptive methods

Method	Baseline (n=301)	End-line (n=334)
Contraceptive methods	96	97
- condom	81	87
- pill	74	76
- injection	64	64
- foam/jelly	35	50
- IUD	28	10
- periodic abstinence	19	18
- vasectomy	19	19
- female sterilization	10	19
- implant	8	5
- EMM	5	8
No, have not heard of any method	4	3

5.7.8. Contraceptive use among MWRA

Although a significant proportion of respondents state that contraceptive use is the only way to achieve an OBSI, only 47% of women and no men used contraceptives at the time of the baseline survey (see Table 16). On the other hand, at end-line more women reported using contraceptives (56%). Also, condom use among men increased from 0% to 29%. However, it is unlikely that the entire increase can be explained by the OBSI initiative alone.

Table 16: % MRA and WRA using a contraceptive method

	MRA		WRA	
Method	**Pre**	**Post**	**Pre**	**Post**
All methods	0	29	47	56
Condom	0	29	0	1
Injectable	0	0	22	28
Pill	0	0	10	8
IUD	0	0	0	0
Natural method	0	0	12	6
Breastfeeding	0	0	2	5
Female sterilization	0	0	0	6

It might be useful for future programming to investigate whether health care professionals and community health agents developed a good understanding of birth spacing and the ability to convey OBSI messages effectively to clients and peers.

5.8 Challenges

An important challenge was to coordinate with the district health authorities and to garner their formal support for the OBSI initiative. Local leaders' formal support and approval were difficult to procure

A significant challenge for the program operators was to reach adolescents no longer in the educational system. Since some young men and women cease their studies for economic reasons or to take care of family, a significant proportion of adolescents were not likely reached by the OBSI activities conducted in schools.

5.9. Lessons Learned

Survey design was difficult to implement. The nursing school graduates administering the baseline survey had difficulty including or omitting questions as necessary based on each respondent's gender. As a result, for the end-line study, ADAR constructed a separate survey for men and women.

CATALYST identified the need to pretest BCC material. Indeed some of the BCC materials developed were difficult for the health promoters to use due to their limited experience utilizing these materials effectively. Also some of the materials were too lengthy to be used in a short counseling session.

Due to delays in carrying out the baseline survey the results may not capture the full effect of ADAR's activities. It may be worthwhile to explore if there is a significant relationship between increase in knowledge of OBSI and intention to use or use of FP services and products.

5.10. Conclusions

ADAR, with support from the CATALYST Consortium, implemented BCC, training and M&E activities to increase awareness and practice of a three to five year OBSI in Loreto, Peru. ADAR helped 108 district health authorities, members of associations of health professionals and public and private sector health providers become informed champions of OBSI and to integrate the "three to five" message into the maternal and child health programs and services they provided.

ADAR trained more than 218 community health agents and created six informative radio spots to disseminate the OBSI message to residents of the two districts. Only in the youth-to-youth peer education component did ADAR fall short.

ADAR OBSI observed a greater proportion of WRA planning to space their pregnancies/births three to five years apart, and indicating their intention to use modern methods of contraception to achieve OBSI.

VI. Birth Spacing Grant Documentation:

AGROVIDA/ Peru

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6.1. Acknowledgements

This report is dedicated to the *Asociación de Promoción Agraria y Defensa de la Vida* (AGROVIDA) team and their partners and collaborators in La Libertad. We acknowledge their technical expertise, dedication and commitment to the Peruvian Initiative for Promoting OBSI project from 2004 to 2005, and extend our sincere congratulations for a successful activity, especially to Dr. Pedro Ulloa Jesús, the Director of AGROVIDA and the grant Project Manager, Flor de Maria Nolazco, the Community Work Coordinator, Karina Gutierrez and Rita Diaz, the Rural and Peri-Urban Educators, and Amado Ricardo Vargas, the Accountant. The support and collaboration from the Peruvian Ministry of Health and the DISA staff from La Libertad was instrumental in initiating and implementing the project, and will help sustain the activities in the future. Special appreciation is extended to the project beneficiaries and project implementers, including the women leaders from the community-based organizations, members of CONOMUP-La Libertad, the health promoters, the students in Otuzco, and all of the providers and staff from the health facilities in El Porvenir and Otuzco without whose interest and motivation the project would never have taken place. The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

6.2. Summary

In 2004–2005, the Peruvian based NGO *Asociación de Promoción Agraria y Defensa de la Vida* (AGROVIDA) carried out training and behavior change and communications (BCC) activities through community participation and linkages to health and other social programs. The primary purpose of the intervention was to increase awareness and practice of a three to five year birth spacing interval to improve maternal and child health outcomes among 2,000 men and women of reproductive age (MWRA) and students from three technical institutes in the rural districts of Agallpampa and Otuzco and the urban marginalized district of El Porvenir in the department of La Libertad, Peru. Additionally the intervention sought to expand access to contraception.

AGROVIDA incorporated OBSI messages into its health, environment, and micro-credit programs; sought community residents participation in the selection of women community leaders and health promoters; built the capacity of 150 women community leaders from 57 community based organizations to replicate OBSI BCC activities in their communities; trained two networks of 20 health promoters to disseminate OBSI messages and distribute contraceptive methods to hard to reach populations; and trained 10 students ages 17-23 years from three technical institutes to become OBSI peer educators. AGROVIDA also succeeded in garnering support from the regional health authorities for OBSI activities from the onset of the program further contributing to the sustainability of the OBSI activities.

The evaluation demonstrated that the intervention was successful in increasing the proportion of MWRA (29%, $p<.001$) and students (38%, $p=.000$) who identified the correct OBSI of 3-5 years, as well as the specific risks associated with OBSI of less than three years for mother and newborn. Overall contraceptive use did not increase significantly over the course of the intervention. However, among MWRA reporting they were not using any contraceptive methods, there was a significant increase in the proportion of women (21%) and men (14%) that intended to use a method in the future.

6.3. Country Profile

Peru's population reached 27.6 million in 2004 and is expected to double in 34 years.[29] A great majority of the population is indigenous (45%) and mestizo (37%). About 7 million Peruvians maintain their native language, primarily Quechua or Aymara. Half of the population live in poverty[30] and the most common health problems are similar to those shared by many developing countries and include acute respiratory infections and diarrheal diseases. The Peruvian government's efforts to increase access to health care services resulted in improved health indicators, although with great disparities across income levels and geographic regions.

According to the last two DHSs, there is an unmet need for RH/FP services in Peru. The Peruvian DHS also showed that 10% of women in union wanted to space their pregnancies or limit the number of children they had, but were not practicing any form of contraception. This unmet need for FP reaches 15% in rural areas and 8% in urban areas. In the department of La Libertad, the unmet need for FP reaches 9% (3% to space; 6% to limit).

In La Libertad, the total demand for FP services among women in union (i.e percentage of women that use contraception plus the percentage of unmet need for FP services) was estimated at 81%, 26% of which wanted access to FP services to space their births.

Maternal mortality remains at a national average of 185 maternal deaths per 100,000 live births, and infant mortality at 33 per 1,000 live births. Infant mortality in rural areas (62/1,000) is more than double the rate than in urban areas (30/1,000).

Lastly, 34% of the Peruvian population is under 15 years of age. This figure has important implications in terms of availability of RH/FP information and services that serve this population group. Moreover, research conducted on the demand for birth spacing using household survey data from 17 developing countries found that in Peru alone the demand for birth spacing is the most prevalent reason for an interest in family planning among the 15-19 years old zero-parity women, representing 34% of the total demand for FP.[31]

6.4. Rationalization

In May 2004, the CATALYST Consortium awarded the Asociación de Promocion Agraria y Defensa de la Vida (AGROVIDA), a Peruvian nongovernmental organization based in Trujillo $39,950 in CORE funds for its proposal to increase awareness of the health and social benefits of OBSI recommendations among 17 rural communities in the Otuzco and Agallpampa districts, and three marginalized urban areas in El Porvenir, on the outskirts of Trujillo, Peru.

[29] Source: PRB 2003

[30] More than half of the population earns less than two dollars a day according to OXFAM Peru Country Profile 2002.

[31] Jansen II, W.H. Existing demand for birth spacing in developing countries: perspectives from household survey data. IJGO, April 2005.

6.5. Grantee Qualifications

Founded in 1990, AGROVIDA is a private nongovernmental organization that implements health, education, and community development activities in the department of La Libertad on the northern coast of Peru. AGROVIDA manages its own clinic, which delivers primary health care services including RH/FP services to the population of Trujillo. AGROVIDA has more than fourteen years experience implementing natural resource management, food security, agriculture, micro-credit, and health programs. It has managed programs funded by a variety of international and local donors. Most recently, AGROVIDA collaborated with Pathfinder International to implement a three-year, USAID funded bilateral project called ALCANCE that delivered comprehensive RH/FP services to adolescents. Through ALCANCE, AGROVIDA reached youth from Andean communities in Otuzco, Corabamba and Julcan districts and a marginalized urban area in El Porvenir.

6.6. Statement of Need

The Department of La Libertad has a total population of 1,550,796 inhabitants. Trujillo, its capital, is located on the coast, and is the third most densely populated city after Lima and Arequipa. The districts of Agallpampa and Otuzco, where the grant was implemented, have populations of 10,860 and 22,733 respectively. The marginalized district of El Porvenir has a population of 1,004,674 (Source: INEI).

