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Promoting Adolescent Reproductive Health in Uttarakhand and Uttar Pradesh, India

The Power of
Innovations and
Partnership

MARCH 2012

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Promoting Adolescent Reproductive Health in Uttarakhand and Uttar Pradesh, India

END OF PROJECT SYMPOSIUM



**The Power of
Innovations and
Partnership**

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FOREWORD

Adolescence is the threshold that one passes through while moving from childhood to adulthood. This phase is characterized by marked physical, emotional and intellectual changes in social roles, relationships and expectations, all of which are important for the development of an individual and the society at large.

With nearly 250 million adolescents in India, efforts to improve the health-seeking behavior of this group will be central for the country to harness its demographic dividend. The National Rural Health Mission (NRHM), the Government of India's (GoI) flagship program, recognizes this and underscores adolescent reproductive and sexual health (ARSH) as a top development priority in its Reproductive and Child Health (RCH-II) program. The national strategy of the GoI takes a three-pronged approach to improving the health of young people: building awareness among communities; creating a conducive environment for service delivery; and providing a comprehensive package of services to young people.

Adolescents are not a homogeneous group and various factors such as age, schooling, marital status, and region, determine their needs. It is in this context that the United States Agency for International Development (USAID) and the GoI supported adolescent health initiatives in Uttarakhand and Uttar Pradesh under the bilateral Innovations in Family Planning Services (IFPS) Project through the UDAAN and Saloni projects. USAID has also provided support at the national level to the Ministry of Health and Family Welfare, GoI to develop a communications plan for its adolescent menstrual hygiene efforts.

The collaborative efforts of the state governments, private agencies and the IFPS Project have emphasized innovation and effectiveness to reach out to adolescents. They introduced the youngsters to a gamut of reproductive health issues including menstrual hygiene, thus familiarizing them with healthy behaviors at an early age. The consultative and evidence-based approach has strengthened the base on which future programs addressing adolescent needs can be built and sustained.

This document captures the details of USAID initiatives. USAID hopes that it will inform implementation of adolescent health initiatives in the country as well as internationally.

Kerry Pelzman
Director
Health Office

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ABBREVIATIONS

AFC	Adolescent-Friendly Center
AFCC	Adolescent-Friendly Clinic and Counseling Center
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ARSH	Adolescent Reproductive and Sexual Health
ASHA	Accredited Social Health Activist
BCC	Behavior Change Communication
BPL	Below Poverty Line
CHC	Community Health Center
CMO	Chief Medical Officer
DARC	District ASHA Resource Center
DCM	District Community Mobilizer
DOTS	Direct Observed Treatment Short-course
DPM	District Program Manager
DPMU	District Program Management Unit
DIET	District Institute for Education Training
FP	Family Planning
FVS	Food Variety Score
GDP	Gross Domestic Product
GoI	Government of India
GoUK	Government of Uttarakhand
GoUP	Government of Uttar Pradesh
HIHT	Himalayan Institute Hospital Trust
HIV	Human Immunodeficiency Virus
HMIS	Health Monitoring Information System
ICPD	International Conference on Population and Development
ICTC	Integrated Counseling and Testing Center
IDI	In-depth Interview
IEC	Information, Education and Communication
IFA	Iron and Folic Acid
IFPS	Innovations in Family Planning Services
IIHMR	Indian Institute of Health Management Research
IPC	Interpersonal Communication

ITAP	IFPS Technical Assistance Project
JHU CCP	Johns Hopkins University Center for Communication Programs
LHV	Lady Health Visitor
MDGs	Millennium Development Goals
MO	Medical Officer
MoHFW	Ministry of Health and Family Welfare
MOIC	Medical Officer In-charge
MoU	Memorandum of Understanding
NFHS	National Family Health Survey
NGO	Nongovernmental Organization
NHSRC	National Health Systems Resource Center
NPIP	National Program Implementation Plan
NRHM	National Rural Health Mission
NYK	Nehru Yuva Kendra
OB/GYN	Obstetrics/gynecology
PAG	Project Advisory Group
PGE	Peer Group Educator
PHC	Primary Health Center
PIP	Program Implementation Plan
PPP	Public-Private Partnership
PPS	Probability Proportional to Size
PRI	Panchayati Raj Institution
QPR	Quarterly Progress Report
RCH	Reproductive and Child Health
RH	Reproductive Health
RDI	Rural Development Institute
RTI	Reproductive Tract Infection
SAHRC	State Adolescent Health Resource Center
SIFPSA	State Innovations in Family Planning Services Agency
SHG	Self-help Group
SPMU	State Program Management Unit
SSYK	Saloni Swasth Kishori Yojana
STI	Sexually Transmitted Infection
TAG	Technical Advisory Group
UDAAN	Understanding and Delivering to Address Adolescent Needs
UP	Uttar Pradesh
UKHFWS	Uttarakhand Health and Family Welfare Society
USAID	United States Agency for International Development
UTI	Urinary Tract Infection

EXECUTIVE SUMMARY

Adolescence, the second decade of life, is a period of transition from childhood to adulthood. It is one of the most crucial stages of life for individuals since, between the ages of 10 and 19 years, rapid physical, physiological and psychosocial changes occur. Promoting better health among adolescents can help nations in their efforts to achieve the Millennium Development Goals (MDGs).

Adolescent health has been a priority for the Government of India (GoI) for many years, and included as such in the flagship National Rural Health Mission (NRHM). The Government's Adolescent Reproductive and Sexual Health (ARSH) Strategy, approved in 2006, takes a holistic approach to improving the health of young people by delivering a comprehensive package of services, creating a conducive environment at facilities with service providers attentive to the unique needs of adolescents, and building awareness and support within communities.

The National ARSH Strategy focuses on improving access to and utilization of sanitary napkins to promote menstrual hygiene among adolescent girls. In 2010, the Ministry of Health and Family Welfare (MoHFW) introduced its own brand of socially marketed sanitary napkins and solicited the Innovations in Family Planning Services (IFPS) Technical Assistance

Project (ITAP), funded by the United States Agency for International Development (USAID) to develop a related communications plan. ITAP developed, tested and launched two television and two radio spots on menstrual hygiene that addressed the barriers to menstrual hygiene among adolescent girls (10 to 19 years old) and their mothers, and stated the benefits of healthy behaviors.

The national agenda to focus on adolescent health has attracted interest from the states as well. In 2009, the Government of Uttarakhand (GoUK), with technical assistance from ITAP, launched Understanding and Delivering to Address Adolescent Needs (UDAAN), an adolescent health initiative, on a pilot basis. The pilot phase of the UDAAN program focused on advocacy workshops in districts, and on the recruitment and training of healthcare providers and peer group educators to work with in-school and out-of-school adolescents. In the scale-up phase, services provided at facilities were oriented to become more adolescent-friendly, while at the community level, the establishment of adolescent groups offered young people a safe space to access quality information and direct their own health-related and recreational activities.

Midline project data showed improvements in participants'

knowledge and attitudes related to early marriage (72.4% adolescent girls and boys were aware of the legal age of marriage for girls at midline as compared to 55.1% at baseline), no preference either for boys or girls (33.2% from baseline to 54.6% midline) and use of sanitary pads during the period (from 30.6% to 52.7%). Their autonomy levels and health-related behaviors also demonstrated improvements.

Also in 2010, the government of the neighboring state of Uttar Pradesh, with technical assistance from ITAP, implemented the pilot Saloni Swasth Kishori Yojana project to test the effects of a nutrition and reproductive health (RH) behaviors intervention for young adolescents (11 to 14 years). The program sought to improve adolescents' knowledge related to health issues, as well as their self-efficacy, intergenerational communication with their parents and other actions that have been proven to affect health behaviors.

During the pilot intervention a case control design was used to measure and compare the success of Saloni. Adolescents received weekly iron and folic acid (IFA) supplement tablets, and in addition the girls from the intervention schools received a 10 session in-class module on nutrition, reproductive health and hygiene and a Saloni diary. Teachers

in the intervention schools were provided with a manual, supplemental communications materials, and training to carry out the program activities in their classrooms.

Adolescent girls who participated in Saloni exhibited adherence to hand washing, vaginal hygiene, IFA supplementation, deworming, and eating the recommended number of meals each day compared to the girls in the control schools. Similarly, their attitudes relating to reproductive health issues changed and they

demonstrated an increased level of self-efficacy.

The collaborative efforts of the state governments of Uttarakhand and Uttar Pradesh, private agencies, and the Innovations in Family Planning Services (IFPS) Project through ITAP have introduced new, innovative and effective techniques to increase adolescents' uptake of health services as well as their health-seeking behavior. For example, both programs used the issue of menstrual hygiene as a gateway to

introduce a spectrum of RH issues to younger adolescents and institute healthy behaviors at an early age. By now, a strong foundation is in place due to dedicated pilot testing, baseline, midline and endline research, monitoring and evaluation, stakeholder dialogue, community outreach and scale up. In the ensuing years, these programs are anticipated to build further momentum towards the sustainability of improved access to, and utilization of, health services among adolescent populations.

Chapter 1

INTRODUCTION

Adolescence is a distinct stage in human development filled with rapid physical and emotional changes. These changes are often grouped into five domains: physical, cognitive, moral, identity-related, and sexual. There is no universal definition of this stage of life and cultural expectations for adolescents vary greatly, yet, the opportunities afforded to young people, including their quality of health, will shape a country's future.

International interest in the reproductive health (RH) and wellbeing of adolescents has grown since the 1994 International Conference on Population and Development (ICPD), which called for specific efforts by government and civil society to understand and meet the unique reproductive and sexual health needs of adolescents. The United Nations marked the International Year of Youth from August 2010 to August 2011, with a resolution noting that “the ways in which the challenges and potential of young people are addressed will influence current social and economic conditions, and the well-being and livelihood of future generations.”¹

Like all people, adolescents have a fundamental human right to quality health care and services. However, they face unique barriers in accessing



such services. The Government of India (GoI) recognizes this right and the associated barriers and, consequently, has identified adolescent health, including reproductive and sexual health, as a top priority of its national health program. In turn, several states have adopted this agenda.

Since 2009, the Innovations in Family Planning Services (IFPS) Project, a bilateral effort of the GoI and United States Agency for International Development (USAID)|India, and its technical assistance project IFPS Technical Assistance Project (ITAP), have supported the National Program for Adolescent Reproductive and

Sexual Health (ARSH). Furthermore, the IFPS Project through ITAP has provided technical assistance for the design, implementation, evaluation and scale up of two state-level ARSH programs in Uttarakhand and Uttar Pradesh. Each of these programs is uniquely tailored to the local context wherein the priorities are identified by the state governments and their partners.

1.1 PURPOSE AND ORGANIZATION OF THE REPORT

This end of project report is intended to capture the best practices, lessons learned and recommendations developed over the course of IFPS

¹ “Proclamation of 2010 as the International Year of Youth: Dialogue and Mutual Understanding.” United Nations General Assembly, February 2010.

Project's and ITAP's two years of work on ARSH in Uttarakhand and Uttar Pradesh. It is hoped that these experiences will offer guidelines for future initiatives related to adolescent reproductive health in India and around the world.

Section 2 of the report outlines the demographic and health profile of adolescents in India and the barriers they face in accessing and utilizing health services. The section also describes the government's commitment to improving ARSH at the national level through a series

of policies and policy goals, as well as the role of ITAP in supporting this effort. Section 3 presents the Understanding and Delivering to Address Adolescent Needs (UDAAN) program in Uttarakhand, including its rationale, design and implementation process, quantitative and qualitative results, and efforts to scale up. In Section 4, the Saloni project, an integrated nutrition and RH program for in-school adolescent girls in rural Uttar Pradesh, is illustrated. Section 5 summarizes the main achievements of these programs.

This report is a compilation and summary of numerous published and unpublished materials from the two programs, including research studies, strategies, presentations and state policies, which are listed in the Reference section. As an end of project report summarizing two years of work across multiple partner agencies, stages and geographic areas, in-depth analysis and presentation of the full details of all implementation experiences are beyond the scope of this document.

Chapter 2

ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH IN INDIA

The Gol created the National Rural Health Mission (NRHM) in 2005 as part of its commitment to increase public spending on health from 0.9 percent of the gross domestic product (GDP) to ~2-3 percent of the GDP in a span of seven years. The goals of NRHM are to reduce infant and maternal mortality; improve access to basic public health services; prevent and control disease; promote population stabilization and, gender and demographic balance; revitalize local health traditions and promote healthy lifestyles. The activities of NRHM focus on 18 Indian states.

One of the programs implemented by NRHM is the Reproductive and Child Health (RCH-II) program. The goals of RCH-II are in-tune with NRHM's goals. Concerned that young people face limited access to, and utilization of, health services, Gol has delineated ARSH as one of the four technical areas in RCH-II, alongside maternal health, newborn and child health; and family planning (FP) and contraceptive use.

This emphasis recognizes that investment in ARSH contributes to various health parameters, including reducing early marriage, adolescent pregnancy and the incidence of

sexually transmitted infections (STIs) and human immunodeficiency virus (HIV), meeting needs for FP and lowering maternal mortality. ARSH is thus considered a top development priority with far-reaching benefits across India's health sector.

2.1 DEMOGRAPHIC AND HEALTH PROFILE

There are nearly 225 million adolescents aged 10 to 19 years in India, representing 22 percent of the country's total population (Census, 2001). As noted in the Gol's ARSH strategy, they come from diverse backgrounds and situations, and opportunities for this large group of young people are varied. About one-

fifth of adolescent girls and one-tenth of boys in the age group of 15 to 19 years have received no education (NFHS-3, 2005-06). The health situation of adolescents' presents unique challenges, among them gender-based disparities. For example, more than 20 percent of older adolescent girls (in the age group of 15-19 years) have ever experienced physical violence since age 15, during one year before the survey (NFHS-3, 2005-06).

Early age at marriage has been identified as a significant problem in India, with important implications for the wellbeing of these young women later in life. Although the legal age



of marriage is 18 years, 46 percent of young women (aged 18-29 years) were married before that age (NFHS-3, 2005-06). The marriage of girls at young ages leads to teenage pregnancy and motherhood. Sixteen percent of currently married young women in the age group of 15 to 19 years have already begun childbearing. This group contributes nearly 17 percent to the total fertility in India.

