TODAY’S YOUTH, TOMORROW’S FUTURE

Young people are the hope and future of nations—but around the world, they are confronting challenges to their health, especially their sexual and reproductive health. Clearly, we need to better understand these challenges and find appropriate solutions. We need research that will improve our understanding of adolescents’ patterns of sexual knowledge, attitudes and practices. We need to grasp how they manage sexual risk to avoid unplanned pregnancies and other adverse health conditions. We also need studies that assess effective interventions for improving their health.

At the Gates Institute, we are applying our knowledge, skills and intellectual curiosity to studying these issues. Our affiliated faculty, students and institutional partners are conducting research in all major areas of sexual and reproductive health—and adolescent needs are a significant focus.

In this annual report, we highlight some of their discoveries about adolescent sexual and reproductive health—including the impact of culture, society and the media, sexual risks and reproductive health challenges. We also highlight a tenth anniversary celebration of Bill Gates Sr.’s first visit to the Institute in April 1997 and his message to those who have benefited from the Gates Foundation’s support.
A MESSAGE FROM THE DIRECTOR

Ten years ago, Bill Gates Sr. visited the Johns Hopkins Bloomberg School of Public Health (JHSPH), and in time that visit led to the birth of the Gates Institute. This spring he visited us again, and our network of individual and institutional partners had the opportunity to meet with him and hear the urgency in his messages about reproductive health and family planning. But the visit accomplished something else—it inspired us to reflect on the important ways in which our projects and collaborations intersect, and the ways in which our work extends into so many facets of discovery while creating “social vaccines.”

So, what is the thread that connects social vaccines, youth populations and national development?

Since our inception, the Institute’s motto has been “Scholarship and Science for Social Change.” When we talk about “change,” we talk about enduring change in scientific learning—the kind of change that results from wide-reaching scholarly efforts, the kind of change that comes on the heels of newly acquired knowledge and skills, the kind of change that empowers and protects. We all understand the concept of a vaccine: an injection of weakened viruses teaches or enables immune systems to form antibodies that inoculate the body against the disease. At the Institute, we work to deliver social vaccines. Instead of using syringes and pharmaceuticals, we use knowledge and information. The antibodies that we provide are cognitive and analytical skills, and self-reliance. This is how we inoculate individuals, families and communities from adverse outcomes such as poverty, unwanted pregnancy and poor reproductive health.

Social vaccines work best when the inoculation happens early in life. That's why, when we “immunize” a community from the negative consequences of sexual and reproductive risks, we prioritize reaching youth in low-income settings. Nearly all sub-Saharan countries have young populations, with 40 percent of the total citizenry under the age of 15. But while other regions are experiencing population stabilization, Africa's youth population is growing rapidly—in fact, it has yet to peak. High fertility drives this growth. And here’s where the concept of youth dependency burden becomes important. In developed nations, there are 3.9 adults for every young person under the age of 15. But in Ghana, for example, there are only 1.5 adults for every young person. With this kind of youth dependency burden, which is likely to prevail for extended periods of time, most African countries face significant challenges in meeting youths' needs to acquire the knowledge and skills for socially and economically productive livelihoods. Healthy starts for today’s youth—through the widespread application of social vaccines—will positively shape their futures and those of generations following them. To build the base of knowledge for discovery of other social vaccines, the Gates Institute is working with partners around the world in organizing an international conference on youth development to be held in Abuja, Nigeria, in April 2008.
This brings us to the demographic dividend, which is the economic benefit gained by an increase in the ratio of working-age adults to young dependents. When fertility levels decline, the number of working-age adults begins to outnumber youth in the population. Under the right market and social conditions, this shifting balance can fuel economic growth through increased productivity, greater household savings and lower costs for basic social services. The burden of dependent youths on working-age adults is tremendous in Africa. That burden can be mitigated in the future by averting unwanted pregnancies, of which there are many in the continent. Family planning is the key to helping couples achieve their reproductive intentions. Yet there is a contraceptive gap in sub-Saharan Africa. One of every four couples seeks to space or end pregnancies but does not practice contraception. This gap is significant, and it has been systematically neglected. Protecting the preconceptional health of mothers who wish to space births and use contraception is an investment in individual and national development that warrants strong support by political leadership. Moreover, protecting the health and well-being of today’s youth as tomorrow’s adults is an immediate investment that neither society nor leadership can afford to ignore or delay. Youth will deliver our future.

We hope that as you read this year’s annual report you will agree that much is being accomplished, although much remains to be achieved in order to protect the developmental prospects and reproductive health of this and future generations. We hope that you will join us in developing and delivering the social vaccines necessary for today’s youth, and for tomorrow’s future.

Amy Ong Tsui, PhD
Director

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TENTH ANNIVERSARY CELEBRATION

On April 18, 2007, Bill Gates Sr. made a tenth anniversary visit to the Gates Institute and delivered an inspiring address to Institute colleagues. We share excerpts of his comments here.

Great to be here to celebrate 10 years of the Gates Institute’s work … I want to talk with you a little about how we at the Foundation got to working on the problem of reproductive health.

At the Foundation we saw how interrelated the problems of the developing world are. We saw the need for better health services, for better education, and for livelier economies and how each of these problems makes a contribution to the existence and persistence of the others.

If you look at these macro problems too hard, you tend to begin to ask yourself if there is really any way to bring about real change. We have learned to ignore those big picture problems. Looking around we have seen all of the folks, institutions and nations devoted to fixing things and we have recognized that no one actor can take on all of the problems.