Although the 2000 DHS survey found that RH/FP indicators in La Libertad are comparable to those at the national level, they hide, however, important disparities within the department. La Libertad is one of the few departments of Peru that includes all three geographic regions: coast, mountain, and the Amazon basin. The better health indicators are found in the coastal region, principally in Trujillo, while the populations in the sierra and the jungle regions record a dire health status.

The rural districts of Agallpampa and Otuzco and the urban marginalized district of El Porvenir have some of the poorest communities in La Libertad, thus they have some of the worst RH/FP health indicators of the department. The total fertility rate (TFR) is estimated at an average of five children per woman in El Porvenir, and seven children per woman in the rural communities of Agallpampa. This compares with a TFR of 2.9 in La Libertad. Reproductive health and family planning and maternal and child health indicators for La Libertad are summarized in Table 1 below.

TABLE 1: RH/FP indicators in La Libertad and Peru

	La Libertad	**Peru**
Total fertility rate	2.9	2.9
% Women of RH age using a FP method	68	69
- modern method	47	50
- traditional method	21	17
Newborn mortality (<1 mo.)	27/1000	23/1000
Infant mortality (<1 yrs.)	45/1000	43/1000
Child (<5 yrs.)	60/1000	60/1000
Maternal mortality	NA	185/10000

Source: Peru DHS 2000

AGROVIDA identified health and social factors that impede women and couples from enjoying healthy reproductive lives in the three districts where the grant was implemented. The cited health factors included lack of information regarding the health benefits of practicing optimal birth spacing interval three to five years for both the mother and the newborn and limited access to contraceptive products and RH/FP services. The social factors cited included cultural norms, specifically a macho culture whereby women have limited decision-making powers regarding their own reproductive lives and are pressured to demonstrate their fertility. Women's limited economic decision making powers at the household level was also cited as an important factor that contributes to women's difficulty in accessing RH/FP services and enjoying healthy pregnancies and deliveries, which leads to increased risks of maternal and perinatal morbidity and mortality.

To address the health and social factors that prevent women from practicing three to five years birth spacing interval, AGROVIDA planned the following activities:

- Incorporate optimal birth spacing messages into health, environment, and micro-enterprise programs implemented by AGROVIDA
- Build the capacity of women community leaders and health promoters to implement optimal birth spacing activities in their communities
- Build the capacity of students from three technical institutes to become OBSI peer educators
- Strengthen RH/FP and optimal birth spacing counseling services and increase availability of contraceptive products at health facilities in the intervention area
- Garner support for optimal birth spacing both at the community level through BCC activities, and at the regional level through coordination with the MOH and DISA

To implement these activities, AGROVIDA targeted the following population groups to sensitize them about the benefits of birth spacing:

- 150 women leaders from community-based organizations working in human settlements in one marginalized urban community located on the outskirts of Trujillo, in the district of El Porvenir
- 40 health promoters
- 2000 women and men of reproductive age in 23 rural communities located in the Agallpampa district in the province of Otuzco in the sierra
- Students ages 17-23 years from three technical institutions in Otuzco
- Local authorities and public and private health providers sensitized about optimal birth spacing

Funding and technical assistance for the CATALYST Consortium allowed AGROVIDA to build their organizational capacity to conduct optimal birth spacing training activities and incorporate optimal birth spacing messages into their health and social programs; conduct optimal birth spacing and FP trainings for women leaders from community-based organizations and health promoters, who in turn disseminated optimal birth spacing messages to women and men of reproductive age at the community level; conduct OBS/FP workshops for health providers; and conduct OBSI behavior change and communications activities (BCC).

6.7. Intervention summary

The overall objective of the grant was to introduce the concept of optimal birth spacing, and increase awareness and practice of a three to five year birth spacing interval to improve maternal and child health outcomes in the rural districts of Agallpampa and Otuzco and the urban marginalized district of El Porvenir through community participation and linkages to health and other social programs. Additionally, the intervention sought to expand access to contraceptive methods available to the target population.

The specific objectives were:

- Incorporate optimal birth spacing messages into health, environment, and micro-enterprise programs implemented by AGROVIDA
- Facilitate the community empowerment process through the women's organization association, *Coordinadora Departamental de Organizaciones de Mujeres de La Libertad* (CONOMUP)
- Incorporate optimal birth spacing strategy into the communities
- Conduct informational sessions for 2,000 women and men of reproductive age, service providers and staff from micro-enterprises
- Garner support from the NGO, private and public sectors to implement the optimal birth spacing strategy at the departmental level

To achieve these objectives AGROVIDA implemented the six activities described below.

6.7.1. Building the capacity of AGROVIDA staff to conduct optimal birth spacing activities

The AGROVIDA technical staff (Project Coordinator and Executive Director of AGROVIDA; Community Work Coordinator; Educator for Rural Area; Educator for Urban Area; and Accountant) traveled to Lima to participate in a workshop on "Healthy Pregnancies and Healthy Motherhood" organized by the CATALYST Consortium May 19–20, 2004. The workshop positioned optimal birth spacing as a strategy to reduce maternal and infant morbidity and mortality, and introduced the participants to optimal birth spacing research findings. During the workshop the AGROVIDA technical team had the opportunity to network with other health professionals and policy makers from the public and NGO sectors in La Libertad.

CATALYST staff traveled to Trujillo on July 7, 2004, to conduct a one-day optimal birth spacing and RH/FP training of trainers (TOT) workshop for 15 AGROVIDA staff and 14 representatives from the DISA in El Porvenir and Otuzco. The workshop consisted of a four-module curriculum that addressed the following:

- Paradigm: Repositioning Family Planning
- Gender
- RH/FP
- Optimal Birth Spacing

BCC materials were also developed during this period, and presented during the training workshop. These included posters, flipcharts, and brochures used during the RH/FP counseling sessions.

In addition to building the capacity of AGROVIDA technical staff in optimal birth spacing and RH/FP, the workshop helped integrate OBS messages into three main AGROVIDA social programs: sustainable management of natural resources, shrimp breeding and micro-credit enterprises.

The OBSI and RH/FP workshop helped AGROVIDA obtain the DISA's support to implement the grant activity in the three districts. An agreement was signed between the two parties and subsequently, AGROVIDA and the DISA identified the ten public sector health facilities that would participate in the grant activities.

6.7.2. Building the capacity of women community leaders to implement birth spacing activities

AGROVIDA conducted a total of ten meetings in the three intervention areas to present the grant project to the communities including women leaders from *Coordinadora Departamental de Organizaciones de Mujeres de la Libertad* (CONOMUP), an association of community-based organizations in La Libertad. The purpose of these meetings was to identify CONOMUP women leaders interested in disseminating optimal birth spacing messages in the community based organizations (CBO) through replica workshops. During these meetings, 150 women leaders from 57 CBOs were elected to participate in a TOT to become OBSI supporters in their communities.

The women leaders were trained during ten workshops using the same 4-module curriculum that had been used from the original trainings. The CATALYST staff in coordination with the AGROVIDA technical team conducted the trainings. During the TOTs, participants received BCC materials for use and distribution during the replica sessions in their communities. The replica sessions were conducted according to a chronogram of activities designed by the trained women leaders themselves and was approved by AGROVIDA. The replica sessions reached 3,202 individuals in the three intervention districts.

6.7.3. Strengthening two health promoters networks

AGROVIDA organized a meeting in each of the communities with the purpose of identifying 40 health promoters to participate in the training. The health promoters were elected by the communities themselves and included individuals from non-health professions such as farmers in the rural area, and mechanics or auxiliary teachers in the urban area. The AGROVIDA technical staff and DISA representatives, with the technical oversight of CATALYST, conducted eight training sessions using three of the four-module curriculum (all except the gender module). The health promoters visited households in the three districts to provide RH/FP and OBSI counseling, distribute contraceptive products (condoms, oral contraceptive pill, and spermicide), and refer clients to AGROVIDA and public sector health facilities for RH/FP services.

To carry out these activities, the health promoters used BCC materials as well as several monitoring tools including standardized patients' forms and referral tickets.

AGROVIDA technical staff conducted a total of 12 supervisory visits to assess the performance of trained health promoters and to identify areas for improvement. They also met quarterly with DISA representatives to report on the progress of the optimal birth spacing activities.

6.7.4. Building the capacity of students from three technical institutes to become OBSI peer educators

AGROVIDA identified ten students (five women, five men) ages 17-23 years from three technical institutes in Otuzco to become OBSI peer educators. These institutes prepare students for careers in teaching and other technical professions. The ten students participated in the TOT 4-module curriculum conducted by AGROVIDA staff. In turn, under the supervision of AGROVIDA, the ten students implemented workshops and conducted informational sessions for their peers, using the same BCC materials used by the health promoters. Additionally, the health promoters provided individual counseling sessions to the students upon request.

6.7.5. Strengthening FP and optimal birth spacing counseling services and increasing availability of FP products at health facilities

To support the RH/FP and OBSI outreach activities, AGROVIDA visited 40 health facilities in the intervention areas to assess their capacity to provide RH/FP, OBSI, and first aid services. Through an agreement with the Peruvian NGO PRISMA in coordination with local health authorities, AGROVIDA distributed contraceptive supplies to these health facilities.

AGROVIDA organized 68 mobile community outreach health days or *jornadas itinerantes* with women leaders and health promoters in the three districts, during which they performed 600 pap-smears. Tests results were communicated directly to women during follow up home visits.