Nearly all (94 percent) adolescent married women (aged 15-19 years) had knowledge of contraception, but only seven percent of those aged 15 to 19 years used a modern FP method. More than one-quarter (27.1%) of currently married women aged 15 to 19 years had an unmet need for FP (Ministry of Health and Family Welfare, Government of India, 2009)

Adolescents also face challenges related to maternal health. Mother's age at birth, birth order, and the interval between births have a strong influence on infant and child mortality (NFHS-3, 2005-06). Although younger women are more likely to deliver babies in a health facility than older women, the rate of institutional delivery among mothers aged 20 years and younger was still low, at 38 percent. Mothers who give birth as teenagers were more likely to have low birth weight babies (26.1%) as compared to mothers in the higher age group (20.4%). Thus, high-risk fertility behavior is classified if mother's age is less than 18 years, mother's age is more than 34 years, previous birth interval in less than two years and birth order is more than three (NFHS-3, 2005-06).

Various data available and literature have demonstrated that adolescents in

India are plagued by under-nutrition, anemia, and infectious diseases resulting from poor environment, sanitation and ignorance (UNFPA, 2003, NFHS-3, 2005-06). More than half (55.8%) of the women in the age group of 15-19 are anemic compared to more than 30 percent men in the same group.

The findings of a National Behavioral Surveillance Survey conducted in 2006, show that young men aged 15-19 and 20-24 years reported more casual sex compared to females in the same age group. However, condom use was inconsistent as only one-third of them used condom every time they had sex with casual partners (WHO & UNFPA, 2006). The study also shows that the awareness levels on sexually transmitted infections (STIs) are very low among youths (aged 15 to 24 years) at about 29 percent. Another study by the Ministry of Health and Family Welfare (MoHFW) in 2009 shows the prevalence of STIs among women does not vary by age. However, among men, the reported prevalence of the two STI symptoms

is much higher among adolescents than older youth.

2.2 BARRIERS TO HEALTH ACCESS AND USE

Certain barriers faced by adolescents have motivated the GoI's interest in focusing on their access to, and use of, health services. Barriers can relate to the beneficiary (adolescents), service providers and parents/gatekeepers. Barriers for the beneficiaries include physical accessibility, availability of services, timing of services, apprehensions about visiting a health facility and experiences/perceptions about provider attitudes. Given the nature of India's conservative society, parents and gatekeepers are apprehensive of talking about sexual issues with adolescents. Furthermore, providers are often judgmental, apprehensive, or lack the knowledge to address sexual and RH needs of this age group. Adolescent health issues are frequently neglected by providers and the adolescents themselves, resulting in the health system failing to meet their unique needs. In addition, adolescents'



utilization of health services is low. These barriers indicate the importance of stimulating demand for such services as a strong component of adolescent health programming.

One important barrier to adolescents' access to, and utilization of, health services in India is early marriage. Although age at marriage has been rising, many girls are married before they reach the legal age of 18. Early marriage is most common among girls from poor families, those living in rural areas, and those who are uneducated. Girls who are married young are more vulnerable to physical and sexual violence, which increases their risk of early pregnancy and exposure to STI. More than one third of HIV infections occur among adolescence (National Behavioral Surveillance Survey, 2006).

Marriage before the age of 18 distorts the life pattern of young women. It often brings an end to their education. Among women in their early twenties who were married before the legal age, 72 percent had received no education (NFHS-3, 2005-06). Early marriage places a young girl in a position of isolation, detached from her own family and friends and living within a household where she may not be valued until she has proven her fertility. For men too, early marriage often distorts their education pattern. It places a burden on the couple to start a family, and for the man to take on the heavy responsibilities of a provider.

Early marriage frequently leads to early childbearing, in which additional risks are present. Adolescent mothers often lack knowledge, education, experience, income and power relative to older mothers. Adolescent

first-time mothers may be neither physically nor psychologically ready for childbirth. Young mothers often know little about their own body or warning signs, and lack sufficient money and status in their new household to access antenatal care (ANC) or institutional delivery.

2.3 GOVERNMENT COMMITMENT TO IMPROVE ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH

The GoI has committed to improving adolescent health through its ARSH Strategy, approved in 2006 as part of the RCH-II Implementation Guide. The strategy aims to increase access to quality health services for adolescents, fulfill unmet need for FP and reduce the prevalence of HIV and STIs. In addition to providing care, the strategy is intended to structure the health system to better meet the reproductive and sexual health needs of adolescents, and to work with communities to create an enabling environment and generate increased demand for services among adolescents. The National Program Implementation Plan (NPIP) 2006 proposes to pilot the ARSH strategy in 75 districts of the country.

The Indian Government has emphasized adolescents as a priority group in other government policies, including the Tenth and Eleventh Five Year Plans, National Population Policy (2000), National Youth Policy (2003) and education-related policies. Adolescents are also a focal area of programming for ministries outside of health. For example, the Ministry of Women and Child Development implements the SABLA program to improve the health and nutritional status of girls, and the *Balika Samridhi*

Yojana program to promote delayed age at marriage. The Department of Education within the Ministry of Human Resource Development implements the Adolescent Education Program, and the Ministry of Youth Affairs and Sports has initiatives on life skills, and an Adolescent Empowerment Scheme. In recognition of the cross-cutting nature of adolescent health and development, the ARSH Strategy takes a multi-sectoral approach, including links to adolescent-focused strategies developed by the National AIDS Control Program.

The national ARSH Strategy focuses on providing adolescent-friendly services through the existing health system. Quality services for adolescents must be accessible and acceptable appropriate, comprehensive, effective and equitable as judged by both the user and the provider. The Strategy has seven standards:

- Health facilities provide the specified package of health services that adolescents need.
- Health facilities deliver effective health services to adolescents.
- Adolescents find the environment at health facilities conducive to seek services.
- Service providers are sensitive to the needs of adolescents and are motivated to work with them.
- An enabling environment exists in the community for adolescents to seek the health services they need.
- Adolescents are well informed about the availability of good quality health services from the service delivery points.
- Management systems are in place to improve/sustain the quality of health services.

The service delivery package outlined as part of the first standard in the ARSH Strategy includes:

- Promotive Services
 - Focused care during the antenatal period
 - Counseling and provision for emergency contraceptive pills
 - Counseling and provision of reversible contraceptives
 - Information/advice on reproductive and sexual health issues
- Preventive Services
 - Services for tetanus immunization
 - Services for prophylaxis against nutritional anemia
 - Nutrition counseling
 - Services for early and safe termination of pregnancy and management of post-abortion complications
- Curative Services
 - Treatment for common RTIs/STIs
 - Treatment and counseling for menstrual disorders
 - Treatment and counseling for sexual concerns of male and female adolescents
 - Management of sexual abuse among girls
- Referral Services
 - Voluntary counseling and testing center
 - Prevention of parent to child transmission
- Outreach Services
 - Periodic health check-ups and community camps
 - Periodic health education activities
 - Co-curricular activities

Along with implementation of the service package, the ARSH Strategy

mandates training of health care providers. Training packages of three days for medical officers (MOs) and five days for lady health visitors (LHVs), auxiliary nurse midwives (ANMs) and other community health workers were developed. By 2011, thousands of health facilities around India had developed adolescent-friendly services, and many providers had been trained on ARSH.

The NRHM has also implemented a menstrual hygiene campaign in 152 selected districts as an opportunity to reach adolescent girls both in school and in the community. The campaign aims to demystify menstruation and also, by connecting girls with health services, motivate the dissemination of information about related health issues and services. NRHM created a unique brand of sanitary napkins, Freedays, to be sold exclusively through accredited social health activists (ASHAs) to adolescent girls at a price of Rs. 6 (USD 0.12) per package. In addition, ASHAs receive a remuneration of Rs. 50 (USD 1) to facilitate monthly meetings with adolescent girls.

Operations and management of the Freedays campaign have been carefully designed. Guidelines, training and interpersonal communication (IPC) materials were developed by MoHFW with technical support from the National Health Systems Resource Center (NHSRC). ASHAs in all 152 districts were trained with technical support from NHSRC before the product was launched, and state and district steering committees were launched. Systems were developed to maintain records of stock levels as well as

to manage the revenue generated from sales. To further integrate the program's benefits into the community, women's self-help groups (SHGs) produced the sanitary napkins.

Monitoring is an important component of NRHM's implementation of its ARSH Strategy. Monitoring activities are intended to strengthen the program by assessing the quality of activities and services, comparing facilities and setting priorities for strategic planning, and prioritizing resource allocation. Monitoring reports flow up from the facility to the district, state and national levels, with specific indicators for each. Reports are generated monthly at the facility and district level, and reviewed at the state level, which then generates quarterly progress reports. At the national level, the Reproductive and Child Health (RCH) Division analyzes reports and plans supportive supervision. In addition, chief medical officers (CMOs) and medical officers (MOs) conduct monthly and quarterly field visits.

Adolescent reproductive and sexual health will continue to be a priority for the GoI. According to a working group review planning for the GoI's upcoming Twelfth Five Year Plan, "the programs that address the needs of adolescent girls have been sub-critical." The working group recommends that the Twelfth Five-Year Plan strongly prioritizes such program, including using designated adolescent health clinics, malnutrition and anemia efforts, and targeting of both in-school and out-of-school girls.



BOX 1: ITAP SUPPORT TO THE NATIONAL ARSH PROGRAM

ITAP support to the national ARSH program has centered on technical assistance for communications activities. The program has been designed to take a lifecycle approach, focusing on the promotion and institutionalization of healthy habits that adolescents can carry forward as they mature. This approach is especially effective in societies where sexual behavior issues are not an effective entry point to discussions about adolescent health. For example, the menstrual hygiene campaign addresses an important issue for adolescent girls, while also serving as a first point of contact to address related concerns, such as reproductive tract infections (RTIs) and STIs, fertility awareness, nutrition and healthy eating, anemia and other nutritional deficiencies, pregnancy and childbirth, and contraception.

ITAP was requested to develop two television commercials and two radio spots to help adolescents understand that menstruation is normal, that hygiene is very critical and sanitary napkins are a hygienic way to manage periods. Formative research helped address the key barriers to positive behaviors and establish the triggers for communication. These findings indicated that the onset of menarche among rural girls is socially embarrassing and alienating, associated with confusion, taboos and unexplained restrictions. With discussion of menstruation stigmatized, there is little information shared among mothers and daughters. This lack of knowledge leads to unhygienic practices which in turn perpetuate infection and disease, and the restrictions on girls' freedom of movement and activities during menstruation contribute to increased absenteeism from school.

To develop this campaign, ITAP used a creative approach towards positive activism and normalization, with their target audience being two groups of adolescents, aged 10 to 14 and 15 to 19 years, as well as their mothers. The mother-daughter relationship was highlighted to show positive mothers who prepare their daughters, talk to them about menstruation and are good role models by providing sanitary napkins. The campaign's core messages were empowerment through knowledge, with girls gaining confidence to accept menarche as natural and view it as a positive change, and empowerment through protection, with sanitary napkins available at affordable prices. The two TV and radio spots were aired nationwide through public broadcast channels (both national and state level) by MoHFW beginning November 2011.

Chapter 3

UDAAN: AN ADOLESCENT HEALTH INITIATIVE IN UTTARAKHAND

3.1 DEMOGRAPHIC AND ADOLESCENT HEALTH PROFILE OF UTTARAKHAND IN 2008

The Indian state of Uttarakhand was created in 2000 from portions of Uttar Pradesh state.² Divided into 13 districts with 16,826 villages, the total population of the state at the time of designing the adolescent health initiative was 8.49 million (Census, 2001). In 2001, nearly two-thirds (74.3%) of the state's population lived in rural areas (Census, 2001). Uttarakhand is distinguished by its hilly and mountainous Himalayan terrain, which is a challenge to navigate for a population that is largely impoverished and resource deficient. Access to secondary and tertiary levels of health care is nearly impossible for many people.

Adolescents constituted nearly one-fourth (23.8 percent) of the state's total population (Census of India 2001). Survey data for Uttarakhand, as reported in the National Family Health Survey 2005-06 (NFHS-3), demonstrated that the state was ahead of national averages in some demographic and health measures of development. Eighty-two percent of adolescents aged 6 to 17 years have



attended school, which is well above the national average of 71 percent (NFHS-3, 2005-06).

The rate of early marriage is below the national average, with almost one-quarter (23%) of women age 20-24 years getting married before the legal minimum age of 18, and 21 percent men aged 25-29 years getting married before the legal minimum age of 21. The corresponding national figures were 58 percent and 43 percent respectively. Early marriages are resulting into teenage pregnancies and fertility. The share of teenage fertility was about nine percent to the state's total fertility (NFHS-3, 2005-06).

Though knowledge about contraceptives was universal, the use of modern contraceptives by young married women aged 15 to 19 years was only six percent in Uttarakhand, close to the average for India of seven percent. Twenty six percent of the currently married women in the age group of 15 to 19 years reported unmet need for spacing and about two (1.5) percent reported limiting with a total unmet need for FP being 28 percent, which is maximum when compared with reported figures by women from the other age groups (NFHS-3, 2005-06).

Regarding nutritional status, as measured by body mass index (BMI),

² Uttarakhand was originally known as Uttaranchal. Its name was changed in 2007.

43 percent of young women and 52 percent of young men aged 15 to 19 years in the state had below-average BMI, compared to 47 percent and 58 percent respectively in the similar age group across India. The prevalence of anemia was found to be higher than the national averages, at 59 percent among adolescents (ages 15 to 19) and 33 percent among men in Uttarakhand, compared to 56 percent and 30 percent, respectively. These findings emphasized the need to influence the health care seeking behavior of adolescents to make a difference to the state and therefore the country's health, mortality, morbidity and population growth scenario.

According to DLHS-3, 2007-08, only 30 percent of unmarried women aged 15 to 24 heard about RTI/STI whereas, HIV/AIDS was known to more than 84 percent of women in this age group. Nearly, 30 percent of ever married women aged 15 to 49 years reported having experienced some form of violence from their spouses (NFHS-3, 2005-06).

Building on the commitment to adolescent health shown at the central level by the GoI, in 2008 the Government of Uttarakhand (GoUK) conceptualized a state-level program to address ARSH, and requested the USAID-funded IFPS Project to design and implement a pilot program.

