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## Reaching young adolescents

### Entre Amigas prepares young girls in Nicaragua for a healthy future

Over the last decade, health systems in many countries have recognized the importance of providing adolescents with reproductive health services and information, particularly with respect to contraception and sexually transmitted infections (STIs), including HIV. These efforts are typically directed toward adolescents between 15 and 19 years of age. Increasingly, however, researchers are recognizing the importance of working with adolescents earlier in their physical and cognitive development, when it is more likely that positive changes can be established and sustained.<sup>1</sup>

To reach young adolescent girls in Nicaragua, PATH and local partners are implementing the Entre Amigas ("Between Friends") project. One of the poorest countries in Central America, Nicaragua is reporting early adolescent sexual activity and high rates of teenage pregnancy and early childbearing.<sup>2</sup> Young girls face enormous challenges, including the risk of HIV, STIs, and gender-based and sexual violence, that may keep them from achieving their full developmental, educational, and economic potential.

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# Influencing gender norms among young men

## Findings from an evaluation to prevent HIV and AIDS

### Project name

Project H

### Location

Brazil

### Method

Operations research

### Partners

Horizons,\* Instituto PROMUNDO

### Funders

USAID, through Horizons; JohnSnowBrasil; Durex Condoms; MacArthur Foundation

### For more information

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\*The Horizons Program is managed by the Population Council. Partners include PATH, the International Center for Research on Women, the International HIV/AIDS Alliance, Tulane University, Family Health International, and Johns Hopkins University.

Increasingly, researchers are recognizing that inequitable gender norms contribute to the spread of HIV.<sup>1</sup> Gender-based expectations—for example, that men will initiate sexual activity early in life and have multiple sex partners or that women should not discuss or learn about sexuality—prevent men and women from protecting themselves from HIV and other sexually transmitted infections (STIs). They also limit the ability of girls and women to negotiate protective behaviors, such as condom use and monogamy, with their male partners. Gender inequities in relationships contribute to sexual coercion and violence.

Promoting gender equity is particularly important for young people, because early socialization that reinforces equities may encourage behaviors that reduce the risk of HIV infection among young men and women. Reinforcing the impact of these early messages is challenging, however. Few substantive interventions directed at the way young men view male and female roles have been well evaluated. To address these issues, the Horizons Program, which conducts operations research activities in Africa, Asia, Latin America, and the Caribbean, is evaluating the impact of programs to improve gender-based behaviors among young men in Brazil.

## Researching the impact of gender-equity programs

PATH staff working on Horizons are collaborating with Instituto PROMUNDO to assess the effectiveness of Project H, which encourages young men to modify their attitudes about gender roles and sexual relationships, with the goal of reducing HIV transmission and violence. The study population includes 750 young men (aged 14 to 25 years) in three lower-income communities in Rio de Janeiro.

In 2002, the study team began evaluating two project components: interactive group-education sessions for young men led by older peers and a community-wide “lifestyle” social-marketing campaign that promotes condom use. The lifestyle campaign uses billboards, posters, and other media to convey messages that reinforce those delivered in the group-education sessions, and young men from the community participate in condom sales at popular bars and clubs. These interventions are based on two hypotheses:

- Engaging young men in critical reflection about the “costs” of traditional views of masculinity can promote positive attitudes and related behaviors concerning equitable gender roles and HIV risk reduction.
- Reinforcing these messages at the community level can have an additional positive impact on the behavior of these young men.

By comparing the impact of different combinations of these activities, the project team is identifying which are most vital to success. One study component, based in Mare, focuses on group education only, and a second component, based in Bangu, combines group education with a community-wide lifestyle campaign. A control group in Morro dos Macacos will receive a delayed intervention.

## Measuring gender norms

The research team developed the Gender-Equitable Men (GEM) Scale to assess the program’s impact. The scale measures “traditional” and “egalitarian” gender norms and attitudes about roles related to HIV/AIDS prevention, violence, sexual relationships, and homosexuality. Researchers used surveys and in-depth

interviews to gather information from young men and a subset of their sex partners. Study participants also provided information about HIV-related risk factors, such as STI symptoms, condom use, and number of sex partners.

At the start of the project, approximately 25 percent of the young men reported STI symptoms in the last three months, 30 percent reported multiple partners in the last month, and 63 percent reported condom use at last sex with a primary partner. “Traditional” gender norms and attitudes were significantly associated with a number of key outcomes, including reported STI symptoms and partner violence.