6.7.6. Garnering support for optimal birth spacing both at the local level through BCC activities and at the regional level through coordination with the DISA

As part of the AGROVIDA BCC activities, optimal birth spacing messages were disseminated through four radio spots, Talking about Optimal Birth Spacing Interval, broadcasted on Radio Otuzco El Chamo. The program aired 15 minutes of information about the health benefits of optimal birth spacing.

At the regional level, AGROVIDA collaborated with the DISA representatives with whom it held regular coordination meetings to inform them about activities' progress. Additionally, AGROVIDA coordinated with the DISA to plan the First Regional Exchange of Health Promoters. This one-day event took place on June 3, 2005 and 240 health promoters from La Libertad were in attendance. One of the purposes of the meeting was to identify future health promoters.

Finally, the OBSI grant project results were presented to CBOs, NGOs, health promoters and health professionals, June 2, 2005. The DISA regional Director and other local health authorities participated in the OBSI grant-closing event.

6.8. Results

6.8.1. Evaluation

In July 2004 and May 2005, CATALYST worked with AGROVIDA to conduct baseline and end-line surveys to assess changes in knowledge and attitudes about RH/FP and birth spacing among women and men of reproductive age, including members of community-based organizations, and students.

The surveys were conducted to collect information about changes in knowledge on OBSI, risks and benefits associated with birth spacing for the mother and child, contraceptive use, and the relationship between knowledge of birth spacing and intention to use contraception.

6.8.2. Methodology

CATALYST designed three instruments to collect baseline and end-line data:

- A household questionnaire for women ages 12–49 years in ten communities located in the Agallpampa district and female, members of community-based organizations in El Porvenir
- A household questionnaire for men ages 15–59 years in ten communities located in the Agallpampa district and male, members of community based organizations in El Porvenir
- A questionnaire for students ages 17–23 in two technical institutes in the city of Otuzco

The sample size for the baseline (pre) and end-line (post) surveys was distributed as follows:

Table 2: Sample Sizes for CATALYST's questionnaires

Target population	Baseline Sample Size (n)		End-line Sample Size (n)	
	Women	Men	Women	Men
MWRA in Agallpampa and members of community-based organizations in El Porvenir	626	465	670	417
Students in Otuzco	43	38	65	55

The household respondents were randomly selected. CATALYST interviewed all the women (590) from 47 CBOs and their respective partners (308) that were present at the time the baseline and end-line were conducted. For the purpose of the evaluation analysis, we will refer to these two groups as “MWRA.”

MWRA were asked about: number of pregnancies, age at birth of first child, reproductive intentions; knowledge of optimal birth spacing period, knowledge of risks associated with OBSI and no OBSI three to five years to mother and child, knowledge of risks of a birth interval shorter than three years and longer than five years to mother and newborn, knowledge of contraceptive methods and contraceptive use, gender roles, and gender-based violence. The survey with MWRA and members of community organizations collected demographic and RH/FP data as well.

Male and female students were asked about: age, year of study, pregnancy history, reproductive intentions, perceptions of birth spacing in their communities, knowledge about OBSI three to five years, knowledge of risks to mother and newborn associated with a short and long intervals, perception of optimal birth spacing practices in his/her community, personal opinion about the intervals at which he or she will plan to have children, knowledge and use of contraceptive methods, gender roles, and gender-based violence.

6.8.3. Results of baseline and end-line analysis

Knowledge of OBSI of three to five years

There was a 29% increase ($p<.001$) in the proportion of MWRA who identified three to five years as the OBSI (see Table 3).

Table 3: % MWRA identifying the appropriate OBSI

Interval length	**Pre (n=1091)**		**Post (n=1087)**	
	Women n=626	**Men n=465**	**Women n=670**	**Men n=417**
6 month and above	21	15	7	5
2 years and less	22	34	6	16
3-5 years	57	51	87	79

There was a 37% increase ($p=0.000$) among female students identifying three to five years as the OBSI, and a 38% increase among males ($p=0.000$) identifying OBSI three to five (see Table 4).

Table 4: % Students identifying the appropriate OBSI

Interval length	Pre (n=81)		Post (n=120)	
	Women n=43	Men n=38	Women n=65	Men n=55
Less than 3 years	19	45	5	7
3 to 5 years	58	53	95	91
6 or more years	23	2	0	1

Knowledge of risks associated with OBSI of less than three years for mother
Over a one-year period, CATALYST saw an increase in the identification of risk factors associated with short birth intervals (see Table 5). There was a significant increase in the proportion of women citing partum and postpartum complications (28%) and a significant increase in the proportion of women (16%) and men (15%) citing death as a potential risk factor. In addition there was a significant decrease in the proportion of men (20%) and women (18%) asserting that there is no risk associated with birth intervals of less than three years.

Table 5: % MWRA identifying risks of OBSI less than three years for mother

Health risks	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=626	n=670		n=465	n=417	
Partum and postpartum complications	7	22	0.001	9	10	0.022
Disease of uterus	19	22	NS	12	17	NS
Abortion, miscarriage	8	11	0.000	6	9	0.000
Diverse health problems	3	12	0.000	7	18	0.000
Death	14	30	0.000	11	26	0.000
No risk	19	1	0.001	20	0	0.001
Does not know	6	9	0.000	4	6	0.000

MWRA also cited socio-economic outcomes associated with OBSI of less than three years (see Table 6 below).

Table 6: % MWRA identifying socioeconomic risks of OBSI less than 3 years for mother

Socioeconomic risks	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=626	n=670		n=465	n=417	
Losing job	3	7	NS	2	6	NS
Worries	0	4	NS	0	8	NS
Lack of financial resources	0	8	NS	0	6	NS

Among students ages 17 to 23 years, there was a significant decrease among those citing no risk associated with shorter birth intervals, and a significant increase in identification of partum and postpartum complications (18%) and death (56%) (see Table 7).

Table 7: % Students identifying risks of OBSI less than three years to mother

Health risks	Students		
	Pre	Post	p-value
	n=108	n=93	
Partum and postpartum complications	20	38	0.000
Disease of uterus	30	18	0.000
Abortion, miscarriage	7	19	<.05
Diverse health problems	2	9	NS
Death	3	59	0.000
No risk	18	0	0.001
Does not know	7	1	0.000

Moreover, students interviewed were aware that shorter birth intervals could result in socioeconomic set-backs. There was an 18% increase among students citing losing work, and a 23% increase among students citing limited financial resources as a potential risk.

Knowledge of risks associated with OBSI less than three years for newborn

MWRA demonstrated increased levels of knowledge of risks to newborn and children under five. The proportion of respondents that could not identify any risk factors decreased significantly both among men and women respondents (see Table 8).

Table 8: % MWRA identifying risks of OBSI less than three years for newborn

Health risks	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=626	n=670		n=465	n=417	
Death	5	9	0.011	4	4	NS
Preterm birth	4	19	0.000	7	16	0.024
Low birth weight	24	43	0.000	22	31	0.000
Born small	12	35	0.000	12	30	0.000
No risk	5	0	0.000	6	2	0.003
Does not know	18	4	0.000	15	5	0.000

Similarly, students demonstrated an increased level of knowledge on the potential risks of birth spacing less than three years to newborn (see Table 9).

Table 9: % Students identifying risks of OBSI less than three years for newborn

Health risks	Students		
	Pre	Post	p-value
	n=108	n=93	
Death	3	6	NS
Preterm birth	4	17	0.010
Low birth weight	23	44	0.003
Born small	13	46	0.000
No risk	9	0	NS
Don't know	0	0	NS

Knowledge of benefits associated with OBSI of 3-5 years for mother

CATALYST found a significant increase in male (19%) and female (27%) respondents identifying health benefits associated with OBSI three to five years as well as a significant decrease in male (17%) and female (18%) respondents not being able to identify any benefits (see Table 10).

Table 10: % MWRA identifying benefits of OBSI three to five years for mother

Benefits	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=626	n=670		n=465	n=417	
Health benefits:						
Better health	22	49	NA	32	51	NA
More time to recuperate	15	23	NA	13	25	NA
Pregnancy w/out complications	4	6	NA	4	10	NA
Safer delivery	2	8	NA	2	8	NA
Fewer abortions/hemorrhage	2	7	NA	1	9	NA
Older sibling can help with newborn	22	24	NA	19	22	NA
Can rest	16	22	NA	12	17	NA
Socioeconomic benefits:						
Improved financial resources	7	11	NA	11	15	NA
Can work	16	60	NA	13	45	NA
Can dedicate for time to care for children	34	43	NA	28	34	NA
Don't know	24	6	NA	22	5	NA
No advantages	7	0	NA	7	1	NA

Similarly, the baseline/end-line analysis found that an increased proportion of students cited more time to recuperate (37%), safer delivery (15%), fewer abortions (10%), more time to rest (11%) as potential health benefits.

Table 11: % Students identifying benefits of OBSI three to five years for mother

Benefits	Students		
	Pre	Post	p-value
	n=108	n=93	
Health benefits:			
Better health	11	9	NA
More time to recuperate	0	37	NA
Pregnancy w/out complications	0	0	NA
Safer delivery	26	41	NA
Fewer abortions/hemorrhage	0	10	NA
Older sibling can help with newborn	6	1	NA
Can rest	19	30	NA
Socio-economic benefits:			
Improved financial resources	4	5	NA
Can work	6	47	NA
Can dedicate more time to care for children	59	72	NA
Don't know	9	0	NA
No advantages	4	0	NA

At end-line, an increased proportion of men (32%) and women (44%) of reproductive age and students (41%) believed that an important benefit of OBSI three to five years for a woman includes the opportunity to work as demonstrated in Tables 10 and 11.