3.2 DESIGNING A COMPREHENSIVE ADOLESCENT HEALTH PROGRAM

The ARSH program was endeavored to empower adolescents so that they become assets for the community. A review of existing efficient and effective ARSH service

delivery models within the state and those implemented in other states informed the development of the ARSH model for Uttarakhand. Three considerations were identified: the diversity in adolescent groups and their needs, the mandate for a comprehensive package of services, and multisectoral participation. The review suggested involving and engaging youth in planning, implementation and monitoring of the program. The design also required a holistic approach to development of adolescents and youth, rather than being restricted to health service delivery. Multisectoral coordination was identified as the key to implementing a unified strategy for improving adolescent health.

As part of the design process, for the supply side, it was identified that in order to deliver a comprehensive package of services, health facilities at all levels are made responsive to the needs of the adolescents. The environment at the health facilities needed to be adolescent-friendly and conducive, with particular emphasis on privacy and confidentiality of clients. Service providers would have to be sensitized to be non-judgmental and responsive to the needs of adolescents. Strategies for equitable service provisioning would have to be ensured.

On the demand side, creating an enabling environment for adolescents to seek services, by sensitizing communities to be receptive to their needs, was essential. Communication efforts needed to provide information to gate keepers within the communities to support their involvement in adolescent programs.

“Even if they (a boy and a girl) are just meeting and somebody sees them, the

name of the whole family goes down. It is then said that it is the fault of the family. People will say that the parents didn't take care of the children properly.”

Parents/gatekeepers, Haridwar, in-depth interview

“If my son asks me about sex, I will say it is nothing.”

Parents/gatekeepers, Udham Singh Nagar, in-depth interview

Regarding contraception: *“Generally we advise them not to do such things. But if they want to (be sexually active), then use precautions.”*

ANM, Dehradun, in-depth interview

To increase the utilization of services, adolescents must be informed about the availability of services at accessible facilities. In addition, management and monitoring systems must be put in place to improve and sustain the quality of services.

The baseline research found that peers have a powerful role in adolescents' decision-making processes, and are an untapped resource that can be harnessed as powerful change agents for the ARSH program in Uttarakhand. Support systems for implementation, service delivery, capacity building, technical assistance and monitoring were developed around the peer group educators (PGEs).

This design was revisited based on a baseline survey conducted by ITAP during September to November 2009 in four of Uttarakhand's most populous districts, namely, Dehradun, Haridwar, Nainital and Udham Singh Nagar. These districts together comprised of nearly 50 percent of the state's population (Census of India, 2001).

It was with this understanding that the Understanding and Delivering to Address Adolescent Needs (UDAAN) initiative was developed to address the needs of adolescents, grounded in a holistic approach.

3.3 THE UDAAN MODEL

UDAAN was launched in February 2009 by the Uttarakhand Health and Family Welfare Society (UKHFWS) and the Department of Health and Family Welfare, GoUK. Funding for the pilot stage was provided by USAID | India's IFPS Project.

The main objectives of the program were to make health care services more accessible and acceptable to adolescents, to build the capacity of health care providers, to improve service performance for the delivery of adolescent-friendly services, and to establish convergence of various stakeholders in providing a comprehensive package of services for adolescents based on their needs.

The project covered adolescents aged 10 to 19 years. A diverse group with varied needs, these adolescents required specific interventions to reach them:

- **Age:** In addition to the differential needs based on gender, the requirements of a 10 year old are different from a 19 year old. Based on age, they were grouped in early adolescence (10 to 14 years) or late adolescence (15 to 19 years).
- **Place of residence:** Though the proportions of adolescents living in rural and urban areas of Uttarakhand were similar, the opportunities and challenges of these groups would vary.
- **Schooling:** With increasing age, the school dropout rate increases.

This results in differences in needs of the school going adolescents in comparison to the non-school going adolescents, who may or may not be engaged in economically productive activity.

- **Marital status:** Within adolescents there are married and unmarried adolescents. For certain RH needs of adolescents, our health system is responsive to the married adolescents but does not cater for services to the unmarried adolescents despite the apparent need.

The strategies for reaching out to each of these groups were tailored.

3.4 PHASES OF IMPLEMENTATION AND GEOGRAPHICAL COVERAGE

During the preparatory phase of the project, formative and baseline studies were conducted on adolescent health issues in Uttarakhand. These studies provided valuable data used to infer target audience knowledge, attitudes and practices, and therefore design effective communications strategies and messages. In addition to the quantitative and qualitative baseline studies, a formative study, *Developing Communication for Adolescent Health Programs in Uttarakhand*, was completed in December 2009. This study used audience analysis to aid in understanding the adolescent target groups and their perspective on healthcare, hygiene and nutrition.

In addition, existing activities catering to adolescent needs within Uttarakhand and other states were reviewed. Roles and responsibilities of various stakeholders, as well as standards of quality for adolescent-friendly services were designed. The comprehensive package of services

included preventive, promotive, counseling and curative services, all of which affect the physical, social and mental wellbeing of adolescents.

The project was piloted for a period of 13 months in two blocks each of the four most populous districts of Uttarakhand, selected to represent those with the highest and lowest proportions of school-going adolescents. During the pilot phase, ITAP conducted advocacy workshops at the state and district levels, enabled capacity building of providers and developed a kit for PGEs. The state nodal agency for UDAAN had specific responsibilities during the pilot phase, particularly facilitating the process of selection of NGOs and monitoring their activities, including training for community health workers and PGEs.

The project was scaled up in four phases (Table 1). The first scale up (Phase 2) was to saturate coverage in Dehradun District. This was then scaled up to saturate the remaining three districts of the pilot. The project has now been proposed for scale up to the entire state. Also, it has further been proposed in the latest NRHM implementation plan for the state.

The sections presented below detail out the components of the UDAAN model at its initiation along with modifications that have been implemented during the scale up phases.

3.5 BEHAVIOR CHANGE COMMUNICATION

3.5.1 Creating an Enabling Environment

In order to garner support among stakeholders and gatekeepers (parents, teachers and community members) for the adolescent health

TABLE 1: UDAAN IMPLEMENTATION PLAN

Phase	Time period	Districts covered	Blocks covered	NGOs engaged
Phase 1—Pilot	February 2009 to March 2010	4 districts: Dehradun, Haridwar, Nainital, Udham Singh Nagar	8 blocks (2 blocks per district)	8
Phase 2—First scale-up	March 2010 to May 2011	4 additional blocks in Dehradun (Dehradun saturated)	12 blocks	12
Phase 3—Second scale-up: District saturation	October 2010 onwards	15 additional blocks in remaining 3 districts (remaining districts saturated)	27 blocks	12
Phase 4—Complete state rollout	June 2012 (expected)	All districts (50% coverage of state)	34 blocks (50% coverage)	

program, the pilot phase of UDAAN, incorporated a series of advocacy initiatives. These included:

State-level advocacy workshop:

A state-level advocacy and experience-sharing workshop was held in February 2009 with more than 60 attendees. The workshop was chaired by the Principal Secretary, Department of Medical Health and Family Welfare, GoUK. Experiences of adolescent health programs from across sectors were shared by representatives from Department of Women and Child Development, GoUK, Department of Youth and Sports Affairs, GoUK, State AIDS Control Society, USAID, NGOs implementing adolescent programs from various states, World Health Organization and service providers. Sessions addressed adolescent health status, experiences with ARSH implementation, malnutrition, sexual concerns, empowering adolescents, service delivery, convergence for adolescent health and ways forward. The workshop provided an opportunity to bring together

government agencies, health workers and civil society to build a common platform and shared understanding of the way forward.

Regional sensitization workshops:

Two sensitization workshops were held at the regional level for district officials in March 2009. The workshops included nearly 80 participants representing Health, Education, Women and Child Development, Rural Development, *Panchayati Raj Institutions*, and *Nehru Yuva Kendras (NYKs)*. Sessions focused on specific issues and

interventions for adolescent health and implementation experiences.

District PRI workshops: In June 2009, four one-day workshops were held in each of the four focus districts. The workshops focused on sensitization of *Zila Panchayat* (local assembly) members. With a total of 85 attendees, the workshops aimed to sensitize the *Panchayat* functionaries about adolescent issues and problems, and inform them of the rationale and interventions of the UDAAN program. A second objective was to highlight the role of



Pear group educators at a five day training workshop

the *Panchayat* members as supporters and monitors of the program at the district level.

3.5.2 Demand Generation

Demand generation activities were planned to address the barriers that restrict adolescents' access to health services. These activities targeted adolescents as a primary audience, and parents, other community gatekeepers and service providers as a secondary audience.

In devising the behavior change communication (BCC) campaign, the project team recognized a number of challenges, including a complex audience (10 to 14 and 15 to 19 year age groups may have different needs), increased parental control, operating within a conservative environment that inhibits a free flow of information about reproductive and sexual health, and both low access to and low quality of service providers. The campaign was modeled on the Pathways Model, a flagship of the Johns Hopkins University Center for Communication Programs (JHU CCP), to facilitate interventions at the environmental, service delivery, community and individual levels. (JHU CCP, 2003)

The overarching communication strategy evolved for the program was about 'change'. The focus was to bring about change in what adolescents know, in the way they think, in their attitudes towards life, and in the way they behave. A unique selling proposition for the project was developed 'we take the leap, we are the change'. The slogan, "Taiyyar Ho!" (Get Ready) was adopted for the campaign, which is an affirmation of readiness. For UDAAN, it served as a promise for better preparedness to meet the future

for UDAAN. This overarching theme could be translated differently for segments of the target audience:

- **Adolescents:** Engaging with the project, learning new things and benefiting from the change.
- **Parents:** Letting our children learn about the ways of life; we help nurture parents of tomorrow.
- **Service providers:** Learning new ways to communicate and engage with adolescents; we help bring in positive change in the next generation.

Based on this strategy, branding for UDAAN was developed that intended to capture the aspirations, understanding and needs of adolescents in Uttarakhand. The logo, shown below, was designed so that the audience could relate to it easily.

The BCC campaign was implemented at the household, community and health facility level, through different media. Communication materials and messages were designed to focus on entertainment, education, awareness and subliminal themes to link to programs and create an enabling environment. These included:

- **Peer Group Educator's Toolkit:** A comprehensive toolkit was developed for PGEs to conduct over 150 hours of interactive workshops/sessions with out-of-school adolescents. The kit contains materials, games, reference materials etc. on the following key areas: marriage and FP; awareness of disease and vaccination; hygiene practices; utilization of health services; school going habits; and personality issues.
- **BCC Multimedia Campaign:** An integrated campaign and



UDAAN Logo: 'We take the leap, we are the change'

related materials to advocate for adolescent needs and rights, inform adolescents about healthcare, inform caregivers about their role, increase demand for adolescent services, and change attitudes of adolescents, caregivers, and service providers towards adolescent health were developed as part of the campaign. Mass media was not part of this campaign, given that the program was implemented in only four districts. Twenty-five different types of materials were developed, including interactive board games, storybooks, healthy lifestyle booklets, leaflets, dispensers for socially marketed products, posters, banners, letter boxes, referral cards, and birth preparedness kits.

The BCC strategy and campaign materials were handed over to the UKHFWS in May 2010. Stakeholders were trained in using these materials effectively. The state invested funds from the NRHM Program Implementation Plan (PIP) to print and distribute these materials for four districts.

3.6 EMPOWERING ADOLESCENTS: PEER GROUP EDUCATORS AS AGENTS OF CHANGE

Opinions and decisions of adolescents are influenced most often by the information gathered from peers. There are many



Posters developed for the “Taiyyar Ho!” campaign

instances where the adolescents experiment risky behaviors such as unsafe sex and substance abuse due to peer pressure. Adolescents are the untapped resource that can be harnessed as change agents in the community. These change agents, or PGEs, were the backbone of the UDAAN initiative as well. Local NGOs selected PGEs based on their qualification, ability to communicate,

recommendations from ASHA and AWWs, and consent from family members. For school going PGEs, selections were based on recommendation from teachers.

During the pilot, two PGEs (one male and one female) were identified for 100 priority villages selected to form adolescent groups. The PGEs are the foundation of the UDAAN

program since they are the first point of contact for adolescents, both in the village and at school. A 10-day training on the PGE kits enabled the PGEs to gain conceptual clarity on health related subjects and strengthened their abilities to communicate effectively with their peers as well as other community members. In their communities, these PGEs used the modules and materials from their kits to impart positive behaviors and life skills among peers. These materials included playing cards and board games.

The PGEs also manage the Adolescent-Friendly Centers (AFCs), identify peers in need of health services and motivate them to access services from the ANMs or at the Adolescent-Friendly Counseling Centers (AFCCs) (see section 3.7).

Based on feedback from local NGOs and community, the PGE training was modified to a five day training workshop during the scale up phase. In addition, GoUK instituted a scholarship of Rs 200 (USD 4) per month for all PGEs. These scholarships are distributed through the principal of the school for school-going PGEs and through the Gram Pradhan for out of school adolescents. A certificate signed by the CMO, NGO functionary, principal or Gram Pradhan is also awarded to the PGEs on completion of their training.

“A young girl was very embarrassed and scared when she had her first period. She could not understand what was happening with her, why this blood came out. Then I gave her information regarding periods and she felt normal.”

Female Peer Educator, UDAAN
(Midline Assessment, 2011)

“Regarding health aspects, they ask me how and why all these changes are there in our bodies.”

Female Peer Educator, UDAAN
(Midline Assessment, 2011)

“They are also benefitting as they keep asking me what is this and what is that. They come to me whenever they are ill or have some problems. I discuss and explain what they could do in that situation.”

Male Peer Educator, UDAAN,
(Midline Assessment, 2011)

3.7 SERVICE DELIVERY

The individual/community and service delivery domains of UDAAN were designed to be spread across six contact points:

- State Adolescent Health Resource Center (SAHRC)
- Adolescent-Friendly Clinic and Counseling Centers (AFCC)
- Adolescent-Friendly Clubs (AFC)
- School Health Program
- School Health Camps
- Adolescent Health Days (especially for non-school-going adolescents)

3.7.1 State Level Adolescent Health Resource Center

The SAHRC is responsible for developing standards for adolescent-friendly services, conducting research

on adolescent health, maintaining databases, documentation and developing resource materials related to adolescent health, and monitoring the ARSH program. While largely a technical support unit, the SAHRC is currently integrating the apex counseling center into the existing integrated counseling and testing center (ICTC). The SAHRC is expected to also have a chat line for information and counseling needs, managed by the ICTC team in 2012.