### Positive results at both intervention sites

The study team collected follow-up data six months after the intervention began. The data reveal positive changes at both intervention sites, including significant improvements in gender norms. For example, fewer young men reported agreement with statements such as “Men need sex more than women do” (54 percent at baseline and 42 percent at follow-up) and “I would be outraged if my wife asked me to use a condom” (22 percent at baseline and 15 percent at follow-up).

At the Bangu and Mare sites, reported STI symptoms decreased and condom use at last sex with a primary partner increased. However, only in Bangu, the site of the most intensive intervention, were the improvements statistically significant, with a reduction in STI symptoms from 23 to 14 percent and an increase in condom use from 58 to 79 percent. The percentage of informants at both sites who reported having two or more sex partners also decreased somewhat, but not significantly. Control-group results are forthcoming.

These findings suggest that educational interventions for young men can successfully influence their attitudes toward gender roles and provide empirical evidence that behavior-change interventions focused on gender dynamics can be associated with a reduction in HIV/STI



Instituto PROMUNDO

As part of Project H, young men in Rio de Janeiro engage in animated group discussions about traditional attitudes toward gender roles and sexual relationships.

risk. The results also highlight the importance of reinforcing gender-equity messages at the community level.

### Next steps

The study team is planning a second round of data collection at 12 months to determine each intervention’s longer-term behavioral effects. A multivariate analysis will help determine the interrelationships among the sociodemographic characteristics of the young men in the study, their attitudes toward gender, and changes in their behavior. Data related to program costs are also being collected and will be analyzed to assess cost-effectiveness.

Horizons is currently exploring whether these strategies are appropriate in other cultural contexts. In collaboration with Instituto PROMUNDO and the Committee of Resource Organization, an Indian nongovernmental organization, Horizons is adapting these strategies and exploring the relevance of the GEM Scale in India. ■

### REFERENCE

1. Barker G. *What About Boys? A Review and Analysis of International Literature on the Health and Development Needs of Adolescent Boys*. Geneva: World Health Organization; 2000.

# Improving the care of newborns in Indonesia

## Strengthening the knowledge and skills of midwives and district health staff

### Project name

*Awal Sehat Untuk Hidup Sehat* (ASUH, or Healthy Start for a Healthy Life)

### Location

Indonesia

### Methods

Capacity building, community mobilization, interactive teaching and learning, participatory planning

### Partners

Indonesian Ministry of Health, international and local NGOs

### Funders

USAID, Bill & Melinda Gates Foundation

### For more information

Please contact Nancy Muller, program officer, at [nmuller@path.org](mailto:nmuller@path.org).

Despite impressive gains in recent years, Indonesia's infant mortality rate remains high: 48 infant deaths per 1,000 live births per year.<sup>1</sup> Nearly one-half of these deaths occur in the neonatal period (0 to 28 days), and the majority of neonatal deaths occur in the first seven days.<sup>2</sup>

Because care in the first few weeks of life is key to infants' survival, PATH and the Indonesian Ministry of Health developed and implemented a child-survival program on the island of Lombok in the 1990s. This "Healthy Start" model linked government-trained village midwives with traditional birth attendants and pregnant women. Project monitoring and evaluation demonstrated decreases in numbers of low-birthweight infants and improved newborn care.<sup>3</sup>

In 2000, PATH and its partners adapted this model for four districts in East and West Java that have a combined population of 6.2 million people. Over the course of three years, the project team built the capacity of village midwives and district health staff and fostered community involvement in newborn health and the health system.

## Building the capacity of village midwives

PATH's preliminary qualitative research identified a lack of mutual trust and respect between village midwives and the community. Midwives also needed better clinical skills related to newborn care, because their midwifery training focused on delivery and the first few hours of life.

To build village midwives' self-awareness, confidence, and communication skills, the project team developed and implemented interactive "self-image" training in which midwives identified their strengths, learned communication theories, and practiced interactive dialogue to help clients identify and overcome obstacles to healthy care-giving behaviors. Midwives also learned to administer hepatitis B vaccine to newborns via the Uniject™ device—a prefilled, single-dose, auto-disable syringe invented by PATH and licensed to BD.

To further build midwives' clinical skills, the project team identified best practices for newborn care and created a training curriculum that included two days of instruction and two days of practice. Participants learned to use an algorithm for classifying infants as needing (1) referral to a medical facility, (2) treatment that could be administered at home, or (3) routine newborn care.