Knowledge of benefits associated with OBSI of 3-5 years for newborn

MWRA demonstrated increased levels of knowledge about the benefits of OBSI to newborn as demonstrated in Table 12 below. The findings are consistent with the health messages disseminated during the life of the project about the possible health risks associated with sub-optimal birth spacing intervals.

Table 12: % MWRA identifying benefits of OBSI three to five years for newborn

Benefits	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=626	n=670		n=465	n=417	
Born with better weight	6	32	NA	8	28	NA
Born with better size	4	20	NA	7	14	NA
Better cared for	48	60	NA	42	52	NA
Born healthy	25	55	NA	34	55	NA
Better protected from diseases	4	6	NA	5	7	NA
Less likely to die	3	2	NA	3	4	NA
Suffers fewer infections	0	4	NA	0	3	NA
Better raised	18	16	NA	15	22	NA
Receives better education	11	18	NA	13	16	NA
Receives more affection	13	31	NA	11	16	NA
Receives more attention	12	21	NA	8	12	NA
Grows better	6	12	NA	4	14	NA
Don't know	23	6	NA	18	5	NA
No advantages	6	0	NA	7	1	NA

Similarly, there was a significant increase in the proportion of students successfully identifying the possible health benefits associated with OBSI three to five years (see Table 13).

Table 13: % Students identifying benefits of OBSI three to five years for newborn

Benefits	Students		
	Pre	Post	p-value
	n=108	n=93	
Preterm birth	4	17	NA
Low birth weight	23	44	NA
Born small	13	46	NA
Death	3	6	NA
No risk	9	0	NA
Does not know	0	0	NA

6.8.4. Contraceptive use

As demonstrated in Table 14, total contraceptive use increased only slightly among MWRA. The usage of modern methods such as injectables among women and condoms among men increased by 5% each. Periodic abstinence among women (25%) and men (36%) at end-line (in comparison with 21% in La Libertad and 17% in Peru) is the most frequently used method.

The small increase in modern contraceptive use may be attributed to the health promoters who carried supply kits of these products when they visited households.

Table 14: % MWRA using a contraceptive method

Method	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=626	n=670		n=465	n=417	
Total	63	64	NS	43	47	NS
Traditional methods:	33	30		36	36	
Periodic abstinence	28	25		36	36	
Other	5	5		NA	NA	
Modern methods:	30	34	NS	7	12	NS
Condom	5	6		7	12	
OCP	3	5		NA	NA	
Injectable	11	16		NA	NA	
IUD	2	3		NA	NA	
Female sterilization	8	5		NA	NA	

Contraceptive use among female students ages 17 to 23 remains low although CATALYST recorded a small increase in modern method usage (4%), and small decrease in traditional method usage (2%) at end-line as indicated in Table 11. The significant increase in condom use among male students is encouraging, since in addition to preventing unwanted pregnancies, condoms are effective against STI transmission.

Table 15: % students using contraceptive methods

Method	Women			Men		
	Pre	Post	p-value	Pre	Post	p-value
	n=43	n=65		n=38	n=55	
Total	9	11	NS	29	28	NS
Traditional methods:	9	7		10	7	
Periodic abstinence	9	7				
Modern methods:	0	4	NS	18	21	NS
Condom	0	1				
OCP	0	1				
Injectable	0	2				
IUD	0	0				
Female sterilization	0	0				

Among MWRA that reported that they are not currently using any contraceptive methods, traditional or modern, 72% of men and 70% of women at end-line indicated that they intended to use a method, up from 58% and 49% respectively at baseline.

6.8.5. Attitude of partner about OBSI three to five year concept

At the end-line CATALYST added three questions in the questionnaire for WRA to assess the attitudes of the partner with regards to OBSI.

The first of these questions asked women whether they had discussed OBSI with their partner in the last six months. Fifty-nine percent of women responded yes and 20% no. The remaining 21% reported not being in any relationship.

Among the 59% that had discussed OBSI with their partner, 97% indicated that their partner agreed with the concept of an optimal birth spacing interval.

6.8.6. Relationship between knowledge of OBSI three to five and intention to use contraception

The third question addressed the relationship between knowledge of OBSI three to five years and the intention to use contraception. Among MWRA that had heard about OBSI at the end-line, 52% of women and 43% of men indicated that it had influenced their decision to use a contraceptive method.

The baseline/end-line results were presented at a public event in June 2005 that was held in coordination with the DISA and was attended by 74 participants including the L-DISA Director as well as MOH representatives.

6.9. Lessons Learned

- The strategy to use existing communication channels to disseminate OBSI messages was cost-effective and reached the intended audience effectively.
- Involving community residents in the selection of health promoters and local leaders helped contribute to the effectiveness of the intervention.
- Engaging the local and regional public health authorities from the onset of the program to support the OBSI intervention contributed to program success and sustainability.
- The program intervention demonstrated that OBSI messages can effectively be transmitted to students.
- The high proportion of women and men using periodic abstinence as a contraceptive method demonstrates the need to continue programming in RH/FP to ensure correct knowledge of the fertile period and expand the method mix availability among impoverished rural and urban populations.
- Longer grant periods may be needed to have effective activity implementation, including the development and pre-testing of BCC messages in order to capture project results.

6.10. Conclusions

Overall AGROVIDA was very strategic in involving the community residents and the regional and local health authorities in the grant activities to minimize cost and maximize results. AGROVIDA involved the community in the election of health promoters and women leaders responsible for the dissemination of OBSI messages in the three

districts. It engaged health authorities from the onset of the project and collaborated closely with them throughout the intervention, ensuring program success and contributing to the sustainability of the intervention.

With regards to the evaluation results, the grant intervention was successful in increasing the proportion of MWRA and students who identified the correct OBSI of three to five years, and specific risks associated with OBSI of less than three years for mother and newborn. Inversely, there was a significant decrease in the proportion of MWRA identifying no risk MWRA and students demonstrated an increased knowledge about risks for infants and children of OBSI less than three years. Students were also very aware that shorter birth intervals could results in job loss.

Contraceptive use increased slightly over the course of the intervention, and periodic abstinence was the most frequently used method among all respondents, opening a window of opportunity to continue programming in RH/FP to ensure correct knowledge of fertile period, and expand method mix availability among these impoverished rural and urban populations.

Among MWRA that reported that they were not using any contraceptive methods, there was a significant increase in the proportion of women (21%) and men (14%) that intended to use a method in the future. Finally, 59% of female respondents indicated that had discussed OBSI with their partner in the last six months, of which 97% reported that their partner was supportive of the OBSI three to five years.

VII. Birth Spacing Grant: Romania

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7.1. Acknowledgements

This report is dedicated to the *Societatea de Educatie Contraceptiva si Sexuala* (SECS) team throughout Romania and their partners and collaborators in the Constanta region. We acknowledge their technical expertise, dedication and commitment to the Romanian Initiative for Promoting OBSI project from 2003 to 2005 and extend our sincere congratulations for a successful activity, especially to Dr. Violeta Cindea, the Project Manager, Dr. Violeta Horhoianu, the Information Officer, and Dr. Borbala Koo, the Director of SECS. The support and collaboration from the Romanian Ministry of Health, the Constanta County Health Department and John Snow Incorporated, especially Dr. Merecedes Gasco, was instrumental in initiating and implementing the project and will help sustain the activities in the future. Special appreciation is extended to the project beneficiaries and project implementers, including the Family Doctors, Community Nurses, OBSI Champions and the Mayors of Cumpana, Cogealac, Corbu and Cobadin, without whose interest and motivation the project would never have taken place. The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

7.2. Summary

The CATALYST Consortium awarded the Romanian NGO, SECS with two grants as part of its Birth Spacing Grants Program. SECS designed and implemented an integrated health and nonhealth birth spacing program model for conducting research, training health providers and community Champions and advancing the awareness and behavior change of men and women of reproductive age on the optimal birth spacing interval (OBSI) and family planning (FP). In collaboration with CATALYST, SECS successfully developed a training curricula, behavior change communication (BCC) materials and a monitoring and evaluation (M&E) plan that were utilized in the project's implementation.

The project interventions, including the training, education sessions, peer counseling, social and clinical reinforcement and BCC campaign were effective. Results from the baseline/end-line comparison data demonstrate that project participants increased their knowledge of OBSI and its risks and benefits through the project's information outlets. Significant changes in behavior were also noted, with men and women demonstrating increased partner communication on birth spacing/FP and in increased utilization of FP methods.