3.7.2 Adolescent Friendly Clinic and Counseling Centers

The AFCCs were intended to provide a package of clinical and counseling services dedicated to adolescents at existing health facilities, primary health centers (PHCs) and community health centers (CHCs) at the block level. These services are intended to be accessible, acceptable, appropriate and affordable to the local community, as well as equitable, inclusive and non-discriminatory among the beneficiaries. Health care providers at facilities have been trained in counseling and confidentiality issues, while community health workers were trained to refer adolescents to AFCCs. In addition, this component can include designated hours for

adolescents to visit health care providers and designated space for their visits. AFCCs were operational in the implementing blocks of four pilot districts by June 2010, and have continued to be gradually scaled up in the remaining blocks of these districts. Currently, there are 27 AFCCs operational, one in each block of the program. The GoUK has also committed funds for setting up AFCCs in nine district hospitals.

3.7.3 Adolescent Friendly Centers

AFCs were established in clusters, with one club for every 10 villages, and were implemented during the second quarter of 2010. The AFCs are administered by PGEs, as per the convenience of adolescents, with support from ASHAs and AWWs in the dissemination of information and education. They have been designed to provide a package of informative entertainment materials, including information on reproductive and sexual health, contraceptives, health products such as sanitary napkins and IFA supplements, education and career planning, newspapers and magazines, and game equipment. Organized at sub-centers, schools and local assemblies, the clubs can also be used to hold events.



Rohit, aged 15, was experiencing nocturnal emissions. Being concerned, he went to the local rural medical practitioner who told him that his treatment would cost Rs. 1,000 (USD 20). Apprehensive, Rohit discussed the matter with his friend Navin, who was a PGE. Navin discussed the issue at length with Rohit and also introduced him to the UDAAN NGO worker, Sandeep, at the AFC. Sandeep further counseled him and advised him on how to handle his concern saving Rohit not only the money but also the mental anguish. Rohit said:

“I was very worried and not sure who I should talk to. Thanks to Navin and Sandeep Bhaiyya, I was relieved to understand that this was a natural process of growing-up problem and feel more comfortable and relieved now.”



ADOLESCENT FRIENDLY CENTER AT DOIWALA CREATES AN ENABLING AND FRIENDLY ENVIRONMENT FOR ADOLESCENTS

The AFC in village Geetapuram in block Doiwala in Dehradun caters to adolescents from three villages with a population of 2500. With its friendly information and counseling services, the center has already attracted 104 adolescent members. They have access to a range of interactive and informative material of adolescent interest.

A key feature of the AFC is the PGEs, adolescents trained by the UDAAN project to counsel fellow adolescents on reproductive and sexual health.

Kajal, Anjali and Deepika and Manish, Raghubeer and Shivam are between 15 to 17 years and would take their board exams this year. But these six teenagers also work as PGEs at the AFC every Sunday from 1.30 pm to 4 pm. Each of them is responsible for supporting 15 to 20 adolescent members of the club in adopting healthy behaviors. The PGEs receive Rs. 200 a month from the principal of their school for operating the AFC.

The AFC provides a space for learning and interaction for adolescents, where they can talk to other members and PGEs on various issues that interest and concern them, and access a variety of books and magazines on education, entertainment, information, sports and employment. Members are asked to pay Rs. 10 a month to use these services and loan reading material. The project also provides facilities for sports such as football and badminton and indoor board games to engage the interest of adolescents.

Support from the community including the *Panchayat* or the village governing body has been critical to the success of this AFC. For example, when the AFC needed space to function, the village *Panchayat* took a decision to use premises of



the *anganwadi* center/village health center of Geetapur Harrawal, a semi urban area near Dehradun. The village *Panchayat* and ASHA have formed a *Samiti* (committee) to decide matters regarding the day to day functioning of the AFC. Decisions on the center's membership fees, fine for failure to return books, and using the fine amount for the AFC are taken by the *Samiti*. Funds generated through fee and fines are used to purchase materials for the center on an on-going basis.

At this AFC, a local NGO called Vardan supervizes the PGEs and organizes "cluster" meetings where PGEs working in a block, discuss their experiences and problems, and find ways to address them. At times, an ASHA also participates in the meetings.

The AFC is linked to the AFCC of the block, where adolescents are referred for further counseling and help. The AFCC provides counseling and treatment services to adolescents every Tuesday and Friday afternoon.

Participation of the community and parents is essential for the system of PGEs to work. Parents support their children to work as PGEs as they are aware of the AFC's interventions in villages.

The enabling environment at the AFC Doiwala created by the community, including the *Panchayat*, the PGEs and their parents, play an effective role in the lives of adolescents and serves as a model for replication throughout the state.

3.7.4 School and Out-of-School Level Intervention

School adolescent programs are operated in primary and upper-primary schools in collaboration with the education department. Teams including two MOs (one male, one female), a pharmacist and a community mobilizer conduct check-ups of children in their respective blocks and at *Anganwadi* centers. These teams also supervise the Village Health and Nutrition Days, into which Adolescent Health Days have been incorporated, during which providers visit communities and hold health-related programs. Previously, school health teams operated by the GoUK had only been run at the primary level, but now include the UDAAN concept of catering to the older adolescents as well.

The health camps within UDAAN are operated by the project NGOs for out-of-school adolescents, while those in school have been included in the state level school health teams. The health camps conducted by NGOs in schools and communities were to ensure adolescent-friendly services at the block and sub-block level. The NGOs aimed to hold 10 health camps per block, with services offered including immunization, growth monitoring, information on reproductive and sexual health, information on growth and body image issues, nutrition and hygiene, general clinical services, eye checkups and treatment and counseling for minor reproductive health problems.

In addition, letter box approach to answer queries of students while maintaining confidentiality, weekly IFA, six monthly de-worming and career counseling *melas* (fairs) were planned for school going adolescents. Village

level adolescent groups led by the PGEs, AFCs, health camps specifically for adolescents, and social marketing were used to reach the out-of-school adolescents.

The school adolescent programs, health camps and Adolescent Health Days were implemented on a very limited basis during the pilot phase, which focused on capacity building of PGEs and other providers. The pilot model was designed to approach school going adolescents through nodal teachers and out-of-school adolescents through PGEs. This approach was modified later to reach all adolescents through PGEs due to the unavailability of teachers for UDAAN trainings.

Career counseling *melas* and livelihood trainings have generated interest among adolescents and helped equip them with skills for better income generation prospects. Although adolescents were not enrolled during the pilot, 80 adolescents were later enrolled into trainings such as computer applications, sewing, bee keeping, typing and others.

In the scale-up phase, these activities have been largely sustained by the GoUK.

3.7.5 Married Adolescent and Young Couples

Identifying role models on delaying the first child and spacing, identifying pregnant adolescents through PGEs, provisioning of IFA for pregnant women, and birth planning for adolescent mothers by ASHAs were some of the interventions carried out to reach married adolescents. While the number of married adolescents was low in the project, the

convergence of the VHND with the *Anganwadi* center was a good platform for PGEs to promote nutritional, hygiene and preventive aspects like FP and immunization of pregnant mothers. Further sensitizing providers on providing adolescent friendly services also helped reach married adolescents and young people.

3.8 CAPACITY BUILDING

A comprehensive approach to capacity building in order to cater to the needs of each element of the UDAAN design was essential. In addition to the sensitization efforts at the state, regional and block level with government officials and *Zila Panchayat* members (see section 3.4), trainings were conducted for service providers (government doctors, ANMs, pharmacists and rural medical practitioners), NGO workers and PGEs. Developing the capacities of master trainers and provision of continuous mentoring support to PGEs was inherent to the capacity building effort. The process of sensitization of providers, capacity building of master trainers and service providers was followed in the pilot as well as the scale up phase.

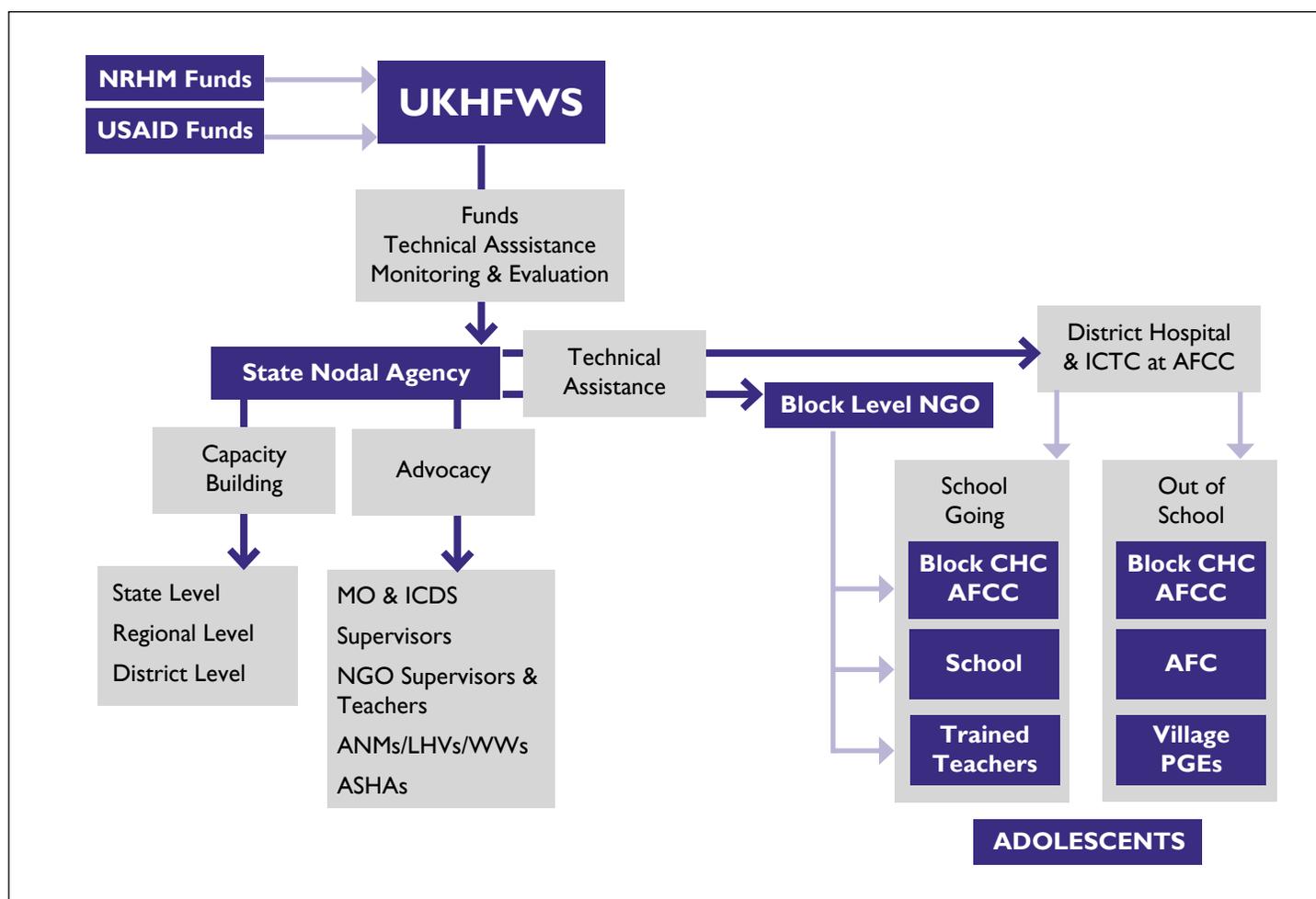
In the pilot phase of the project, service delivery activities focused on training and capacity building. Service providers' skills in dealing with adolescent health issues are often limited. Hence, building their capacity is essential. The UDAAN program built the capacities of various groups of providers, including MOs, ANMs, LHVs and male supervisors, pharmacists and ASHAs. To meet the requirements of the AFCCs in the scale-up phase, the health care providers and community workers were trained on counseling adolescents and respecting their confidentiality.



Rita, aged 16, is studying in Class 10. She took part in one month embroidery and tailoring training at the AFC. She learnt how to stitch *salwaar suits*, and also to embroider them. Rita feels confident and has been able to build upon her talent after the training. She is now not only stitching *salwaar suits* for herself, but also for other members of her family. She said:

“I am very happy to make embroidered suits for my sister and mother. They are very proud of me.”

FIGURE 1: UDAAN PROGRAM IMPLEMENTATION MODEL



A major focus of the capacity building efforts was the recruitment, training and deployment of PGEs. NGOs held community meetings in each village, after which one male and one female PGE were identified through community nomination, volunteering or selection by the NGOs. With a high attrition rate among PGEs, it was important to enhance capacities of implementing NGOs to administer the training plan developed for PGEs on a regular basis. Master trainers were identified and trained. These master trainers were further responsible for training and mentoring the identified PGEs. Fifty six NGO functionaries were trained in a 10 day residential training as master

trainers for the toolkit developed for adolescents. These trained functionaries then trained selected PGEs on a similar agenda.

Across the four pilot districts, a total of 1,600 PGEs participated in the program, beginning with 10 days of training on life skills and reproductive and sexual health issues. In addition, 316 PGEs were trained during the scale up phase by the master trainers.

3.9 PROGRAM MANAGEMENT

The implementation structure for UDAAN is shown in Figure 2 below. Key players to reach the adolescents include the UKHFWS, State Nodal

Agency, Block Level NGOs, service providers and PGEs. ITAP provided technical support in conceiving the design, capacity building efforts, development of systems (including clarifying roles and responsibilities) and evaluation.

3.9.1 Role of UKHFWS

The UDAAN project is implemented under the leadership of UKHFWS, which has the role of designing the adolescent health program, monitoring implementation, funding adolescent health activities, funding the NGOs providing financial monitoring, and ensuring inter-departmental convergence for delivering the project activities.