## Fostering community involvement

PATH and its partners recognize that village midwives' success depends, in part, on the need for their services and on the presence of community systems for notifying midwives of pregnancies and births. In addition, much of good newborn care rests on health behaviors at home.

To foster community involvement, the project team trained and supported more than 3,000 community facilitators who are helping establish midwife-notification systems for vital events (such as pregnancy and birth) and promoting newborn care at the village level. To encourage healthy behaviors, the team used various media to communicate the basics of newborn care, focusing on the importance of a first neonatal home visit by a midwife, hepatitis B vaccination, early breastfeeding, and exclusive breastfeeding (that is, feeding newborns only breast milk, not formula or other substances).





Decky, ADA Productions

In East and West Java, midwives are providing routine newborn care, identifying low-birthweight infants, administering hepatitis B vaccine, and providing home treatment and referrals.

## Improved skills

More than 1,800 midwives and other district health staff received “self-image” training, and approximately 1,400 received clinical training. Data from pre- and post-training surveys suggest that the training improved participants’ communication skills and knowledge of newborn care. Data from clinical observations suggest increased adherence to protocol during newborn exams and increased correct classification of infants. Families also recognized the improved skills of midwives; after project implementation, more mothers who received a neonatal visit by a midwife said they would recommend the service to a neighbor.

## Improved newborn care and nutritional status of children

Surveys of mothers before and after project activities showed significant increases in indicators of good newborn care, including the proportions of newborns with an early home visit by a midwife, newborns receiving hepatitis B vaccination within seven days of birth, and mothers initiating early breastfeeding.

## Focusing on sustainability and expansion

Throughout the project, PATH worked as a team with government health staff at the district level,

strengthening the skills and experience of those who administer public health programs and supervise midwives. In addition, the project team trained district health staff in how to lead training for midwives, involved staff in developing project materials and curricula, held workshops on how to involve the community in health programs, and coached staff in using data for decision-making. The team also developed guidelines for supervising midwives in a supportive manner and mentored midwives’ supervisors by accompanying them on supervision visits and facilitating monthly meetings of midwives and their supervisors.

Even before project completion, numerous districts across five provinces expanded one or more project elements to new locales. At the end of 2003, PATH and its partners transferred responsibility for activities in East and West Java to provincial and district health staff, who now have numerous tools and a solid platform from which they can continue to expand the approach and apply it to other health issues.

*ASUH (Awal Sehat Untuk Hidup Sehat)—Improving the Health of Newborns in Indonesia: Final Report* provides a more detailed report of these activities and lessons learned. It is available from the “Publications” section of PATH’s website ([www.path.org/materials.php](http://www.path.org/materials.php)). ■

## REFERENCES

1. *Profil Kesehatan Indonesia 2001 [Indonesian Health Profile 2001]*. Jakarta, Indonesia: Ministry of Health; 2002.
2. *Laporan Studi Mortalitas 2001: Pola Penyakit Penyebab Kematian Neonatal di Indonesia [Mortality Study 2001 Report: Pattern of Illness Causes of Neonatal Death in Indonesia]*. Jakarta, Indonesia: Institute of Health Research and Development, Ministry of Health; 2002.
3. S TI, Maynard J, Sutanto A, Ruff T. *A Healthy Start for Indonesian Children*. AusAID. Undated.

# Working to control tuberculosis in Ukraine

## Encouraging earlier detection and treatment

### Project name

Controlling Tuberculosis in Donetsk Oblast

### Location

Ukraine

### Methods

Training and an information, education, and communication campaign

### Partners

World Health Organization, Donetsk Oblast Health Education Center, Oblast Tuberculosis Hospital

### Funders

World Health Organization, USAID

### For more information

Please contact Amie Bishop, Ukraine country program leader, at [abishop@path.org](mailto:abishop@path.org).