7.2.1. Lessons learned from the SECS OBSI project include

- Understanding that an integrated model approach to repositioning FP is effective
- Realizing that utilizing both male and female peer educators to reach community members is most appropriate and successful
- The project is expected to reach more than 48,000 people in the Constanta region as the trained health providers and "Male and Female Champions" continue their counseling, education and support efforts. SECS worked with closely with partners throughout the project lifespan to ensure the sustainability of the project interventions by building support for the OBSI concepts among health and non-health leaders

7.2.3. Problem Statement /Romania Country RH/FP Profile

From 1964 to 1989, Romania had a socialist, dictatorial government that enforced an extremely restrictive anti-reproductive health and family planning agenda. To counter the nation's decline in fertility during the 1950's and 1960's, the dictator Ceausescu initiated several pronatalist policies that negatively affected reproductive health and family planning (RH/FP). These policies included outlawing abortions, severely restricting access to contraceptives, implementing anti-FP propaganda campaigns and providing incentives for women who had additional births.[32]

Romania's maternal mortality rate was the highest in Europe prior to 1998 with 170 maternal deaths per 100,000 live births and more than 10,000 maternal deaths between 1966 and 1989. The high rate was attributed to complications of illegal, unsafe abortions, the lack of advanced medical practices and technology and a general dearth of safe motherhood initiatives. Infant mortality was also extremely high during the Ceausescu period, with a rate of 25 infant deaths per 1,000 live births in 1989.[33]

Since the fall of Ceausescu's government in 1989, the Romanian government has worked with donors and local and international NGOs to reform the old policies and to establish an environment that supports improvements in RH/FP. The laws that prohibited abortions and the use of FP methods have been rescinded, but the decades of anti-FP propaganda continue to affect men and women's decisions to use modern FP methods. International and local NGOs have worked hard to reverse the years of conditioning that conveyed to both the medical communities and general public that modern FP methods are unhealthy and even dangerous. The rates of modern contraception use have risen significantly in recent years, increasing from 14% in 1993 to 30% in 1999. However, 39% of married women who reported that they wanted to delay or stop childbearing also reported that they either were not using an FP method or were using a less effective traditional method.[34] Although modern FP methods have become available free-of-charge to all Romanians, much needs to be done in the areas of service delivery, training and community involvement to reduce the unmet need for FP.

The extremely high rates of maternal mortality in Romania have declined, but the 2000 rate of 60 maternal deaths per 100,000 live births is still high compared with other European countries.[35] Partially due to the inception of FP programs and increased availability of FP methods, the rate of abortions per woman has diminished from 3.4 abortions in 1993 to 2.2 abortions in 1999. However, the rate of abortions still exceeds the rate of live births (1.3 per women), which further accentuates the importance of reducing the unmet need for FP.[36]

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[32] Ludicke, F, Horga, M. et al. *Reproductive Health in Eastern Europe: A Collaborative Training Project in Romania.* AJPH, Vol 91, No. 11, 2001.
[33] Federal Research Division of Library of Congress, Country Studies/Area Handbook, Romania, 2004.
[34] Contraception and Abortion in 12 Countries: Recent Trend, April 2003 as Cited by Population Reference Bureau, MEASURE Communication. Improving Reproductive Health in Romania, 2003.
[35] Population Reference Bureau, World Population Data Sheet, 2004.
[36] Population Reference Bureau, MEASURE Communication. Improving Reproductive Health in Romania, 2003.

The rate of infant mortality also has declined sharply; however, the rate of 16.7 deaths per 1,000 live births[37] is still unacceptably high. This high rate is attributed to a lack of advanced neonatal and infant health technology, skilled health attendants and poor understanding of neonatal and infant health problems by parents as well as factors related to the abandonment of newborn children, which accounts for 1.8% of all births in Romania.[38] Areas such as Constanta have even higher rates of infant mortality (24.7 per 1,000 live births) than the national average due to the effects of lower socioeconomic status, lower education levels and higher incidence of births to very young women — factors that contribute to frequent abortions, premature births and infant deaths.[39]

Additionally, there is a culture of little or no male support for women who use or wish to use modern FP methods in Romania. Formative research conducted by SECS indicates that Romanian men are reluctant to participate in the acquisition of male controlled contraceptives because publicly buying condoms is socially stigmatized as a sign of infidelity to one's partner. The lack of partner support may be another obstacle for Romanian women in their attempts to space or limit their births by accessing and using modern FP methods.[40]

Table 2: Romania: Key Statistics[41]

Total population (millions) (2002)	22.3
Projected population (millions) (2050)	18.1
Life expectancy (M/F)	66.5 / 73.3
% Contraceptive prevalence: any method	64
% Contraceptive prevalence: modern methods	30
Births per 1,000 women aged 15-19	37
Maternal mortality ratio (per 100,000 live births)	60
Infant mortality total per 1,000 live births	22
Average population growth rate (%) (2000-2005)	-0.3
Total fertility rate (2000-2005)	1.32
% Births with skilled attendants	98
Health expenditures public (% of GNP)	3.8

[37] Population Reference Bureau. Romania Country Data. 2004.
[38] Alfred Rusescu Institute for Mother and Child Care. *Socio-Medical Causes of Mortality on Under-Five Children at Home and within the First 24 Hours of Hospitalization.* Supported by UNICEF Romania 2004.
[39] Data provided by SECS from Romanian National Center for Health Statistics, 2004.
[40] Florescu, S., Gheorghe, I. et al., *Knowledge, Attitudes, Practices Regarding the Optimal Birth Spacing Interval*, Unpublished research conductec by SECS under the auspices of the CATALYST Consortium. 2003.
[41] UNFPA. The State of World Population, 2002.

7.3. Rationalization

7.3.1. CATALYST Consortium OBSI Grants

The CATALYST Consortium initiated a birth spacing grants program in 2002, which was designed to provide funding, technical assistance and support to local NGOs for the implementation of community discussions and programs that engage health practitioners, community members and special interest groups, such as males, youth and hard-to-reach populations, to create awareness of the health and social benefits of practicing and the risks of not practicing OBSI. The OBSI grants program was visualized as a tool for enhancing the capacity of local NGOs to provide culturally appropriate and community-based RH/FP and OBSI activities.

The Request for Proposals for the OBSI grants was made available via the CATALYST Consortium website, and was advertised by USAID country office staff and at the CATALYST Consortium Asia Near East conference in 2004. All NGOs that were registered with USAID and had the organizational capacity and desire to work on OBSI were encouraged to apply. Applications were reviewed by a panel at CATALYST headquarters and were assessed based on designated criteria that included components such as technical qualifications, organizational capabilities, justification of need, project design, workplan, monitoring and evaluation plan, budget and programmatic and financial reporting. CATALYST worked closely with USAID Washington, DC, to identify the applications and organizations that were most qualified to receive the OBSI awards.

Four OBSI grants were awarded in 2003: two to organizations in Bolivia, one in Romania, and one in Peru. The objective of these grants was to conduct innovative activities in operation and formative research, training, counseling and community outreach that would contribute to advancing the knowledge and practices of OBSI.

In March 2003, CATALYST awarded the *Societatea de Educatie Contraceptiva si Sexuala* (SECS), a national Romanian NGO, for its proposal to conduct research on birth spacing and to utilize OBSI recommendations to improve FP and postpartum counseling in the Constanta region of Romania.

Following the first successful round of OBSI grant awards and project implementation in 2003, another grant initiative was sponsored in 2004 by CATALYST, which resulted in four more OBSI grants; one each to organizations in Cambodia, Nepal, Romania and Peru. A Special Initiative Grant on Gender was provided to CATALYST from the USAID Interagency Working Group on Gender in 2004. The funds were designated to support a gender-based intervention that complemented existing CATALYST activities. CATALYST chose to allocate the Special Initiative Grant on Gender within its OBSI Grants Program to SECS based on its history with CATALYST and its excellent proposal to create a network of Male OBSI Champions in the Constanta region.

SECS received a no-cost extension of its 2003-2004 grant, extending the life of the project until June 2005, to effectively integrate the planning and activities of the second OBSI Male Involvement grant into its first OBSI Primary Health Care Providers grant.

7.3.2. Grantee Qualifications

SECS has been the leading RH/FP NGO in Romania since 1990, with 28 branches and 11 clinics. The NGO has focused its activities on improving access to RH/FP information and quality services throughout Romania by providing direct services and collaborating with government health and educational institutions, local administrative bodies and other NGOs. SECS's central office is based in Bucharest, and they have three regional offices in Constanta, Cluj and Iasi, which ensures that their programs are managed efficiently. SECS is determined to contribute to the improvement of the Romanian people's health through complex and integrated services: clinic service delivery; training; education; and advocacy. SECS has worked on many major RH/FP projects in Romania, including the integration of FP into the national Primary Health Care training.

SECS worked with USAID from 1998 to 2001 on the Improving Access to FP Services Project. They provided TA to local health authorities in ten districts to develop RH/FP strategies for their programs and provided basic FP training for more than 1,500 GPs and nurses and more than 1,000 FP promoters. Since October 2001, SECS has been a partner of the Romanian Family Health Initiative (RFHI), which is a national RH/FP initiative led by John Snow Incorporated Research and Training Institute (JSI R&T) financed by USAID. The Initiative is a consortium of service providers, who work with the Ministry of Health and Family (MOHF), USAID and other donors.

7.4. Statement of Need

There is a demonstrated need for both health (Primary Health Care Providers) and non-health (Male Champions) OBSI interventions in Constanta, Romania. In order to reduce maternal and infant mortality and the unmet need for FP, it is essential that RH/FP education for women and men and skills training for health providers on counseling related to FP and MCH, particularly in the area of OBSI, be advanced and improved.

Access to RH/FP services is still limited in parts of Romania and the myths and misconceptions surrounding modern FP methods from the previous era remain, which help keep rates of use of modern FP low. Abortion continues to be a family planning method for many women, particularly those of lower socioeconomic and educational status residing in rural areas. Inter-pregnancy intervals are also shorter than the recommended spacing period due to frequent unintended pregnancies. As a result, morbidity and mortality rates among children and women remain high.

Romanian health care providers and the general population lack a good understanding of how practicing OBSI benefits MCH. Although many Romanian health professionals believe that birth intervals of at least two years are important for infant, child and maternal health, there is little awareness of the most current research on birth spacing. The existing programs in the field of RH/FP counseling and education do not include specific information on the potential benefits of practicing OBSI and potential risks of not practicing OBSI.