3.9.2 Role of the State Nodal Agency

ITAP provided technical assistance to UKHFWS during the conceptualization and implementation of the UDAAN pilot program. During the pilot phase, ITAP developed the concept note and strategy document. UKHFWS awarded a subcontract to state level NGOs, initially to the Rural Development Institute (RDI) Dehradun, and subsequently to SAMARPAN, to assist with “day to day” management of UDAAN and the Block level NGOs.

3.9.3 Role of Block-level NGOs

Recognizing that the day-to-day implementation activities could be best managed by organizations with extensive presence and integration within local communities, UDAAN was designed for close partnership with local NGOs.

At the block level, local NGOs were selected to function as the primary implementation agencies in the field. In the pilot phase, the NGOs were selected by a committee coordinated by the State Nodal Agency (SNA) based on their experience within local communities and work on RH issues. Subsequently, each NGO signed a Memorandum of Understanding (MoU) with District Health and Family Welfare Societies. Their work was monitored by the SNA.

Working within each block, the NGOs assumed several implementation responsibilities. These included identifying and training PGEs, forming and mentoring adolescent groups, establishing AFCs and organizing their activities, working with health officials at the sub-center level to organize health camps and

Adolescent Health Days, coordinating and facilitating adolescent services within schools, conducting advocacy with parents with the support of local Panchayati Raj Institutions (PRIs), maintaining the supply chain for drugs and social marketing products, managing social marketing activities, facilitating district Project Advisory Group (PAG) meetings, and establishing adolescent Health Monitoring Information Systems (HMIS) at all levels.

3.9.4 Role of Adolescent Groups

Following their training, the PGEs were asked to form adolescent groups of at least 10 to 15 young people in their villages. The groups defined their aims and objectives, developed their own agendas and worked together to achieve their objectives. Their activities also included sessions on life skills education facilitated by the PGEs. The adolescent groups have provided an important outlet as a “safe space” for sharing experiences and questions, in an environment that promotes the exchange of accurate health-related information.

3.10 MONITORING AND EVALUATION

Monitoring and evaluation is one of the essential elements of the adolescent health program. The baseline and midterm assessments offered opportunities for thoughtful design and, later, identification of programmatic barriers and corrective measures. Data segregated by age and sex on adolescents is collected from the block level NGOs and is compiled by the SNA and submitted to UKHFWS. To strengthen the adolescent health service delivery points, performance indicators on

adolescent health were introduced, with monthly reporting of the service indicators by NGOs. These reports were submitted to the block medical officer in-charge (MOIC) with a copy to the NGOs in order to review the progress of the program.

The process indicators developed for the monitoring implementation include: delivery of quality services; capacity building of providers; demand generation; advocacy and stakeholder involvement; and empowering adolescents. Outcome indicators include: availability of quality health services to adolescents; access to, and utilization of, services by adolescents; and satisfaction of adolescents with the package and quality of services offered under UDAAN. Table 2 lists the target audience and expected outcomes.

3.11 PROGRAM RESULTS

To assess the progress of UDAAN activities in the intervention blocks, a midterm assessment was carried out by UKHFWS in September 2011. The purpose of this assessment was to gauge the midterm progress of UDAAN on various program components in four implementation districts. The assessment was conducted using a suitably developed research design to achieve the study objectives with a combination of pre-tested quantitative and qualitative tools. The study was conducted in the eight pilot blocks of our districts.

A total of 80 PSUs were selected from the eight pilot blocks, by sampling 10 villages from each of the eight blocks using probability proportional to size (PPS) method. These villages were selected from the list of villages where the ARSH program was implemented. In each PSU, house listing was done to

TABLE 2: EXPECTED OUTCOMES OF UDAAN

Target Audience	Expected Outcomes
Adolescents aged 10 to 19 years, unmarried, boys and girls	<ul style="list-style-type: none"> ● Utilization of services ● Knowledge and life skills enhanced ● Health awareness increased ● Nutrition and hygiene knowledge and skills enhanced ● Personality developed
Married/ pregnant adolescents	<p>In addition to above:</p> <ul style="list-style-type: none"> ● Increased knowledge and skills in health care during pregnancy, delivery and child care ● Increased use of family planning methods for delaying and spacing
Peer Group Educators	<p>In addition to above:</p> <ul style="list-style-type: none"> ● Enhanced knowledge and skills in providing services for adolescents ● Increased capacity in interpersonal communication (IPC) to: <ul style="list-style-type: none"> ■ Counsel adolescents ■ Mobilize community and resources ■ Promote and sell socially marketed health products ■ Refer adolescents to relevant services ■ Organize events
Parents	<ul style="list-style-type: none"> ● Increased awareness about adolescent health issues and life skills ● Motivate/support participation of their adolescent's in UDAAN activities ● Positive attitudes towards girl child, equal opportunity and delaying the age of marriage and childbearing ● Advocate adolescent issues among peers
Community	<ul style="list-style-type: none"> ● Increased supportive environment for UDAAN program and adolescent health issues
ASHAs/ANMs	<ul style="list-style-type: none"> ● Enhanced knowledge and skills in providing services for adolescents ● Increased capacity in IPC to counsel adolescents and parents, mobilize community and resources, sell social marketing products and organize events
Staff of Adolescent-Friendly Centers (AFCs), Adolescent-Friendly Clinic and Counseling Centers (AFCCs), State Adolescent Health Resource Center (SAHRC) and non-governmental organizations (NGOs)	<ul style="list-style-type: none"> ● Enhanced capacity in: <ul style="list-style-type: none"> ■ Addressing adolescent health issues effectively ■ Developing materials for UDAAN program ■ Training and supportive supervision ■ Data management and reporting

identify households with adolescent boys and girls aged 10 to 19 years, and 32 adolescents were selected using systematic random sampling procedure. Similar to the baseline, a total of 2,500 adolescents were covered from 80 PSUs, spread across the four districts.

The results from midterm assessment found improvement in adolescents' attitudes and behaviors related to reproductive and sexual health. About

26 percent respondents in midterm assessment reported about son preference compared with 40 percent at baseline. Seventy two percent of adolescents have demonstrated awareness of the legal minimum ages of marriage, which is much greater as only 55 percent knew about it at the time of baseline. Adolescents from the program areas have made progress in self-decision making as both male and female adolescents have shown improvement from baseline to

midterm assessment. These findings are shown in Annex A.

The use of sanitary napkins among adolescent girls in the four pilot districts improved from 31 percent to more than 52 percent girls as shown in Figure 3. Similarly, a lower proportion (37%) of girls are found to be using old cloth during their periods compared to their behavior (47%) two years ago. Even when they use cloth during periods, more adolescent

girls (51%) tend to use clean/washed cloth when compared to their behavior two years ago.

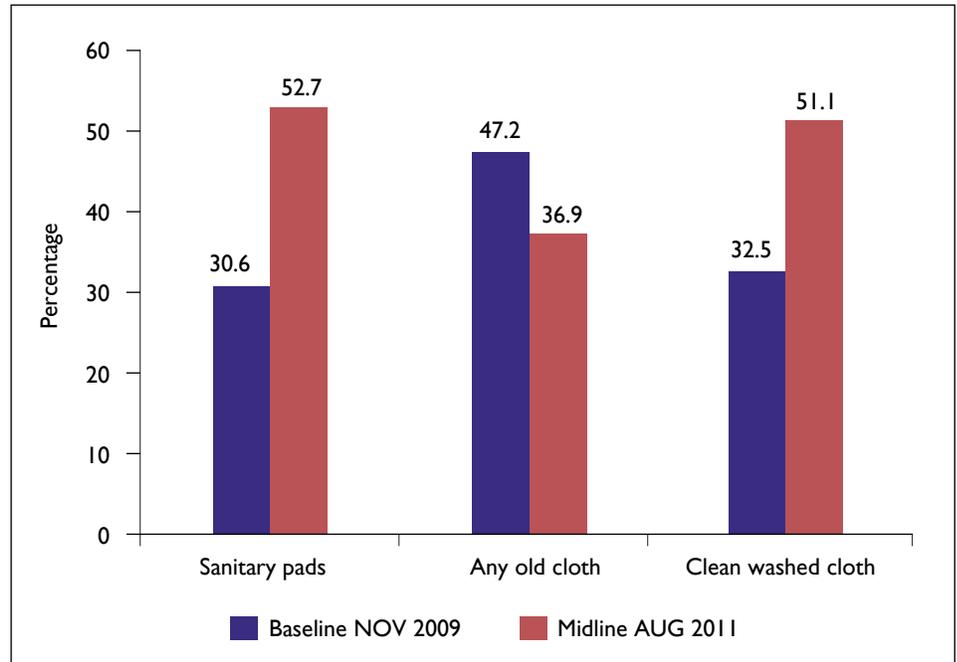
Midterm assessment showed improvement in knowledge about maternal health among the adolescents. More adolescents reported (38%) the about possible risks of early pregnancies. Knowledge about condom use can prevent the spread of HIV was reported by 37 percent of adolescents respondents compared to 32 percent at baseline.

The midterm assessment also compared adolescents who used at least one UDAAN service with those who had not participated in the program about their knowledge about various healthy behaviors. As shown in Annex A, those who were exposed to UDAAN program demonstrated higher levels of awareness and were more likely to have shown health-seeking behaviors than their peers who had not participated in UDAAN.

Adolescents who participated in at least one UDAAN activity were also much more likely to have received important health services than those who had not. Adolescents who were exposed to the UDAAN program were more likely to receive various health services like TT injection, calcium tablets, B-complex supplementation, de-worming and weight measurements in one year prior to the survey than those who were not participants of the UDAAN program. The difference in most of the cases were found to be two to three times as much.

Both qualitative and quantitative assessments show that the UDAAN program was able to succeed in getting the confidence of parents,

FIGURE 2: ADOLESCENT GIRLS (15-19 YEARS) WHO REPORTED USAGE OF DIFFERENT TYPES OF MATERIALS DURING PERIODS



and gatekeepers such as teachers and registered medical practitioners. According to field staff, one of the program's biggest successes has been the sensitization of MOs and other health workers on adolescent health issues. The promotion of menstrual hygiene is also a major program success, not only because it addresses an important health issue of early adolescence, but in addition has opened up a platform to reach girls and young women on pregnancy, contraception and other reproductive health issues.

Encouraged by results of the program, the GoUK plans to scale up the program in the remaining nine districts in a phased manner.

3.12 SCALE UP

Scale-up of the UDAAN project occurred in two stages. In the first stage (Phase 2), UDAAN was rolled out to the remaining four blocks of Dehradun district, beginning in

March 2010, supported by funding from USAID | India through the IFPS Project. In the next scale up phase (Phase 3), the program was scaled up to the 15 blocks that had not yet been covered in the remaining three pilot districts. In the second phase of scale-up, the project started implementation from October 2011 and was funded entirely by NRHM through the GoUK. Currently, UDAAN is operational in all 27 blocks of the four pilot districts.

Monitoring and evaluation efforts of the pilot UDAAN program found areas in which improvements to the program's operations could be incorporated during its scale-up phase. Major changes to the program during the scale-up phase included implementation of new service delivery points, a shift in monitoring responsibilities to the state nodal agency, and efficiency improvements in the PGE and community health worker trainings.

3.12.1 Service Delivery Points

In order to reach adolescents effectively, physical proximity of services is essential. Following the training activities conducted during the pilot phase, service delivery outreach was integrated into the project during the scale-up phase. This included roll-out of the SAHRC, AFCCs, AFCs, school adolescent programs, school health camps and Adolescent Health Days, some of which were streamlined into analogous activities operated by the GoUK.

3.12.2 NGO Activities and Monitoring

After the pilot phase, the state nodal agency for UDAAN was tasked with providing technical assistance related to oversight and monitoring of the advocacy and capacity-building work of the UDAAN NGOs' activities, with funding provided through NRHM. In addition, the training of ASHAs has been more closely tied to districts with the District ASHA Resource Centers (DARCs) assuming responsibility.

During the second scale-up, no new NGOs were added to the program. Instead, the existing NGOs took over implementation responsibilities for the new blocks added in their districts. The total number of NGOs active in the program remains at 12. These NGOs trained an additional 316 PGEs, taking the total number of trained PGEs in the implementation blocks up to 1,916.

3.12.3 Strengthening Monitoring Systems

To improve monitoring and to disseminate more timely and uniform results among the implementing NGOs, ITAP has created a quarterly activity chart with guidelines for

achievement of the targets. In addition, funding is now conditional to the achievement of pre-determined benchmarks rather than uninterrupted release of quarterly installments. Performance indicators related to adolescent health have also been introduced. NGOs submit monthly reports of their activities to chief medical officers, conditional to which funds to the NGO are released.

3.12.4 Additional Modifications during Scale-up

The scale-up phase also introduced a new entrepreneurship program targeted at improving the income-generating prospects of out-of-school adolescents. In each block, 10 male and 10 female adolescents, with preference given to those not in schools, were enrolled in the program, with training provided by government and local private institutions.

The PGEs have often been described as the backbone of the program, but the pilot phase revealed a fairly high attrition rate among them. Their family members felt that the 10-day residential trainings were too long and detracted from the young people's studies and other responsibilities. In order to improve their longevity with the program, during the scale-up phase, only one PGE was selected per village, with villages alternating between male and female PGEs, and the initial training period was reduced to five days. Furthermore, during the second scale-up beginning in October 2010, UDAAN introduced a scholarship for PGEs of Rs. 200 (USD 4) per month. These changes have been effective in reducing the dropout rate.

Despite the successes, further areas for improvement are visible as the project continues to evolve.

3.13 CHALLENGES

The initial roll out of UDAAN had its share of challenges with delayed NGO selection and high rate of attrition of PGEs. While these operational issues have now been resolved, certain challenges continue still exist.

At times, NGOs still encounter defiance from community members. These issues are resolved by involving *Panchayat* leaders and other gate keepers, in order to continue involvement of adolescents health initiatives. Such resistance is deep rooted and it will be a while before they become a norm.

At the same time, adolescents are shy and find it difficult to discuss their issues with their families. While PGEs are breaking the ice, efforts to engage adolescents so as to increase uptake of services at AFCCs are required as yet.

Furthermore, although AFCCs have been established at all the 27 blocks of the four pilot districts, not all the AFCC are fully functional. This is also because with transfers and new postings of doctors and paramedical staff there is a need for orientation to UDAAN and training on provisioning of adolescent friendly services.