In Ukraine, the post-Soviet socioeconomic crisis has opened a doorway to tuberculosis (TB). Poverty, unemployment, homelessness, and malnutrition have increased, and health care services have deteriorated—all of which have led to a resurgence of the disease. Between 1990 and 2001, TB infection rates in Ukraine more than doubled, and TB-associated mortality rates nearly tripled.<sup>1</sup> Ukraine's fast-growing HIV epidemic further complicates the situation; TB currently accounts for one-half of the deaths among people with AIDS.<sup>2</sup>

## Initiating a coordinated response

To combat the epidemic in Ukraine, PATH is collaborating with the World Health Organization (WHO) to implement the WHO-recommended TB control strategy known as “directly observed therapy, short course” (DOTS) in Donetsk Oblast (province), where TB mortality rates are even higher than Ukraine's national average.<sup>3</sup> WHO is improving Donetsk's response to TB by introducing the DOTS strategy and strengthening key elements: improving laboratory diagnosis, training medical staff, and enhancing surveillance. PATH is complementing these efforts by conducting training and media campaigns designed to educate patients and the general public about TB prevention and the DOTS strategy and by training medical staff in counseling and communication skills. PATH initiated the first of two linked projects in 2001.

In April through June 2002, PATH conducted in-depth interviews and focus-group discussions to assess TB knowledge and determine information needs. The interviews included physicians and nurses (both TB specialists and providers in general practice), and the focus-group discussions included patients with TB, students, HIV-infected individuals, employees of local businesses, and patients from a local hospital. PATH researchers probed for information about attitudes toward health services, motivations for seeking or avoiding treatment, knowledge of TB, and perceptions of people with TB.

Through this research, PATH identified a need for outreach activities: an information campaign to increase public awareness and knowledge of TB, including materials for patients and their families, and training to educate health care providers about how to reach out and respond to patients with TB.

## Increasing public awareness

Although most project participants were already knowledgeable about TB, they expressed a need for messages from the media—particularly television—that would reinforce that TB is curable, as well as information about symptoms and the availability of free treatment.

Because incomplete TB treatment can lead to the development of drug-resistant bacteria, participants also recommended emphasizing the importance of completing the full course of treatment. This is often difficult, because once patients begin to feel better, they may discontinue treatment, which requires at least six months of adherence. The stigma attached to a disease that is associated with homelessness, unemployment, elderly people, and prisons also may prevent people from seeking care and completing treatment.

To fulfill these needs, PATH produced numerous information, education, and communication (IEC) materials. Posters and brochures were displayed on public transportation and distributed at medical facilities, cafes and restaurants,

universities, and post offices. Television and radio spots were aired intensively. These materials highlighted several key messages: that anyone can get TB, that people with certain symptoms should seek treatment, and that the disease is curable, as long as the course of treatment is completed. The team distributed these materials shortly before World Tuberculosis Day in 2003.

### Training health workers

The interviews with health care professionals revealed dissatisfaction with the lack of financial support for health care, the poor quality of medical equipment, difficulties communicating with policymakers, and the lack of information resources for the public, despite the disease's impact. Many physicians who were not TB specialists were not aware of the DOTS program.

At the end of 2002, PATH conducted two training workshops to increase providers' capacity to address these issues. During a two-day workshop for government health center and Red Cross staff in Donetsk, instructors reviewed the IEC plans and pretested drafts of the TB print materials. The second workshop, a one-day introductory session for TB specialists, emphasized counseling skills, especially techniques for communicating the importance of completing treatment.

### Measuring the impact of outreach

PATH is currently assessing the impact and reach of the media materials and training sessions. In the month after the media campaign, the Donetsk TB dispensary experienced a surge in outpatient clinic attendance compared with the previous year, and dispensary staff reported that people who requested examinations had a greater awareness of TB facts. Many patients indicated that the television and radio spots had taught them about TB symptoms and prompted them to seek medical advice.

### Expanding efforts

PATH can now build on these successes. With new funding from the U.S. Agency for International Development, PATH is initiating a project to improve TB case detection and management in up to three oblasts. Since this second three-year project began in October 2003, PATH has been implementing these activities

with WHO, the Royal Netherlands Tuberculosis Association, the National Tuberculosis Institute, and the Ministry of Health.