Additionally, information from the SECS OBSI Project of 2003 shows that Romanian women wish to receive more support from their partners on FP and birth spacing. Significantly, the results also indicate that Romanian men want to learn how to be more

encouraging of their partners by acquiring and using contraception for birth spacing, but they lack the information and support to do so.[42]

Newly created Romanian RH/FP services, endorsed by the WHO have presented health system managers and policymakers with many challenges as they expand the availability of high-quality, comprehensive reproductive health care and family planning in a setting of economic hardship, political unrest, insufficient infrastructure and outdated medical knowledge and practice.[43]

Through the integrated health and non-health model of its OBSI project, SECS worked to reposition FP from a misunderstood and distrusted aspect of RH to a socially accepted concept for improving MCH, reducing reliance on abortion and meeting the needs of the population for spacing their births. SECS planned to improve the skills of local primary health providers by providing them with training on state-of-the-art RH/FP information on OBS and FP methods, which was integrated into the primary health care services. Adoption of CATALYST's OBSI recommendations and "OBSI Windows of Opportunities" for counseling on birth spacing helped the health providers identify appropriate times for discussion of OBSI as well as improve their counseling skills for FP and OBSI. The improvements to the health providers' skills and knowledge was expected to translate into improved quality of care for male and female clients and an increased awareness of OBSI recommendations and RH/FP behaviors, such as practice of a three to five year birth spacing interval and the adoption of FP methods, which can lead to improved MCH and RH.

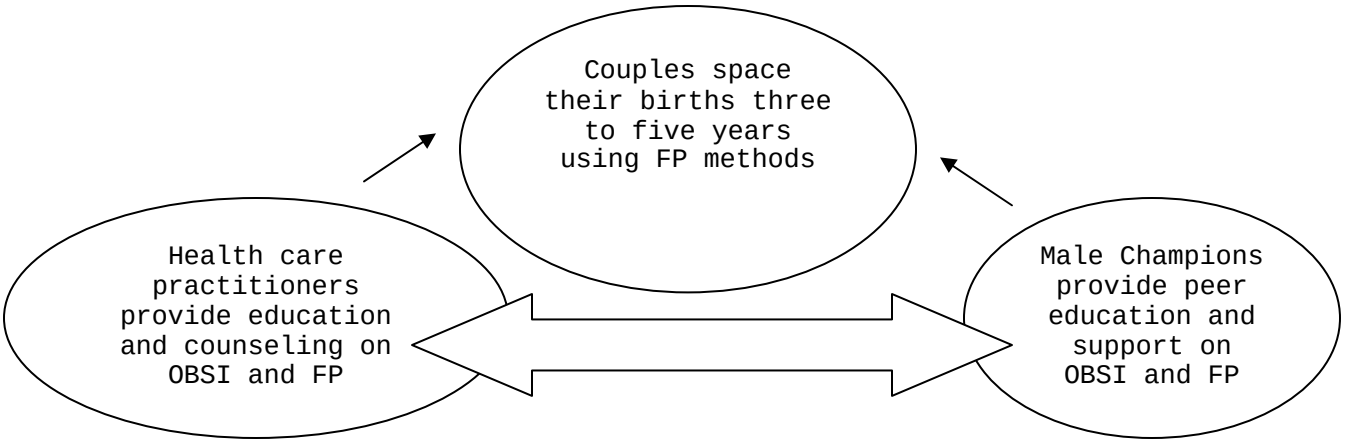
The SECS OBSI Project also allowed RH/FP concepts to be shared with Romanian men to improve maternal, infant and child health and to decrease the unmet need for FP, all of which are concerns identified by the Romanian MOH in its assessments of MCH. [44] In developing a male-focused OBSI project, SECS provided an opportunity for interested men at the community-level to increase their awareness and to share information with peers on modern FP methods and OBSI. The project strategy involved identifying men who would support the ideals of OBSI and FP and act as Male Champions for the project. The Male Champions would develop a support network that they could use for planning their peer education outreach activities, which would reach men from the communities with OBSI and FP information. These activities would convey to their peers the importance of adopting healthy RH/FP behaviors, such as communicating with their partners about practicing optimal birth spacing by using FP methods.

SECS' integrated health and non-health OBSI project model is a unique approach to improving MCH and RH/FP indicators by using both the established medical system and sources of care along with peer education and reinforcement. The model (Figure 1) provides a comprehensive strategy for improving health by increasing beneficiaries' access to health by increasing the capacity of health providers and increasing health

[42] Florescu, S., Gheorghe, I. et al. *Knowledge, Attitudes, Practices Regarding the Optimal Birth Spacing Interval*. Unpublished research conducted by SECS under the auspices of the CATALYST Consortium. 2003.
[43] Hord, C., David, HP., Donnay, F., Wolf, M. Reproductive Health in Romania: Reversing the Ceausescu Legacy. Studies in Family Planning. 22940: 231-40, 1991.
[44] Alfred Rusescu Institute for Mother and Child Care, Socio-Medical Causes of Mortality of Under-Five Children at Home and within the First 24 Hours of Hospitalization. Supported by UNICEF Romania 2004.

information and access to FP to the target population at both the clinical and community level.

Fig. 1: An integrated health and non-health model was the basis for the development of the objectives and activities for the SECS OBSI Male Involvement project.



7.4.1. Objectives of the Primary Health Care Providers Project:

- Increase the knowledge and skills of primary health providers on OBSI, OBSI recommendations and RH/FP counseling
- Train primary health care providers in counseling clients on OBSI and FP
- Raise the awareness of selected communities within Constanta about the benefits of practicing OBSI and the potential risks if OBSI is not practiced
- Dispel myths regarding FP methods by raising the awareness on the relationship of OBSI to modern FP methods
- Increase utilization of FP methods

Target groups and desired changes

- Postpartum women (six months or less)
- Women/couples with a child less than two years old
- Desired Change: (1) Gain knowledge of OBSI; (2) Utilize OBSI information to plan next pregnancy/birth; and (3) Gain knowledge of modern FP methods
- Primary Health Providers: Family doctors, Primary Health Nurses, Community Nurses and Maternity Nurses
- Desired Change: Gain knowledge and counseling skills on OBSI and RH/FP

7.4.3. Objectives of the OBSI Male Champions Project:

- In addition to the Primary Health Care Providers Project objectives, the objectives of the OBSI Male Champions Project also include:
- Increase communication about contraception between partners (including among Champions)
- Expand the scope of the Romanian Initiative Promoting OBSI Project by integrating community-based activities and gender-appropriate strategies

Target Groups and Desired Changes

- Community members of four areas of Constanta
- Desired Change: (1) Gain knowledge of OBSI; (2) Utilize OBSI information to plan next pregnancy/birth, and (3) Gain knowledge of modern FP methods

7.4.4. Activities

To achieve its objectives, SECS created a one-year workplan, which was approved by CATALYST, consisting of:

- Conducting FG discussions to assess KAP on birth spacing
- Creating an OBSI and FP knowledge and counseling curriculum for use with primary health care providers
- Training of 160 primary health care providers from Constanta District Health Facilities and Community Outreach Programs
- Creating BCC materials to be utilized by primary health care providers for client education and counseling

- Monitoring of the trained health providers through follow-up interviews and meetings
- Implementing a national conference for health personnel to raise awareness of OBSI, illustrate the OBSI activities and demonstrate the SECS OBSI materials
- Creating a six-hour awareness training curriculum for the OBSI Male Champions
- Identifying and training Male Champions
- Assisting Male Champions in creating a Champions network
- Assisting Male Champions in developing personal action plans
- Monitoring of the Male Champions through follow-up interviews and meetings

7.4.5. BCC Activities

The SECS OBSI Project had a comprehensive BCC strategy that included qualitative research, message and materials development, partnership building press coverage and information and materials dissemination activities. The Project Manager and Information Officer worked closely with CATALYST Technical Advisors to create the most researched, informative and effective BCC campaign for a health activity that has been conducted to date in Romania.

7.4.6. Focus Group Activities

An FG Guide and implementation plan was used for FG discussions with 19 groups of community residents and health practitioners to assess their KAP on birth spacing, contraception and other RH/FP topics. The findings provided SECS with important new information on the RH/FP needs of the target groups, which redirected the strategies for the project activities. Information from the FGs also illuminated aspects of the populations' behaviors and knowledge, which indicated that the interviewees supported the concepts of birth spacing, although they did not fully understand the health implications of OBSI and did not know how to effectively practice birth spacing.

7.4.7. Materials Development

SECS utilized information from the FG discussions and existing health materials to conceptualize OBSI messages and strategies. By pre-testing the concepts and messages, it was determined that the most effective tools for health education and counseling were posters, booklets and drink coasters that could be utilized by the health providers and Champions and be distributed to clients. By developing materials that were used by both the health providers and Champions, SECS created versatile sources of information that were recognizable and consistent for beneficiaries whether in a health or non-health setting. SECS worked with a graphic design and advertising firm in Bucharest to create the posters, booklets and coasters, using the pre-tested messages as the basis for the products. A dissemination strategy was created for the materials, and by March 2005 the materials were in use by the Champions. (Copies of BCC materials created included in the Appendix.)

7.4.8. Press Coverage

SECS also held press conferences in collaboration with the local health department on local and national television and radio programs. One radio interview included a live, hour-long, interactive discussion of birth spacing by the project manager, two

Champions, and a community nurse. These activities helped SECS create a national awareness of OBSI and garnered support from local leaders and government officials.