The midline assessment also indicates that there is a low level of awareness of the services provided by the UDAAN program, distance of residences from service provision sites, limited salience within community on adolescent health concerns, hesitance among adolescents to discuss sexuality, and challenges in sustaining the involvement of peer educators.

The commitment of GoUK to take the initiative forward by integrating the program with existing systems is heartening.

Chapter 4

SALONI SWASTH KISHORI YOJANA: AN INTEGRATED NUTRITION AND REPRODUCTIVE HEALTH PROGRAM FOR IN-SCHOOL ADOLESCENT GIRLS

4.1 HEALTH SCENARIO IN UTTAR PRADESH IN 2009

India's most populous state, Uttar Pradesh (UP), is home to 166.2 million people. UP is divided into 71 districts and nearly 107,452 villages (Census, 2001). The state is largely rural, with 79 percent of the population living in villages. The state is known for its strong traditions; patriarchal sociocultural setting and deep rooted gender, caste and class-based structural inequalities. As a result, women are in a subjugated position which is evident from their lower literacy, nutritional status and health care seeking behavior, which subsequently leads to their adverse reproductive health outcomes.

Adolescents in the state account for 23 percent of total population. As per NFHS-3, 69 percent of adolescents in the age group 6 to 17 years attend schools, with only 64 percent girls attending schools. Adolescents in the state have undergone early marriages as about 59 percent of women (20 to 24 years) were married before 18 years in UP (NFHS-3,



2005-06), thereby contributing teenage pregnancy and childbearing. Teenage pregnancy is reported at 14 percent and contribution of teenage fertility to the total fertility is 14 percent.

Current use of modern contraceptives among married adolescents (aged 15 to 19 years) is only six percent and the unmet

need reported in this age group is as high as 32 percent. Nearly, 30 percent reported unmet need for spacing methods.

Prevalence of anemia among adolescent women as recorded in NFHS-3 is 49 percent, which is nearly twice as compared to men at 27 percent. Other studies show that the anemia in unmarried adolescent girls ranges from

73 to 95 percent in rural UP (Vir et al, 2008, Totecha et al, 2006).

Regarding nutritional status, as measured by body mass index (BMI), young people in UP are in line with the national average. Forty-two percent of young women and 57 percent of young men aged 15 to 19 years in the state have a below-average BMI, compared to 47 percent of women and 58 percent of men in that age group across India.

The age of menarche for 90 percent of Indian girls is 12 to 15 years, and poor hygiene during menstruation is common (Dasgupta and Sarker, 2008). Three-fourths of the girls in India use an old cloth during menstruation (Dongre, 2007) and fewer than half wash their cloth more than once or twice (Narayan et al. 2001). In addition to poor overall health, rural adolescent girls have high reproductive morbidity. About 64 percent of adolescent girls, many of whom were unmarried, report symptoms of RTIs (Ram et al. 2006).

Infant mortality in young women (< 20 years) is significantly higher at 108 per 1000 live births compared to 75 per 1000 live births for women (20 to 29 years) (NFHS-3, 2005-06). Early pregnancy is considered to be a high-risk fertility behavior.

4.2 SALONI DESIGN AND IMPLEMENTATION

Building on the commitment to adolescent health shown at the central level by the GoI, in 2008 the Government of Uttar Pradesh (GoUP) and the NRHM implemented an initiative to address anemia among adolescent girls. The government of UP launched the *Saloni Swasth Kishori Yojana* (SSKY) initiative in October

BOX 2: ITAP SUPPORT TO SALONI SWASTH KISHORI YOJANA (SSKY)

In 2010, ITAP supported the GoUP to design an integrated nutritional and RH intervention for adolescent girls aged 11 to 14 years in selected schools in the Hardoi district. The state government had asked ITAP to provide a sustainable model which reflects changes in the dietary and hygiene practices of adolescent girls. This intervention, the SSKY, aimed to bring about sustainable changes in the dietary and hygiene behavior of adolescent girls and improve menstrual and vaginal hygiene practices, as well as increase knowledge about the legal age of marriage.

Meanwhile, ITAP also supported NRHM (Government of UP), to develop a theory driven behavior change communication (BCC) strategy. The Pathways model and 'Sadharanikaran', an ancient Indian theory of communication, were used as the theoretical base for the overall communication strategy. (JHU CCP; Government of Uttar Pradesh, 2008). The SSKY program is part of the state communication strategy and uses the same theoretical base of the Pathways and 'Sadharanikaran' in addition to Bandura's Social Cognitive Theory with the core construct of self-efficacy (Bandura et. al, 1986).

The intended behavior health change included reduction in under nutrition as measured by BMI and hemoglobin, early detection and treatment for symptoms of reproductive tract infections, improved menstrual hygiene, increased intention to marry after 18 years and to postponement of childbearing until after 19 years, and reduction in desired number of children.

2008. SSKY seeks to address the problem of acute anemia in adolescent girls by providing weekly IFA tablets through a direct observed therapy short-term (DOTS) approach, together with biannual de-worming and medical examination of girls. SSKY covers one million school-going girls and 0.5 million non-school-going girls ages 10 to 19.

At the request of NRHM in UP, ITAP designed a pilot intervention in Hardoi district of UP during 2009-2011, with the goal of mainstreaming it into all schools and having an impact on school girls ages 11 to 14. Hardoi is a less developed district of UP. It has a population of 3.3 million which is 91 percent rural. Early marriage

is prevalent with 44 percent of girls marrying before the age of 18 years. Around eight percent of women receive at least three ANC check-ups and 10 percent of women deliver institutionally (DLHS 3, 2007-08). The ITAP project participated in the conceptualization of the program activities and the development of the communication support package for SSKY. The state government, specifically the State Program Management Unit (SPMU), has been a partner in the SSKY pilot program from its inception.

The intervention design was based on cluster randomized trial. The randomized trial was conducted in 30 schools in Hardoi district, UP

during January 2010 to October 2011. Hardoi district has 19 blocks. Blocks were matched in pairs based on the criteria of distance from Hardoi district. These blocks were stratified into three categories based on distance: near distance (< 20 km), middle distance (21-40 km) and furthest distance (41-65 km) from Hardoi district. A total of six blocks were randomly selected, two from each category. The randomly selected blocks according to distance were, Tadiyawan and Bawan (near), Bilgram and Hariyawan (middle) and Mallawna and Bharkani (far). Each pair was randomly assigned to the intervention or comparison arms. Then five schools were randomly selected from each block, thereby resulting in a total of 30 schools. The SSKY pilot intervention was

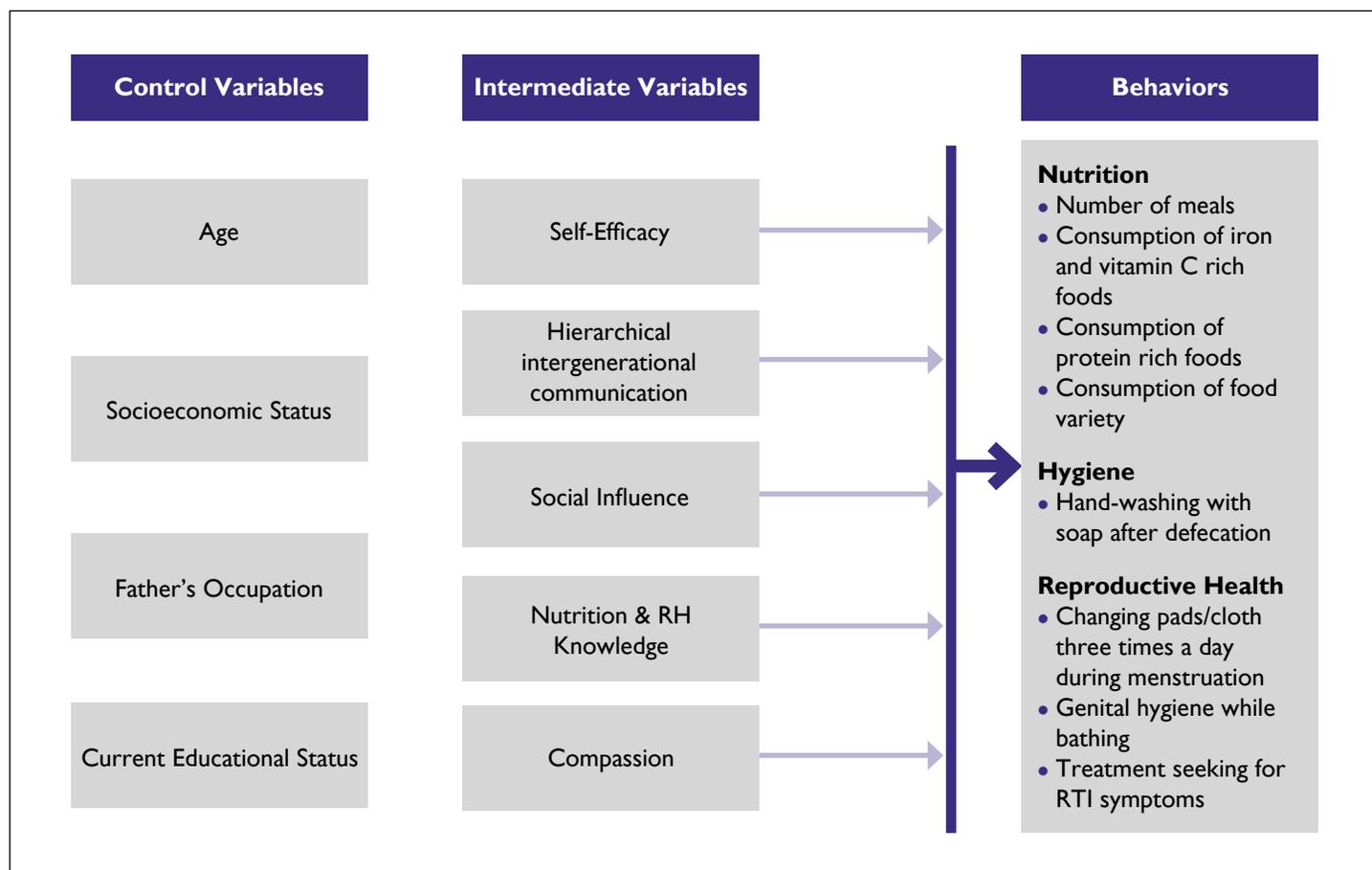
implemented in 15 government schools in collaboration with the district education department and the district NRHM office (District Program Management Unit (DPMU) in Hardoi. The one-year intervention with young adolescent girls (11 to 14 years), with the program implemented in 15 schools in 3 blocks and another 15 schools assigned as a comparison group in 3 blocks.

The sample for the pilot intervention consisted of a total of 600 currently enrolled unmarried adolescent girls in grades six through eight (aged 11 to 14 years) in 15 schools in Hardoi district. Equal sample of girls in 15 other schools were selected for comparison, also received weekly IFA tablets. The intervention included four components. Two of these were

unique to the students enrolled in the pilot group: 10 monthly sessions that covered topics such as nutrition, hygiene, age at marriage and age at first conception (to be conducted by either a school teacher or an ASHA) and a Saloni Diary for each participant. The other two components, weekly IFA tablets to be consumed using Direct Observation Treatment, Short-course (DOTS) methodology and biannual de-worming, were applied to students in both the pilot and comparison groups.

As a part of implementation strategy a baseline survey was conducted, with the objective of understanding the situation of adolescent school going girls (in 6 to 8 grades) on their nutritional status, anemia status, nutrition and hygiene behavior in

FIGURE 3: SELF EFFICACY, SADHARANIKARAN AND PATHWAYS MODEL FOR HEALTH AND NUTRITION BEHAVIORS IN RURAL SCHOOL GOING ADOLESCENT GIRLS



Hardoi district. A total of 40 girls were selected from each of the 30 schools identified for the baseline survey. Altogether, 1,195 girls were interviewed in the baseline survey. The survey measured self-efficacy, and household and neighborhood influences on young adolescent girls. Household influences were measured in terms of mother-daughter communication and father-daughter communication. The 'Pachod Paisa' scale, a culturally relevant, empirically tested scale, was used to measure self-efficacy and intergenerational communication (Kapadia-Kundu, N. and Dyalchand, A, 2007). Written informed consent was obtained from parents of the girls in the sample, and also of the girls themselves. A unique identification number was assigned to the girls to ensure confidentiality. Similarly, an end line was conducted after one and half years in 2011. A comparison of baseline and endline results on selected indicators are presented in the result section.

Conceptual Model of SSKY

The conceptual framework for SSKY, based on the Pathways, 'Sadharanikaran' (Kapadia Kundu N., 1994) and Bandura's Social Cognitive Theory, is a model that combines variables like self-efficacy and knowledge with relational variables of 'Sadharanikaran' like compassion, social influence and intergenerational communication (JHU CCP, 2003). The model highlights the need for a SSKY communication program to include constructs other than knowledge. Self-efficacy is not encouraged for girls within the rural Indian sociocultural context. Self-efficacy implies a belief that a behavior, an action, can be performed or mastered. It is an assurance in one's own capability (Bandura, 1997). Self-efficacy has

been strongly associated with diet behaviors in children (Rimal, 2003 and Rimal & Flora, 1998). To begin with, it is important to assess levels of self-efficacy in rural school-going girls. The model also focuses on the hierarchies of intergenerational communication and social influence.

4.3 ELEMENTS AND STRATEGIES OF THE SSKY

The SSKY was designed with various innovative elements that provide policy implications for similar initiatives in both UP and the national level. The program focused on younger adolescents, aged 11 to 14 years, and is one of the few evidence-based reproductive health initiatives focused specifically on adolescents in this formative stage. It addresses adolescents in school, reaching a majority of the target population, but can also be adapted for non-school-going adolescents, and is designed for scale-up and adaption to alternate locations and contexts. The cluster randomized controlled trial technique used to evaluate the pilot and the impact data it generated provide an evidence base to support the introduction of the Saloni curriculum and diary in additional intervention areas.

The 10-session curriculum and diary are designed to promote self-efficacy, intergenerational communication and social influence for healthy behaviors, and can readily be mainstreamed into existing school-based programs. The behavior change components of the SSKY were designed as an integrated communication support package. The package included two central elements.