PATH will continue IEC work that supports DOTS. Activities include conducting public awareness campaigns; producing culturally sensitive information materials for patients with TB, families, and health care providers (with an emphasis on the interaction between HIV and TB); and implementing community-based social mobilization strategies to improve health-seeking behavior. With WHO, PATH will also work to increase political support for DOTS, improve program monitoring and use of surveillance data, and strengthen Ukraine's TB diagnostic capacity. Collectively, these efforts will help Ukraine control this escalating epidemic. ■

### REFERENCES

1. Melnyk V. *Improvement of Information Systems of Monitoring for Detection of TB Patients and of Epidemiological Analysis in Ukraine: Substantiation of Necessity*. The F. G. Yanovsky Institute of Tuberculosis and Pulmonology of the Ukrainian Academy of Medical Sciences; November 2002.
2. *Application to the Global Fund for HIV/AIDS, TB, and Malaria*. Kyiv: Government of Ukraine; 2002.
3. Kucher T, Laptyeva N, Antonenko E, Antonenko L, Nikiforova L. *Comparative Data on TB Incidence and TB Institutions' Effectiveness in Ukraine in 2000–2001*. Academy of Medical Sciences, Center of Medical Statistics, and F. G. Yanovsky Institute of Tuberculosis and Pulmonology; 2002.



Siri Wood

Health care professionals in Donetsk strengthened their counseling skills and contributed to the development of informational materials.



# Managing medical waste in Nepal

## Developing local solutions to reduce infection

### Project name

Practical, Local Solutions for Safely Managing Contaminated Syringes and Other Medical Waste

### Location

Nepal

### Methods

Communication for social change, technology development

### Partners

General Welfare Pratisthan, local communities

### Funder

Bill & Melinda Gates Foundation

### For more information

Please contact Scott Wittet, director for advocacy, communication, and training for PATH's Children's Vaccine Program (CVP), at [swittet@path.org](mailto:swittet@path.org), or visit PATH's CVP website at [www.childrensvaccine.org/html/safe\\_injection.htm](http://www.childrensvaccine.org/html/safe_injection.htm).

As the use of disposable syringes for immunizations and therapeutic injections increases, more infectious medical waste is being generated than ever before. Many health workers in developing countries do not know how to properly dispose of medical waste, and proven waste-management tools, such as incinerators, are prohibitively expensive for some settings. As a result, contaminated injection equipment, bloody gauze, and other hazardous materials are commonly dumped in unprotected areas.<sup>1</sup> This places children and adults at risk of accidental needle sticks—and, consequently, infection with bloodborne pathogens—and creates a potential for contaminated syringes to be reused.

To reduce these risks in Nepal, PATH and local partners developed a Safe Injection Promotion Initiative to address waste management and other injection-safety issues. The team used a communication for social change model that promotes individual behavior change while increasing political will for change, influencing community norms, and mobilizing local groups.

## Building partnerships to improve injection safety

PATH and General Welfare Pratisthan (GWP), a Nepali nongovernmental organization, selected seven sites in both rural and urban settings in central Nepal. These communities needed little convincing that contaminated sharps were a serious health problem, and community leaders enthusiastically embraced the waste-management campaign.

In 2002, PATH and GWP worked with the communities to organize safe injection promotion committees, composed of local health and political leaders and representatives of private health care providers, to brainstorm local solutions to injection-safety problems and manage the interventions as they evolved. The committees also convinced participating providers to support the costs of syringe collection and destruction through monthly fees based on the amount of waste produced by each provider.



Scott Wittet

Hetauda has become the first city in Nepal to implement a comprehensive system for managing medical waste. Their strategy includes simple, locally designed waste burners with integrated sharps pits and a rickshaw-based collection system.



Meanwhile, GWP brokered an agreement with a Nepali company to produce burnable safety boxes made from recycled paper. At a cost of only 20 rupees (\$0.27) each, the boxes eliminate the need to recap needles and allow easy transport of syringes to disposal sites. The committees sold 5,000 boxes to pharmacies and government health centers in the first 18 months of the project. Proceeds from the sales are used to buy more safety boxes.

### Segregating, storing, and collecting waste

Because PVC-based plastics produce unacceptable levels of pollution when burned, the communities decided to segregate materials that can be burned (such as paper and cotton) from items made of such plastic. However, they decided to burn syringes, which are not made of PVC plastic.

The communities developed two approaches for processing the waste. In locales without burners on site, health workers place syringes into the paper safety boxes immediately after use. In Hetauda, an urban area, a rickshaw driver picks up burnable boxes daily and delivers them to the municipal burn site. In rural Santipur village, a rickshaw driver gathers the boxes weekly and delivers them to a burner at the local health center. In another village, pharmacies are close enough to the health center to bring in the safety boxes for destruction themselves.

At hospitals and health centers with on-site burners, health workers place syringes into secure metal safety boxes immediately after use. Staff later dump the contents of the metal box directly into the burner.