7.4.9. National Conference

With assistance and support from CATALYST, SECS designed and implemented a National Conference, “New Approaches in Reproductive Health: OBSI and PAC.” It presented the design, implementation and results of the SECS OBSI and PAC projects to a national audience of governmental and nongovernmental health program managers, administrators and community beneficiaries. The conference also began dialogue on how to replicate and scale-up the OBSI and PAC activities.

7.4.10. Training Activities

Primary health care providers from County Health Facilities, including Family Doctors, Primary Care Nurses, Community Nurses and Maternity Nurses were invited to participate in OBSI training and activities. The Primary Health Care Providers one-day training focused on educating the providers about the concepts of OBSI, its relationship to FP and MCH and the health benefits of practicing and health risks associated with not practicing an OBSI of three to five years. Also included in the training were discussions and practical applications of OBSI/FP counseling. The trainers utilized the CATALYST “Windows of Opportunities” to learn and practice OBSI counseling recommendations in conjunction with several role plays and mock counseling session activities. Health providers were trained to effectively utilize the OBSI BCC materials as education and counseling tools. Throughout the training, the providers were able to constructively discuss the myths and misconceptions that surround modern FP.

Male Champions were chosen based on their interest to volunteer for the project, to attend the three training sessions and to practice and teach others about OBSI and FP behaviors. The mayors of two of the target sites became Male Champions and assisted SECS with the recruitment of other Champions. The participatory educational sessions focused on educating the Male Champions about OBSI, FP and the health benefits of practicing and health risks associated with not practicing a birth spacing interval of three to five years as well as community mobilization techniques. The Male Champions were trained to effectively utilize the OBSI BCC materials as education and counseling tools and to guide them in communicating and building an informal network (among themselves) that they could use for support and collaboration in their outreach activities.

During the first session of the Male Champions training, the men expressed an interest in having their female partners educated on OBSI and FP and in developing a Female Champions network. With the assistance of the Male Champions, SECS recruited Female Champions. In the final training session, the Male and Female Champions developed their personal action plans for their peer education outreach activities. As a result of interactions between the Male and Female Champions, open discussions occurred regarding OBSI FP and male and female roles in contraceptive decision making. The Champions also discussed and planned for couple-based outreach activities, in which male and female beneficiaries could be educated in the same session, thereby facilitating communication between the couples on OBSI and FP.

7.4.11. Monitoring and Evaluation Activities

SECS created an M&E plan with intensive TA from CATALYST at the project's inception, which was revised and updated as the project progressed. The plan consisted of:

- Ongoing monitoring and documentation of project activities by Project Manager
- Providing CATALYST with quarterly programmatic and financial reports
- Conducting pre/post-tests with Primary Health Care Providers
- Documenting regular follow-up meetings and interviews with Primary Health Care Providers and Champions after their OBSI training to hear how they had integrated the OBSI and FP information and counseling skills into their primary health care activities and to hear their assessments of clients' responses to the information/materials
- Conducting a baseline/end-line survey to assess beneficiaries change in knowledge and behaviors relative to the project activities

7.4.12. Baseline/End-line

To measure the change in knowledge and behaviors of the project beneficiaries, a household survey was created. The survey was designed and pre-tested in collaboration with the Constanta County Health Department staff.

The surveys were conducted before and after the OBSI interventions on couples that had an infant of six months or less in four communities of Constanta. The County Health Department provided SECS with a list of couples that fit the survey criteria and SECS interviewed all available members of the eligible couples. The survey data were collected by trained interviewers (Community Nurses) from the local Health Department using a structured questionnaire, which was applied individually to the woman and man of the household. The interviewers obtained written consent from each person interviewed after explaining the concepts of informed consent and confidentiality.

7.5. Sustainability

SECS worked with CATALYST and its other partners to incorporate a sustainability plan into the project design, which allowed for adoption of OBSI activities by local governmental and nongovernmental organizations. This plan involved:

- The OBSI/FP Training curriculum, which has been integrated into the SECS/JSI RH training manual, "The Reproductive Health Comprehensive Curriculum", will continue to be used by SECS in all of its FP Training and by other JSI projects in Romania.
- The trained primary health care providers of the Constanta County Health Department will maintain their commitment to OBSI in their daily activities, FP counseling and dissemination of OBSI messages.
- SECS will continue to produce the OBSI BCC materials using their own funds and funding from other FP projects.
- The June 2004 conference sparked interest from other County Health Departments and NGOs in the OBSI training and materials. SECS is currently discussing the possibilities of creating partnerships to fund training and materials.

- The Male and Female Champions may continue to perform their outreach activities as part of a SECS/JSI CBD activity.
- Strong support from community leaders has helped maintain focus on the project activities and to generate the interest of other towns and organizations.

7.6. Results

All of the project objectives have been met and project activities were fully conducted by June 30, 2005. CATALYST provided a great deal of technical assistance and support to SECS over the course of this birth spacing project. Four CATALYST technical advisors provided on-site TA in Constanta, while several more provided constant information and support from the CATALYST HQ office. The SECS OBSI Project Manager received direct TA from CATALYST for two weeks in February 2005.

7.6.1. Training Activities Results

Accomplishments from the training activities include:

- One-day OBSI Training Curriculum created
- Training Curriculum accredited by National Center for Continuous Medical Education. Six continuing education credits provided to participants.
- 12 OBSI/FP Training sessions completed by March 2005
- 201 providers trained from three health facilities
- More than 43,000 clients expected to be educated and counseled on OBSI/FP by trained health care providers
- Six-hour training curriculum created for Champions project
- 66 Male Champions & 67 Female Champions identified
- OBSI Male and Female Champions trained
- Male and Female Champions developed action plans
- 145 booklets, 164 posters and 1,900 coasters distributed through outreach activities
- More than 8,600 condoms were distributed through a pilot SECS/JSI Community-based Distribution (CBD) activity
- More than 5,300 community residents expected to be educated via the Male and Female Champions activities

7.6.2. BCC Activities Results

- FG Discussions conducted in 2003
- FG report completed in Romanian and English
- BCC strategy designed, pretested and implemented
- 500 posters, 1,200 booklets and 3,000 coasters utilized
- Press conference conducted in collaboration with County Health Department
- Five articles published. Four radio interviews conducted. Two news broadcast interviews conducted by the Project Manger and implementers.
- National Conference, “New Approaches in Reproductive Health: OBSI and PAC” conducted June 29-30, 2005. 96 participants attended.

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7.6.3. Monitoring and Evaluation Results

- The project manager conducted all monitoring and follow-up activities as was needed. The training participants demonstrated a 32% average increase in knowledge from the pre- to post-test.
- Findings from some of the follow-up sessions with the health providers:
- On integrating OBSI Counseling into Health Care Services:
- Most appropriate time is at postpartum, newborn- and child-care visits
- Clients are more likely to listen to messages if they are relayed one by one, repeated and adapted to the client's needs
- Reactions to OBSI Messages:
- Clients recognized that they do not know potential risks
- Many people identified with the situation of the characters in the booklet
- Many clients did not know that lactational ammenorhea was a FP method and wanted more information on how to practice it
- Clients would take the information and then return with questions
- Utility of the BCC Materials:
- Counseling card helped provider adapt information to each client
- Poster in clinic motivated people to ask questions about OBSI
- Booklet was considered very attractive and text and messages as simple
- People identified with the characters in the Booklet

Findings from some of the follow-up sessions with the Champions:

- Community residents are very interested in OBSI
- Champions educated their families, friends and colleagues
- Men were interested in finding out about contraceptives available from the County Health Department
- Men discussed going with their wives to obtain FP methods
- Female Champions used the booklet to initiate education sessions with other women
- Distribution of condoms and coasters assisted with the initiation of discussions with men
- In some religious communities men were more willing than women to discuss OBSI
- The involvement of mayors in the projects resulted in a sense of community pride in the activities

7.6.4. Baseline/End-line

The baseline and end-line surveys were conducted in the fall of 2004 and the spring of 2005, respectively. SECS entered the survey responses and created SPSS data files that were analyzed and compared to develop tables that illustrate the changes in knowledge and behaviors of the beneficiaries over time.

7.6.5 Exposure to Project Information (Table 1 below)

The survey data demonstrates that the target population's exposure to the OBSI/ FP messages and information increased. Statistically significant changes in exposure to messages from specific outlets demonstrate that the project information sources have

been effective Women's awareness of OBSI increased by 21.5% and men's increased by 38% from the baseline to the end-line. The community nurses who perform PP outreach were one of the most frequently cited sources of OBSI information for both men and women. Male respondents identified local men (Champions) as important sources of OBSI information — an increase from 0% to 6%.

The BCC materials used by the health providers and Champions were also effective tools for OBSI information dissemination; a large percentage of both the male and female respondents identified the poster and booklets as sources of information.

Interestingly, 15% of women and 16% of men stated that they had heard of OBSI from the radio at the end-line. The only radio exposure that the project had was from the four interviews that were conducted with the project manager.