In-school sessions: The program developed a 10-session sequence

of themes to be addressed with adolescent girls by their teachers. Of the 10 sessions, five were adapted from the Institute of Health Management Pachod's Life Skills sessions and five were prepared by ITAP. The 10 sessions aim to introduce specific nutrition and hygiene behaviors that are convenient to adopt into the adolescents' daily routine. Another set of sessions deal with the issue of early marriage and early motherhood. In this component, the law related to early marriage and its penalties are discussed in an interactive manner.

- Session 1: Saloni Swasth Kishori Yojana and Me*
- Session 2: What is Anemia? What can I do about it?*
- Session 3: Balanced diet and my role*
- Session 4: Self-confidence and my role in improving my diet*
- Session 5: Hand washing with soap after defecation*
- Session 6: Female reproductive system, menstrual cycle and hygiene*
- Session 7: Importance of personal hygiene*
- Session 8: Legal age at marriage*
- Session 9: The underage mother and the appropriate age for first child*
- Session 10: Saloni group, my diary and the changes in me.*

To ensure uniformity and quality and to control the Saloni sessions, a structured teacher's manual was prepared. The 10-session teachers' manual was designed for government schools in rural areas and was prepared by ITAP, reviewed by NRHM/UP and VISTAAR. The manual is written in a simple manner, is behavior-focused and builds students' self-efficacy to adopt new nutrition, hygiene and reproductive health behaviors.

The sessions are participatory and include an assessment which the teachers can conduct.

Saloni Diary: The second component of the pilot program, the Saloni Diary, was developed as a behavioral tool for girls to record their views, aspirations and behaviors. It serves as a mechanism for the girls to observe changes in themselves over time, with exercises that will enable the girls to reinforce and practice what they learned in the sessions. For the project, the diaries also serve as a monitoring and evaluation tool. Although similar diaries have been used by women's self-help groups and micro-finance (Noponen, 2003a) and their impact has been measured in the context of rural women, the SSKY is one of the first to use this approach with adolescent girls, aimed at documenting the process of their empowerment.

The diary has three main sections:

- **My small and beautiful world...**
Here the girls record their dreams, aspirations, favorite things and list their friends.
- **What have I learned and what I need to do next**
This section is linked to the 10 Saloni sessions conducted in school. It has a summary of each session, interactive games, coloring and community activities.
- **My records**
Here the girls record changes in their nutrition hygiene and reproductive health behaviors, using simple formats.

In addition to these two central components, a series of

communications materials were developed. These included a set of 12 posters highlighting the main behavioral messages of the Saloni program. These posters were pasted in the classrooms of all 15 schools. Based on the analysis of the baseline data, the posters were modified to emphasize self-efficacy, social influence and intergenerational communication. Other materials included a press advertisement used by NRHM to launch SSKY on the International Day of the Girl Child, wall painting, and brochures.

The baseline survey results were a key component in the development of the communication package to address issues of self-efficacy, intergenerational communication and social influence in addition to knowledge. Typically, a teacher's manual would have consisted of

10 sessions focusing purely on information related to nutrition, hygiene and reproductive health. Based on the baseline results, the communication package was further strengthened to highlight a sense of self-efficacy for each behavior, with activities to present individual trials of behavior and role plays during the Saloni sessions. Group pledges to adopt specific behaviors were added to several sessions and to the diary. Given the importance of these personal and social motivations as a predictor of behavior, detailed guidelines for teachers were added on how to instruct the girls on use of the Saloni diaries and how to review diaries and give feedback to the girls.

The teacher's guide and diary were modified to encourage girls to initiate dialogue with their fathers about diet, hygiene and the Saloni sessions. The



An adolescent girl holds her Saloni Diary

that they had asked their mother for an evening snack or additional food during a meal, which was covered in session four.

Most of all, the girls loved their Saloni Diary. They ranked the diary at 90 paisa, the Saloni group at 80 paisa and Saloni sessions at 70 paisa. The teachers interviewed also stated that the diary had elicited a good response from the girls. However, problems persisted with the way teachers guided the girls on completing their diaries. Often, due to lack of time, answers were dictated by the teachers and girls completed the diary en masse.

The girls expressed a desire for more interactive methodologies to be included. Based on this feedback, such activities were added to their diaries, as there is often no time in school for exercises. A special note was prepared for teachers with detailed instructions on the use of the diary and interactive sessions. Language changes were made to the sessions, and suggestions made by girls, teachers and supervisors were incorporated into the revised manual and diary.

Teachers from the 15 pilot schools were trained for two days in February 2011 in the use of the manual and the diary, and were provided with a one-day refresher training in December 2011. The training included an orientation to the Saloni sessions, the diary and participatory activities.

4.5 MANAGEMENT, OPERATIONS, AND MONITORING

The Saloni pilot program illustrates how a successful partnership with district authorities and the education department can enable effective implementation of

adolescent initiatives within the government school system. The program management of the SSKY pilot intervention was led by the communication specialist (ITAP) with the research initiative being led by ITAP researchers. The implementation team consisted of a field coordinator (ITAP), district community mobilizer (DCM) and 15 government teachers from rural schools in Hardoi district.

The field coordinator was appointed by ITAP and was based in Hardoi district. He visited each of the 15 schools at least once a month. Schools that required more support due to a low number of teachers were visited more often. The field coordinator maintained a record of the sessions conducted in each school, the attendance of the girls, their consumption of IFA tablets, and other indicators related to the program design. The field coordinator also checked the girls' diaries and monitored them on a monthly basis. Monthly monitoring assessments were shared ITAP.

The DCM was central to the effective implementation of the SSKY program. The DCM is based at the DPMU office in Hardoi. He conducted field supervision at least once a month and provided support to the field coordinator. He ratified the daily records of the field coordinator. Because the school year included many holidays due to festivals, closures due to cold weather, and girls' absences because of illness or household chores, the one-year SSKY pilot was extended to 18 months.

4.6 PROGRAM RESULTS

This section highlights the achievements of SSKY program on selected indicators (Table 3). In



The Saloni program logo

October 2011, endline research was conducted to measure the results and impact of the Saloni pilot program. The endline surveyed a total of 1,201 adolescent girls in Hardoi district, of whom 600 were students of the intervention area and 601 were students of the comparison group. Table 3 presents the results of various indicators between intervention and comparison groups for baseline (2010) and endline (2011).

The endline data indicate that the intervention had an impact in all three behavioral domains: reproductive health, nutrition and hygiene. The SSKY initiative in which all girls were covered includes weekly IFA tablets, biannual de-worming doses, an annual health checkup and counseling sessions. Table 3 indicates that the intervention group fared significantly better ($p < 0.05$) than the comparison group at endline for all key components of SSKY.

More than 73 percent girls in the intervention group indicated that they had maintained weekly consumption of IFA tablets with DOTS for more than six months compared to 21 percent in the comparison group. Similarly, 65 percent of the girls who exposed to SSKY program reported having received a health checkup at school compared to only 10 percent in the comparison group. Endline results show about 81 percent girls in the intervention group stated that they had received a de-worming dose in the past



DEEPIKA TRANSFORMS HER FAMILY AND HERSELF

Deepika Varma is a happy 14-year-old studying in 8th grade in Bajaria Kanya Junior High School in Bajaria village, Hardoi district. Deepika's father, a barber, keeps busy all day and her mother is busy too with household chores. Deepika lives with her parents and two brothers and likes going to school. Her friends are her main attraction to school. Her closest friends are Anjum and Swati. "Anjum is my best friend. She talks to me. I tell her everything that I feel. She is also studying in the eighth grade but she is not equal to me in studies," says Deepika.

The Saloni sessions were a novel experience for Deepika. She had never had an opportunity to become part of a group or to have a diary of her own. Now there were 8 to 10 girls in the village from her school who attend the Saloni classes. They named their group *Asha* (hope).

Deepika talked about her Saloni sessions at home. While she spoke about all the sessions to her mother, she discussed age at marriage and "eating green vegetables" with her father and brothers. She showed her diary to her mother who was curious to learn about a healthy diet and menstruation.

Deepika says the biggest changes since the program began for her have been in her diet, which is not surprising as she ranks the session on a healthy diet as her most favorite of all sessions. She regularly has a snack in the evening and has also started consuming green leafy vegetables. She says, "Previously I never ate green leafy vegetables even if my mother prepared them. But now I have understood the importance of green leafy vegetables and have started consuming them. I also add a dash of lemon to the vegetables. My mother makes *moong dal khichdi* exactly as shown in the diary and I have it with lemon."



“And do you know what?” she adds, “My brothers and mother also started having an evening snack. Yesterday we had some *namkeen* [fried puffed rice] as a snack. My mother prepared it at home.” Deepika has changed the dietary habits not only for herself but for mother and brothers too!

She also says that a few girls in class would remind the teacher about the weekly IFA tablets which were given every Saturday to the girls. At the same time, Deepika admits that she was irregular in washing her hands with soap before a meal and after defecation prior to Saloni. However, she now washes her hands daily with soap on both occasions. She says that the students never washed their hands with soap prior to the midday meal at school. Now it’s a changed story.

Deepika admits that the sessions on the reproductive system were the most difficult. But she says, “For the first time, I came to know about my body.” She says genital hygiene was not easy as she had never practiced it before. But she is attempting it now. She has understood the need to practice good menstrual hygiene. And she adds, “I told my parents that no girl should get married before 18 years,” as she rattled off the marriage law and the penalties associated with it.

She has talked about her Saloni sessions to many people, from her “*badi mummy’s* daughter” (her cousin), her parents, her brothers, her friends and to her neighbors. She told her 22-year-old cousin about diet and menstrual hygiene.

And she says, “my absolute, absolute favorite part of the Saloni sessions was the Saloni Diary...”

TABLE 3: COMPARISON BETWEEN BASELINE AND ENDLINE VALUES ON SELECTED KEY INDICATORS OF SSKY PROGRAM

Key Indicators		Baseline (Jan 2010)	Endline (Oct 2011)
		Percent	Percent
Weekly Consumption of IFA***	Intervention	36.1	73.8
	Comparison	41.7	20.9
Annual Health Check Up***	Intervention	17.5	65.3
	Comparison	18.5	10.0
De-worming Dose***	Intervention	63.8	81.7
	Comparison	57.7	15.3
Eating more than 4 meals /day***	Intervention	25.8	72.3
	Comparison	24.3	55.1
Daily hand washing with soap before meal***	Intervention	14.6	46.8
	Comparison	13.2	21.6
Maintaining genital hygiene***	Intervention	9.4	36.2
	Comparison	6.5	21.5
Changing cloth (homemade sanitary napkin) thrice a day during menstruation**	Intervention	29.1	35.1
	Comparison	28.3	18.1
Food Variety***	Intervention	40.1	69.3
	Comparison	27.2	54.4
Self-efficacy Index# (Mean)	Intervention	179	187
	Comparison	173	163
Total Number of Cases (n)	Intervention	595	600
	Comparison	600	601

*** p < 0.01 and ** p < 0.05

p value is not calculated for Self-efficacy Index

year compared to 15 percent in the comparison group. The coverage for de-worming dropped significantly from baseline to endline in the comparison group, indicating a worsening of the situation ($p < 0.01$) (Table 3). Coverage of services like de-worming dose and provision of IFA tablets reduced in the comparison area at endline compared to baseline because of irregular government supply. However, Saloni program ensured regular supply in the intervention schools.

The results indicate that the program had made considerable impact on

girls' behavior of washing practices prior to a meal. The level of hand washing with soap prior to eating a meal in the comparison group increased slightly at the endline, while the proportion of girls who reported washing their hands once a day or more rose from 15 to 47 percent within the intervention schools ($p < 0.01$).

The proportion of girls reporting genital hygiene at least once a day (cleaning genital area with soap during a bath) improved at endline in both intervention and comparison groups,

but the increase in the intervention group (36.2 percent) was much higher than the comparison group (21.5 percent) ($p < 0.01$).

Promoting self-efficacy was an important part of the SSKY. An index was constructed to measure self-efficacy for health and nutrition behaviors. Moderate increase in the Self-efficacy Index³ was observed in the intervention blocks.

As summarized above, the baseline and endline evaluations indicated that the program had a positive

³ Index was calculated taking into account five indicators on a scale of 5-500

effect on the nutrition, hygiene and reproductive health behaviors of girls in the intervention group, including a reduction in reported morbidity. In addition, the elements of the broader SSKY initiative, including IFA consumption, de-worming and frequency of health check-ups, also improved significantly among the girls in the SSKY intervention group. Program implementation was effective due to good coordination between ITAP, the DPMU, the district education office and local school teachers.

Most importantly, there was strong endorsement for the SSKY pilot initiative from the SPMU within the GoUP.

4.7 CHALLENGES

The SSKY pilot intervention faced several challenges during its implementation. The primary challenge was to get the same girls to attend the Saloni session due a high level of absenteeism in school. The school teachers and the district community mobilizer worked with the girls to make them understand the

need to attend both school regularly. Another challenge was implementing the RH sessions on menstruation and the female reproductive system as the girls were very shy. This was overcome by training the female teachers on how to put the girls at ease prior to starting the session. The intervention originally planned to take Hb test for anemia in schools, but due to the invasive process of taking the blood samples being involved, the state government decided not to go ahead with the plan.

Chapter 5

MAIN ACHIEVEMENTS

The UDAAN and SSKY projects have focused on adolescents as the guardians of their own health knowledge, behaviors and status. Each program was carefully designed taking into consideration different challenges and opportunities for adolescent health in two contexts. While targeted to be relevant to the situation of the state in which they were implemented, the models are also highly replicable, and can be successfully scaled up geographically to incorporate additional regions and at the national level. The improved rates of health-seeking knowledge and behavior among participants in the UDAAN and SSKY programs, as measured in the midline and endline research, demonstrate that they have been very effective relative to pre-existing programming. In addition to geographic scale-up, the programs are therefore also likely to produce greater impacts if scaled-up to achieve higher coverage in the regions where they are currently implemented.

While recognizing the need to empower young people to be informed in making decisions and seeking services, the programs have also incorporated parents, community members and health care providers, whose roles as authority figures have a major bearing on the environment for adolescent reproductive and



Adolescent girls gather for a peer group meeting

sexual health. These programs have also been innovative in not simply working to provide accurate information and quality services to young people, but also approaching behavior change by addressing their autonomy, self-efficacy and communication patterns.