### Developing local tools for waste management

Some rural communities destroy waste on site using one of two types of burners designed by PATH, local groups, and GWP. The Santipur burner is constructed of concrete rings and has an integrated sharps pit. After syringes and paper are burned, water flushes residual ash and needles into the pit. These burners are easy to secure and do not become dangerously hot during use. At a cost of 10,000 rupees (US\$133), the concrete burners are less expensive than oil drum

## Managing sharps waste

PATH, with support from the U.S. Agency for International Development (USAID), is evaluating the use of needle removers. These devices remove needles from used syringes immediately after injection and isolate the needles in a secure chamber. Needle removers eliminate the risk of reuse, reduce the danger of needle sticks from improper disposal, and cut the volume of sharps waste by almost 90 percent.



PATH

In India, a six-month assessment of three needle removers, including two prototypes developed by PATH, showed that the devices were highly acceptable to health workers and easily integrated into existing systems.

burners, and they are also more durable. All seven communities chose to replace worn-out oil drum burners with the new Santipur design.

The locally produced metal Manahari Mini-Burner is divided into two chambers: one for filled safety boxes or loose syringes and another for cotton and paper. A removable tray at the bottom collects residual ash and needles. The mini-burners, which cost 1,500 rupees (US\$20), provide private clinicians and pharmacists with a way to burn waste near their shops.

### Future directions

Even at this early stage, additional partners and communities are showing interest in these novel waste-management techniques. The city of Kirtipur has requested technical assistance in initiating a system like the one in Hetauda, which has gained national media attention. GWP is also talking with GTZ, the USAID-funded Nepal Family Health Project, and Peace Corps volunteers about replicating the project in other parts of Nepal. ■

### REFERENCE

1. Bhattarai MD, Wittet S. *Perceptions About Injections and Private Sector Injection Practices in Central Nepal*. Seattle: General Welfare Pratisthan and PATH; 2000. Available at: [www.childredivaccine.org/files/Nepal-Inject-Practices-RA.pdf](http://www.childredivaccine.org/files/Nepal-Inject-Practices-RA.pdf).



### Project name

Entre Amigas

### Location

Nicaragua

### Methods

Social research,  
communication for social  
change, mass media,  
community networks

### Partners

Centro de Estudios y  
Promocion Social,  
Puntos de Encuentro,  
University of Leon

### Funders

Bill & Melinda Gates  
Foundation, William and  
Flora Hewlett Foundation

### For more information

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## Focusing on high-risk environments

In August 2002, PATH launched the Entre Amigas project in four zones of Ciudad Sandino, a peri-urban municipality in Managua, Nicaragua. With a population of 76,000, Ciudad Sandino is a hostile environment where overcrowding, poverty, drug use, and violence are the norm.

Through a project coordinator based in Managua, PATH provides technical guidance and coordinates project activities conducted by Entre Amigas' three implementing partners. Using an integrated package of interventions that link social research, media entertainment, and community interaction, the project team is building a supportive network of girls, mothers, teachers, and government groups. These efforts are designed to increase knowledge of reproductive health, foster positive communications and relationships, and strengthen girls' connection with their community.

## Identifying factors that influence young girls

In early 2003, PATH and the University of Leon led a baseline assessment of factors that affect health-related attitudes and practices, especially as they pertain to sexual and reproductive health among young adolescent girls. Working with 590 girls aged 10 to 14 years, the team conducted a quantitative survey that explored knowledge of sexual and reproductive health issues, self-perceptions, communication patterns, and access to health information. The team also used qualitative approaches to document the girls' perspectives and behaviors, as well as parents' and teachers' attitudes. These assessments revealed important findings:

- Although the girls see themselves as valued and capable, they lack confidence in their relationships, mostly because of low self-esteem and exposure to violence, which weakens potentially positive adult influences.
- Most of the girls reported that they do not discuss sexual or reproductive health issues. Two-thirds stated that they do not talk to anyone about HIV and AIDS, and more than half said that they do not discuss pregnancy-related issues. Forty-seven percent had not spoken to anyone about changes in their bodies.
- Among girls who do discuss these issues, mothers are the primary confidants.
- The girls do not routinely seek out health providers for sexuality and reproductive health information.
- Eighty percent of the girls watch television daily.