Table 1: Exposure to Project Information

Exposure to Project Information (%)					
Women	**Variable Studied**	**Baseline (n=379)**	**End-line (n=354)**	**Statistical Test**	**Confidence Interval**
	Ever heard of OBSI	24.5%	46%	x^2	0.000
	Heard of OBSI from family doctor	3%	32%	x^2	0.000
	Heard of OBSI from health center nurse	0%	18%	x^2	0.000
	Heard of OBSI from community nurse	6%	25%	x^2	0.000
	Heard of OBSI from booklet	3%	18%	x^2	0.000
	Heard of OBSI from poster	0.5%	23%	x^2	0.000
	Heard of OBSI from radio	2%	15%	x^2	0.000
	Heard of OBSI from clinic doctor	62%	73%	x^2	0.000
Men	Ever heard of OBSI	31%	69%	x^2	0.000
	Heard of OBSI from family doctor	2%	22%	x^2	0.000
	Heard of OBSI from health center nurse	0%	16%	x^2	0.000
	Heard of OBSI from community nurse	3%	20%	x^2	0.000
	Heard of OBSI from local male	0%	6%	x^2	0.001
	Heard of OBSI from booklet	3%	15.5%	x^2	0.000
	Heard of OBSI from poster	0%	18%	x^2	0.000
	Heard of OBSI from radio	0.5%	16%	x^2	0.000

7.6.6. Knowledge of OBSI Information (See Table 2)

The survey results indicate that among men and women, there was an overall increase in their knowledge of OBSI and the risks and benefits associated with it. At the end-line, the majority of women stated that they knew that there were benefits from practicing

OBSI for the mother (67%) and newborn (81%). The majority of men at the end-line also recognized that OBSI might provide benefits for the mother (55%) and newborn (75%). OBSI male respondents increased their knowledge that maternal death is associated with not practicing OBSI by 17%, while women increased theirs by 14% over the course of the interventions.

An increase in knowledge of some health and social benefits of practicing OBSI that were promoted by SECS as a result of information obtained from the FGD were also seen in both groups. Findings from the end-line demonstrate that men increased their knowledge of certain social benefits such as, “women may become more available for their partners” (13% increase), a “couple’s relationship will improve with more time together” (7% increase) and that a “couple may be more sexually active” (7.5% increase) if they practice OBSI. Female respondent’s increased by 13% their reporting of “women being more attractive” as a result of OBSI.

Table 2: Knowledge of OBSI Information

Knowledge Comparison (%)					
Women	**Variable Studied**	**Baseline (379)**	**End-line (354)**	**Stat. Test**	**Confidence Interval**
	Beneficial for mother to space 3-5	45%	67%	X^2	0.000
	Mother has risks if not practicing 3-5	38%	62%	X^2	0.001
	Maternal death risk of not practicing 3-5	3%	17%	X^2	0.000
	Beneficial for newborn to space 3-5	59%	81%	X^2	0.000
	More time and energy from mom is benefit of 3-5 for newborn	38%	55%	X^2	0.000
	Better relation with last born is benefit of 3-5 for newborn	12%	28%	X^2	0.000
	Risks for newborn if birth not spaced 3-5	22%	39%	X^2	0.000
	Newborn death risk of not practicing 3-5	1%	8%	X^2	0.000
	Low birth weight for newborn if risk of not practicing 3-5	3%	12%	X^2	0.000
	Woman being more attractive is benefit of OBSI	4%	17%	X^2	0.000
Men	Beneficial for mother to space 3-5	41%	55%	X^2	0.001
	Maternal death risk of not practicing 3-5	3%	20%	X^2	0.000
	Beneficial for newborn to space 3-5	54%	75%	X^2	0.000
	Risks for newborn if birth not spaced 3-5	21%	38%	X^2	0.000
	Woman more available for partner is benefit of OBSI	5%	18%	X^2	0.000
	Couple's relationship will improve with more time together is benefit of OBSI	3%	10%	X^2	0.002
	Couple can be more sexually active is benefit of OBSI	4%	11.5%	X^2	0.004

7.6.7. Behavior Change (See Table 3)

The baseline/end-line comparison findings demonstrate statistically significant changes in positive RH behaviors of both the female and male respondents. In both the male and female groups (of postpartum parents), there was a 22% increase for the men and a 24% increase for the women in having ever communicated with their partners about contraception. More than three fourths (76%) of the women surveyed at the end-line indicated that they had recently discussed birth spacing with their partners. Men increased their discussion of birth spacing with their partners from 2% at the baseline to 46% by the end-line. Another important finding from the research was that women increased their initiation of discussions with their partners about contraceptives during the intervention — from 21% to 43%.

Table 3: Behavior Change

Behavior Change (%)					
Women	**Variable Studied**	**Baseline (379)**	**End-line (354)**	**Stat. Test**	**Confidence Interval**
	Ever talked to partner about contraceptive use	26%	50%	x^2	0.000
	Initiated discussion about contraceptive use	21%	43%	x^2	0.000
	Recently discussed birth spacing with partner	39%	76%	x^2	0.000
	Decided to practice OBSI after discussion with partner	20%	73%	x^2	0.000
	Currently using a FP method	31%	63%	x^2	0.000
	Using OC	5%	12%	x^2	0.015
	Using IUD	2%	6%	x^2	0.036
	Using BF	8%	27%	x^2	0.000
Men	Ever talked to partner about contraceptive use	28	50%	x^2	0.000
	Initiated discussion about contraceptive use	9.5%	9%	x^2	0.000
	Recently discussed birth spacing with partner	2%	46%	x^2	0.000
	Decided to practice OBSI after discussion with partner	2%	39%	x^2	0.000
	Currently using a FP method	35%	61%	x^2	0.000
	Using OC	6%	13%	x^2	0.018
	Using IUD	2%	5%	x^2	0.051
	Using BF	10%	21%	x^2	0.001

The data from the surveys validates the success of the project interventions, because it shows that not only did men and women discuss FP and birth spacing, but that they actually changed their intention and use of FP methods. At the end-line, 76% of the women surveyed and 39% of the men stated that they had decided to practice OBSI after discussing it with their partner. To support that information are the findings that women experienced a 32% increase and men a 26% increase in FP utlilization over the course of the project. These behavior changes can potentially be attributed to the

OBSI/FP education, support and CBD activities conducted by the OBSI Champions in conjunction with the OBSI/FP counseling and service provision provided by the clinic and outreach health care providers.

7.7. Challenges

All implementation obstacles caused SECS and CATALYST to review and revise the Romanian Initiative Promoting OBSI plan as needed. Some of the most important challenges included:

- Delays in the implementation of activities due to changes in the project plan, expansion or reduction in activities and revisions to technical information
- Limited subcontractors experienced in health projects in Constanta and Bucharest
- Extensive amount of TA required for M&E, BCC and Gender components of projects
- Implementation of both OBSI projects simultaneously created additional activities to manage and monitor
- The complex BCC and M&E strategies required much more time and TA than what had originally been planned

7.8. Lessons Learned

- Through the process of designing and revising and adding and deleting aspects of the OBSI project, SECS and CATALYST have learned many lessons that can improve future project management and outcomes.
- An integrated health and non-health project is effective at repositioning FP
- Any change in program design has an impact on the human and financial resources of the organization
- Having a flexible workplan and budget allows for development of a new project
- Longer grant periods are needed to have effective activity implementation to be able to capture project results
- Involving community residents and leaders assists in the effectiveness of implementation
- A complex program design will require extensive TA from the grant donor
- Incorporating dissemination events, such as press conferences, interviews and national conferences helps to make the program sustainable
- The implementation of both OBSI grants provided a more comprehensive and effective model of program design
- The outreach efforts of the Male and Female Champions as couples were more efficient for disseminating OBSI/FP information as a way to support behavior change than the individual Champions outreach
- To most effectively promote partner communication and behavior change, it is best to involve both partners
- TA from CATALYST staff increased the capacity of the SECS organization
- The BCC and M&E strategies were very successful because they were thoroughly researched, planned and implemented (with monitoring and revisions along the way)
- The excellent results from the SECS PAC project suggest the potential of SECS creating an integrated OBSI/PAC model to expand the scope and reach of the RH services and education provided by the individual CATALYST grant programs

7.9. Conclusions

SECS introduced a state-of-the-art RH/FP concept, OBSI, into a health and non-health integrated comprehensive model to improve MCH and RH/FP behaviors and outcomes in Constanta, Romania. The SECS OBSI activities allowed the repositioning of FP due to the combined efforts and support of the whole community, which included health practitioners, community leaders, Champions and local residents. Project beneficiaries and government and NGO partners learned new strategies for improving MCH and for dispelling the negative images associated with FP methods.

SECS had a strong and productive relationship with CATALYST throughout the project and benefited from the CATALYST TA by utilizing information and skills gained in M&E, BCC and Male Involvement to advance the cause of OBSI and FP in its projects and activities, especially noted in the National Conference. The essential aspects of the project will be sustained through replication of the activities in new counties (sponsored by the MOH), training of FP providers on OBSI via the national FP training program, continued production of the materials and continued training and support of the health providers by SECS. This demonstrates the interest and commitment that the partners and implementers have in OBSI.

The SECS OBSI projects met and exceeded all of its objectives and activities due to the support and interest of health providers, partners, counterparts and leaders. Qualitative and quantitative information from project activities illustrate that the project implementers (health providers and Champions) and the beneficiaries' interest in OBSI is strong and that the strategies utilized to implement the projects have been successful. The project's interventions resulted in an increased knowledge of OBSI and the benefits associated with practicing OBSI. The FP counseling and outreach activities rare associated with significant positive changes in partner communication on birth spacing and contraception as well as an increase in contraceptive utilization. These changes are significant because they demonstrate no only the direct changes in communication and FP utilization, but also represent the potential for long term change in the RH/FP and overall well being of the families of Constanta.