5.1 SUCCESSES OF UDAAN IN IMPROVING ARSH IN UTTARAKHAND

Comprehensive qualitative and quantitative midline program reviews provide evidence that UDAAN has been an effective approach to improve adolescents' knowledge of, access to and

utilization of reproductive and sexual health information and services in Uttarakhand. More than 80 percent of the adolescents who have utilized UDAAN services reported satisfaction with the program, and other stakeholders offered similarly positive reviews. There is a high level of awareness about the program, even among health care providers who have not had a direct association with its implementation. On the whole, stakeholders perceive that significant progress has been made, especially since the program is still in the scale-up phase and results will take some time to accrue.

The midline assessment also shows that specific health-related knowledge and behaviors have improved among adolescents in the program's pilot districts. The use of sanitary pads increased from the baseline to the midline in all districts. Half of menstruating females used sanitary pads and the other half used clean washed cloth. Nearly, 85 percent and 72 percent of respondents in the program area were aware of minimum legal age of marriage for females and males respectively by the midline. Among adolescents aged 15 to 19 years, nearly two-fifths of males reported knowledge of condoms while half of females reported knowledge of oral contraceptive pills.

The success of the program is also in the cadre of master trainers and trained PGEs available at community level who will continue to touch lives even if UDAAN is discontinued.

5.2 SUCCESSES OF SSKY IN CHANGING ADOLESCENT BEHAVIORS IN UTTAR PRADESH

The SSKY program is a recent test of the effect of expanding a state-level adolescent health program beyond service provision (IFA supplements and de-worming) to include a holistic package of BCC strategies implemented in schools. In its pilot phase, the program has demonstrated that this comprehensive approach yields much greater improvements in health knowledge and behavior relative to the service-only model.

The SSKY pilot was implemented in a predominantly rural area of UP with high poverty rates and typically large family size. Baseline research demonstrated that adolescent girls in the area suffered from poor

nutritional status and dietary habits and a high frequency of illness, as well as poor menstrual hygiene and use of soap. The program was designed to focus on early adolescence as a period with high potential to change and improve health behaviors and status during the critical coming years. Other innovative elements of the program were a focus on communications issues such as father-daughter dialogue, an area that has been shown to directly affect young girls' health status. SSKY also introduced personal diaries to promote expression and self-efficacy among adolescents while also offering them a way to consider and track their health behaviors.

Endline research showed that more than twice as many girls who were part of the SSKY intervention area reported washing their hands with soap prior to a meal more than once a day compared to those in the comparison group. A large majority, 71 percent, of girls in the SSKY program reported typically eating three meals and a snack daily, compared to less than half of those in the comparison area at the endline. Attitudes related to reproductive health were also different among the two groups. Knowledge of the minimum legal age of marriage for girls was nearly universal (97 percent) among girls in the intervention area, while only two-thirds of girls in the comparison area could correctly identify it. Girls who participated in the SSKY program also stated a preference for smaller families. Only 17 percent said that a couple should have three or more children, compared to 35 percent among their counterparts who were not enrolled in the program. The SSKY program even resulted in higher

adherence to the service components that were offered to both groups of adolescents. Girls who were part of the program reported higher rates of IFA supplements, de-worming and health check-ups than those who were offered such services without the SSKY communication elements.

5.3 THE WAY FORWARD

Research has revealed that the key barriers to improved reproductive and sexual health among young people are awareness without knowledge, limitations on whom to approach, lack of access to correct information and gender-specific discrimination. Adolescents' inherent reticence to discuss sensitive reproductive health issues in a culturally conservative setting can create apprehension in approaching health care providers and their own family members for information. Meanwhile, service providers, parents and community members often lack the training and knowledge to reach out to adolescents on these issues.

In identifying strategies to address and overcome these challenges, the UDAAN and SSKY programs have highlighted various takeaways for the design and implementation of adolescent health programming. Their successes can be attributed to the collaborative, multisectoral design, which places adolescents at the helm and also addresses the many groups within their communities, from parents and peers to multiple levels of health providers, who directly affect their reproductive and sexual health.

Within UDAAN, the peer group educators, adolescents recruited from within communities to provide information, activities and a "safe space" for their peers, are often

described as the backbone of the program. The design of a three-tiered BCC program with uniquely tailored components for adolescents, parents/gatekeepers and health care providers, ensures that messages received by these diverse target audiences are acceptable and relevant. The PPP model, with NGOs as a key partner, brings an unprecedented degree of local expertise into the day-to-day implementation. Increasingly, too, the public sector health system has become a significant partner, assuming responsibilities for components of training and monitoring that afford local leaders greater ownership and investment in the program's success.

The SSKY pilot intervention indicates the benefits of integrating nutrition,

reproductive health and hygiene interventions for adolescents. Currently, most RH and nutrition initiatives are implemented in a vertical manner. Also, the baseline research demonstrates that there is a strong benefit in reaching out to improve health status and behavior among younger adolescents (aged 11 to 14 years) as the proportion of girls who are stunted increases with each year.

Most importantly, the governments of Uttarakhand and UP have appreciated the leading role that adolescents have in affecting and improving their own health. The state governments have shown not only a willingness to address sensitive health issues in innovative ways, but also offered funding to ensure the

sustainability of these programs. The UDAAN and SSKY programs have shown that approaching adolescent health as an issue of communication and empowerment as well as knowledge, and targeting outreach to the perspectives of young people themselves, their parents and their service providers, can pay tremendous dividends in promoting improved awareness, attitudes and uptake of health services. These programs offer a promising way forward that can be easily adapted and scaled up to new areas of adolescent populations. Fostering healthy development and behavioral choices among young people in turn improves the health of everyone in society, as adolescents grow into the next generation.

ANNEXURES

Annexure A

BASELINE AND MIDLINE RESULTS FOR UDAAN

TABLE 4: PROGRESS OF UDAAN IN FOUR DISTRICTS OF UTTARAKHAND: COMPARISON OF BASELINE AND MIDLINE RESULTS FOR SELECTED INDICATORS

Indicators	BASELINE, 2009		MIDTERM, 2011	
	Percent	Number of cases	Percent	Number of cases
Percent of adolescent girls and boys between 15-19 years aware of legal age of marriage of boys i.e. 21 years***	55.1	1400	72.4	1231
Percent of adolescent girls and boys between 15-19 years aware of legal age of marriage of girls i.e. 18 years***	68.2	1400	85.4	1231
Percent of adolescents between 15-19 years reported maternal death as a possible outcome of early pregnancy***	31.9	1400	37.7	1231
Percent of adolescents 10-19 years aware that use of condom can prevent HIV***	31.6	2650	36.9	2500
Percent of adolescent boys and girls between 15-19 years who desire having only one child***	6.1	1286	10.5	1200
Percent of adolescent boys and girls between 15-19 years who desire having only two children**	76.7	1286	80.3	1200
Percent of adolescent between 15-19 years have preference for boys***	39.9	1286	25.7	1220
Percent of adolescent between 15-19 years have no preference either for boys or for girls***	33.2	1286	54.6	1220
Percent of male adolescents between 10-19 years reported to have confidence in self decision making***	72.4	1208	79.8	1219
Percent of female adolescents between 10-19 years reported to have confidence in self decision making***	60.1	1247	66.1	1281
Percent of adolescent girls between 15-19 years use sanitary pads during their period***	30.6	669	52.7	628

*** p<0.01 and ** p<0.05

TABLE 5: COMPARISON OF USERS AND NON-USERS OF UDAAN SERVICES ON KEY HEALTH INDICATORS (MIDTERM ASSESSMENT, 2011)

Indicators	Respondents who have used at least one UDAAN service	Respondents who have not used any UDAAN service
	Percent	Percent
Awareness about age of experiencing physical changes in boys at age 13-15 years**	41.1	34.6
Awareness about age of experiencing physical changes in girls at age 12-14 years	41.5	38.3
Maintaining cleanliness of sexual body parts	91.5	90.7
Awareness that balanced diet comprises all the 5 essential elements of food in diet***	92.3	87.5
Awareness that balanced diet comprises milk/non-vegetarian/proteins	91.3	90.3
Ever heard of RTI***	21.5	10.2
Ever heard of HIV/AIDS***	76.6	61.0
Received TT in last 12 months***	35.5	18.4
Received IFA in last 12 months***	18.1	5.6
Height measurement in last 12 months***	43.5	16.5
Weight measurement in last 12 months***	52.9	26.7
Received de-worming services in last 12 months***	21.3	11.2
Received calcium tablets in last 12 months***	8.5	3.6
Received B-complex in last 12 months	4.8	2.7
Number of respondents	410	2053
Aware of legal age at marriage for girls-18 years***	90.1	84.5
Aware of legal age at marriage for boys-21 years#	77.2	71.4
Perception that ideal number of children is one or two***	94.1	10.4
Perception that ideal number of children is three or more#	5.4	77.6
Perception that early pregnancy may cause any problems***	76.2	63.7
Number of respondents	202	1029
Aware of all the modes of HIV transmission\$	65.0	59.8
Aware that HIV infection can be prevented using condoms during intercourse***	62.8	56.9
Number of respondents	317	1273

Based on respondents age 15-19 years

\$ Based on respondents who have ever heard about HIV

*** p < 0.01 and ** p < 0.05 (Other values are not significant)

REFERENCES

PUBLISHED

Health Communication Partnership. (2003). *Pathways to Social and Behavioral Change*. Johns Hopkins Bloomberg School of Public Health Center for Communication Programs. Baltimore, MD.

International Institute for Population Sciences (IIPS) and Macro International. 2007. *National Family Health Survey (NFHS-3), 2005–06: India: Volume I*. Mumbai: IIPS.

Jejeebhoy, S. J. and Santhya, K. G. 2011. *Sexual and Reproductive Health of Young People in India: A Review of Policies, Laws and Programs*. New Delhi: Population Council.

Kapadia-Kundu, N. and Dyalchand, A. “The Pachod Paisa Scale: A Numeric Response Scale for the Health and Social Sciences” *Demography India 2007*. 36: 2. 303-313

National AIDS Control Organization. 2006. *National Behavioural Surveillance Survey*. New Delhi: NACO

Nehru Yuva Kendra Sangathan. 2003. *National Youth Policy 2003*. New Delhi. Ministry of Youth Affairs and Sports, Government of India.

NRHM. 2005. *Mission Document 2005-2012*. New Delhi: National Institute of Health and Family Welfare, Government of India.

NRHM. 2006. *Implementation Guide on RCH II: Adolescent Reproductive Sexual Health Strategy*. New Delhi: Government of India.

NRHM. 2009. *Adolescent Reproductive and Sexual Health (ARSH) Program Definitions, Vulnerability, Strategy and Focus Areas*. New Delhi: Government of India.

NRHM. 2009. *Reproductive and Sexual Health of Young People in India (2009)*, New Delhi, India: Government of India.

NRHM. *Progress and Performance of National Rural Health Mission (NRHM) and suggestions for the Twelfth Five Year Plan (2012-2017)*. New Delhi: Futures Group International. (Draft)

Office of the Registrar General and Census Commissioner, India. 2001. *Provisional Population Totals: Paper I of 2001, Series I*. India: Office of the Registrar General.

United Nations. 1994. *Report of the International Conference on Population and Development (ICPD) Program of Action (English)*. Cairo, Egypt: United Nations Population Division.

United Nations. 2010. *International Year of Youth: Dialogue and Mutual Understanding*. Geneva: United Nations General Assembly.

Vir, S.C., Singh, N., Nigam, A.K., & Jain, R. (2008). *Weekly iron and folic acid supplementation with counseling reduces anemia in adolescent girls: a large-scale effectiveness study in Uttar Pradesh, India*. *Food and Nutrition Bulletin*, 29(3), 186-94. ; Toteja, G.S., Singh, P., Dhillon, B.S., et. al. (2006). Prevalence of anemia among pregnant women and adolescent girls in 16 districts of India. *Food and Nutrition Bulletin*, vol. 27, no. 4, 311-315.

World Health Organization India. 2009. *Reproductive and Sexual Health of Young People in India*. New Delhi: Ministry of Health and Family Welfare.

UNPUBLISHED

Gandhi, Medha, and Chokshi. "BCC for ARSH." New Delhi: ITAP. (presentation)

International Institute for Population Sciences (IIPS) and Macro International. 2007. *National Family Health Survey (NFHS-3), 2005–06: India: Volume I*. Mumbai: IIPS.

ITAP. 2009. *Baseline Qualitative Research on Adolescent Health in Uttarakhand: Qualitative Study*. New Delhi: Futures Group International.

ITAP. 2009. *Developing Communication for Adolescent Health Programs in Uttarakhand: Formative Study*. New Delhi: Futures Group International.

ITAP. 2010. *UDAAN: Baseline Survey for Adolescent Health Initiative, Uttarakhand*. New Delhi: Futures Group International.

ITAP. 2011. *Midline Assessment Report, Understanding and Delivering to Address Adolescent Needs (UDAAN)*. New Delhi: Futures Group International.

ITAP. 2011. *UDAAN Program Strategy, Revised 2011*. New Delhi: Futures Group International.

ITAP. 2012. *Behavior Change Communication Activities and Achievements: Lessons Learned, Best Practices, and Promising Approaches*. New Delhi: Futures Group International.

ITAP. 2012. *Promoting Adolescent Health in India: Case of Uttarakhand and Uttar Pradesh*. New Delhi: Futures Group International.

Kapadia-Kundu, N. (1994) *An empirical test of the Sadharanikaran theory of communication to defecation hygiene behaviour: An evaluation of a child-to-community intervention in Maharashtra, India*. Phd Thesis submitted to the Johns Hopkins School of Hygiene and Public Health

Mohanty, Soumya and Mohan. 2011. "Monitoring for ARSH." Delhi: National Rural Health Mission. (presentation)

NRHM. "Adolescent Reproductive and Sexual Health (ARSH) program: Definitions, vulnerability, strategy and focus areas" New Delhi: Government of India. (presentation)

Sharma, Kiran. 2011. "National Workshop on Adolescent Health" Geneva: World Health Organization. (presentation)

Errata

Table 3, Page 34, Key Indicators

“Self-efficacy Index”

should read

“Self-efficacy Index (**calculated on a scale of 5-500**)”

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