## Increasing knowledge and life skills among girls

Based on the assessment, the team designed an ensemble of multisectoral interventions rooted in the girls' perspectives and support networks. Centro de Estudios y Promocion Social leads these efforts by conducting peer-training sessions and supporting interactive groups of girls, mothers, and teachers.

The project strategy underscores the importance of promoting youth participation and creating a safe environment where girls can express their fears and emotions. Trained peer facilitators and promoters are involved in all aspects of the project design and assessment, including curriculum development, entertainment script-writing, and interactions with mother and teacher groups. To increase girls' reproductive health knowledge and life skills, the peer teams implement participatory events for girls in schools and in the community:

- Using puppet shows in schools, health centers, and other locations in the community, the peer trainers promote messages about safe sexual practices and the risks of early pregnancy, HIV and AIDS, and violence.

- Because sports have been shown to help youth develop confidence, negotiation skills, and trust,<sup>3</sup> the project team organized girls' soccer teams in all four districts. The Municipal Child and Adolescent Commission provides support for the coaches.
- In collaboration with the ministry of health, the ministry of education has arranged for a small team of health providers to visit the school regularly and inform students about the health resources available in their communities.

## Strengthening support systems

Throughout these efforts, the focus on positive mother-daughter communication and relationships is essential. The project involves mothers, daughters, and teachers in a range of activities to increase mothers' knowledge of reproductive health and strengthen their communication skills. Mothers and teachers discuss themes that parallel the topics the girls are exploring. Based on the women's own experiences, these conversations help adults reinforce girls' rights, correct prejudices, and clarify myths.

## Using television to model healthy behavior

To build on the information shared through the peer and network activities, Puntos de Encuentro has included a young adolescent character in its widely viewed television soap opera, *Sexto Sentido*. The character's role was constructed using baseline findings from *Entre Amigas*, and scripts are validated with the girls in the community. The show is used to raise awareness of development and reproductive health issues among young girls.

Since October 2003, the drama has featured the everyday problems of a 13-year-old girl. By highlighting her interactions with parents, peers, and teachers, *Sexto Sentido* is providing insight into the issues and decisions that confront girls who are navigating adolescence. The series explores girls' self-efficacy and negotiation skills, myths associated with adolescent body changes and virginity, and relationships. It also focuses on parents who build confidence and respect, create equal relationships in the home, and guide the girls in managing reproductive health risks. Puntos is developing a question guide to foster community dialogue about these themes.

## Next steps

In August 2004, the University of Leon will conduct an end-line survey to document *Entre Amigas*' successes. In addition, PATH and the University of Washington will document the cost of the project's activities. PATH and its partners will use these results to assess the sustainability of the interventions and provide guidance to other organizations considering similar programs. The project will move forward with an even greater emphasis on mother-daughter relationships. ■

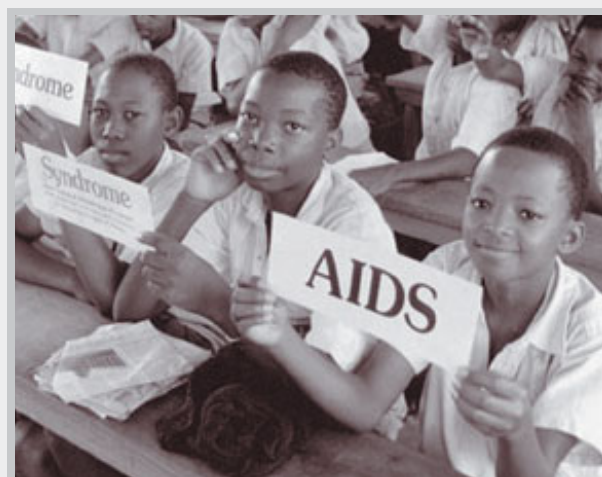
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## Participatory learning and action

Based in group processes and involvement, participatory learning and action (PLA) involves simple, qualitative research techniques that help participants share knowledge and life experiences.<sup>4</sup> PLA represents a shift from traditional, didactic teaching methods to an interactive approach. The technique is especially useful among adolescents. It also benefits project staff, who learn from and with the people they are working to assist.

Two-way interaction has proven invaluable to two of PATH's largest adolescent health endeavors: the African Youth Alliance (AYA) and the China Youth Reproductive Health project. AYA—a collaborative project implemented in Botswana, Ghana, Tanzania, and Uganda—used PLA in its first joint field activity and as a holistic approach to community entry. In conjunction with data from surveys and baseline studies, the information gained through PLA activities informed and guided program interventions. PLA also strengthened the partnership among the three implementing organizations: PATH, the United Nations Population Fund, and Pathfinder International.

In China, PATH and the China Family Planning Association used PLA for formative research and as a participatory intervention with community members, especially marginalized youth. PLA activities provided extensive information about youth in the project regions, including their reproductive health knowledge and needs. By tailoring the interventions to youth needs identified through these methods, the project empowered youth, engaged stakeholders, and prompted attitude changes among project staff, particularly with regard to migrant and unemployed youth.



Jorgen Schytte



# Innovations in adolescent health

PATH has been active in sexual and reproductive health programs for youth in more than 50 countries. We build support for adolescent health on all levels, reaching out to communities, where we promote alternatives to harmful practices; to local organizations, with which we design materials for low-literate audiences; and to health care providers, including pharmacists, whom we train in youth-friendly services. Highlights of current projects include:

## African Youth Alliance

The African Youth Alliance (AYA)—a partnership among PATH, the United Nations Population Fund, and Pathfinder International—is working with youth in Botswana, Ghana, Tanzania, and Uganda to mitigate the spread of HIV and AIDS and reduce rates of sexually transmitted infections, unintended pregnancy, and unsafe abortion. AYA's network of interventions includes youth-friendly services, advocacy, behavior change communication, and integration of reproductive health information into livelihood programs. Learn more about AYA at [www.ayaonline.org](http://www.ayaonline.org).

## China Youth Reproductive Health Project

PATH is working in partnership with the China Family Planning Association to improve adolescent reproductive health in 12 Chinese provinces that include nearly 80 million adolescents. We are implementing interventions tailored to the needs of young people, especially marginalized youth such as young migrant workers. Our work is strengthening adolescents' knowledge, life skills, and ability to make informed, healthy choices.

Learn more about PATH's adolescent health work at the Global Health Council's Annual Conference (June 1–4, 2004, Washington, D.C.; booths 201, 202, and 204) and the International AIDS Conference (July 11–16, 2004, Bangkok), or visit our website at [www.path.org](http://www.path.org). ■

## IMPACT

PATH has a rich history implementing programs that educate through entertainment. In Kenya, PATH has introduced multiple entertainment-based interventions as part of the IMPACT project. Interventions such as Magnet Theatre use audience participation to get young people thinking about and responding to sexual and reproductive health issues. Our activities give youth a chance to engage in dialogue about healthy behaviors in a safe and supportive environment.

## Teenpath

In Thailand, PATH's Teenpath website ([www.teenpath.net](http://www.teenpath.net)) is using interactive computer technology to help adolescents protect themselves against sexually transmitted infections, unintended pregnancy, and other health risks. The Teenpath project is cooperating with the AIDS Access Foundation to help undergraduate students produce responsible, positive messages about sexuality, HIV, and AIDS through short films. A selection of these films will be shown at the 2004 International AIDS Conference.

PATH is an international, nonprofit organization that creates sustainable, culturally relevant solutions that enable communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, we help provide appropriate health technologies and vital strategies that change the way people think and act. Our work improves global health and well-being.

*Directions in Global Health* shares information about PATH's programmatic experiences with colleagues around the world. Produced three times per year, *Directions* is available free of charge. To subscribe, please send your contact information to:

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## REFERENCES

1. Carnegie Council on Adolescent Development. *Great Transitions: Preparing Adolescents for a New Century*. New York: Carnegie; 1995. Available at: [www.carnegie.org/sub/pubs/reports/great\\_transitions/gr\\_intro.html](http://www.carnegie.org/sub/pubs/reports/great_transitions/gr_intro.html).
2. YouthNet. *Assessment of Youth Reproductive Health Programs in Nicaragua*. Arlington, VA: Family Health International; September 2003. Available at: [www.dec.org/pdf\\_docs/PNACU234.pdf](http://www.dec.org/pdf_docs/PNACU234.pdf).
3. Brady M, Khan AB. *Letting Girls Play. The Mathare Youth Sports Association's Football Program for Girls*. New York: Population Council; 2002.
4. Shah MK, Zambezi R, Simasiku M. *Listening to Young Voices: Facilitating Participatory Appraisals on Reproductive Health with Adolescents*. Zambia: FOCUS on Young Adults/CARE International; 1999. FOCUS Tool Series 1.



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ISSN 1549-8662