Progress is only going to happen as men, women and organizations focus on making incremental changes to independent problems.

Focus is the key. Focus on dealing with problems one at a time.

One of the things we focused on at an early time was the problem of reproductive health and family planning, which is what so many of you have made into a life’s work.

We see this Institute as being a vital contributor in the struggle to improve outcomes in childbirth and to bring down the problematic growth in the populations of so many of the countries from which you have come.
Let’s just focus on one current aspect of this very daunting challenge: contraceptive supplies.

- Thirty percent of the need for contraception in the developing world is going unmet.
- Funding for contraception is sporadic, so organizations are hoarding supply for fear that there won’t be another shipment for some time. This has resulted in a significant amount of supplies expiring in warehouses.
- There are still cultural issues and myths around using methods like Depo-Provera [that need to be combated with education campaigns].
- And, as you well know, there is the unfortunate impact of the U.S. gag rule—which has critically limited commodities given by USAID [U.S. Agency for International Development].

But limited supply is only one side of the issue. In many countries there is significant ungenerated demand, due to a lack of knowledge about using contraception to prevent pregnancy and control family size.

If part of our goal is to inform men, women, and especially young adults about contraception, then, as we succeed in meeting this goal, we will dramatically increase the unmet need.

These problems are clearly linked. But, as I said before, I am pleased that you not only understand the whole landscape of reproductive health, but also the importance of focusing on each of the problems individually. Focus is the key.

As I think about the genesis of this Institute and the urge of that small cadre of Johns Hopkins folks who wanted to do something about addressing the global problem of effective reproductive health programs and policies, I am reminded of the often quoted observation of sociologist Margaret Mead:

“Never doubt that a small group of thoughtful, committed people can change the world. Indeed it is the only thing that ever has.”

At the Gates Foundation, we look forward, like you, to the day when the risks in childbirth everywhere in the world are down to those same tiny numbers as in the industrial world.

We dream, like you, of the day when fertility represents simply filling the places left by those who have died, when the disastrous multiplication of people is no longer a threat to the continued livability of your countries.

We are so very pleased at the investment we made to inaugurate this great work. We are grateful to the people of Johns Hopkins for the wonderful organization they have brought to this field and the inspiration they have passed along to you.

But, most of all, we are pleased and grateful for all of you—and those who have preceded and the many who will succeed you—giving a life of inspiration and devoted effort to this work.
Young people aged 10 to 24 constitute the fastest growing segment of the world’s population.

1 in 8 persons in the world is a young female between ages 10 and 24.

1 girl in 7 in developing countries marries before the age of 15.

Between one-quarter and one-half of girls in developing countries become mothers before they turn 18.

More than 100 million adolescents do not attend school.

“At the Gates Foundation, we look forward, like you, to the day when the risks in childbirth everywhere in the world are down to those same tiny numbers as in the industrial world.”
—Bill Gates Sr.
Some 13 million young persons aged 15 to 24 cannot read or write.

About 525 million people—more than half of all youth—survive on less than $2 a day.

122 million young girls aged 10 to 24 in sub-Saharan Africa live on less than $1 per day.

Nearly half of the world’s unemployed are young people aged 15 to 24.

6,000 young people are infected with HIV every day; most of them are girls in sub-Saharan Africa and Asia.

“Studies in the U.S. have shown that adolescents who communicate [about reproductive health] with their parents are less likely to engage in risky sexual behavior. Why would the case be different in an African setting?... If we can get things right with our adolescents, we will be building a more stable and healthy generation.”

—Paulina Tindana, Gates Institute–funded researcher
Sexual and reproductive health (SRH) does not develop in a vacuum. In every setting, adolescents’ sexual knowledge, attitudes and practices are largely determined by their family origins, the cultural context and, often, their exposure to media.

The Context of Change

An ongoing Gates Institute–supported study entitled The Three-City Asian Study of Adolescents and Youth: Collaborative Surveys in Hanoi, Shanghai and Taipei explores adolescent sexual knowledge, attitudes and behaviors in the context of change. Originally all Confucian-based cultures, China, Taiwan and Vietnam have been experiencing social and economic change and increasing contact through the Internet and other media with the outside world, but experiencing these changes at different rates and on different timetables. Researchers are exploring the influences of cultural traditions and recent social transformations among 17,016 males and females 15 to 24 years of age. The work is a collaborative effort of Gao Ersheng and Lou Chaohua of the Shanghai Institute of Planned Parenthood Research; Nguyen Huu Minh of the Institute for Gender and Family Studies in Hanoi; and of Yi-Li Chuang and Baai-Shyun Hung of the Taiwan Bureau of Health Promotion, which funds the Taipei portion of the study. This work is led by Gates Institute–affiliated faculty Laurie Schwab Zabin, PhD, with Mark Emerson as project coordinator and with the participation of Robert Blum, MD, PhD, MPH, and David Bishai, MD, PhD, MPH. Papers are currently being prepared in all four sites.

The three metropolitan areas reflect very different stages of change in romantic and sexual behavior as revealed by comparing teen behaviors of the older and younger respondents. Youths in Taipei report earlier premarital sexual behavior, significantly higher than even the younger cohort in Shanghai, which appears to be in the midst of considerable change. Hanoi youth report much lower incidence of sexual onset in their teen years. Higher expectations for their own future education and job status—rather than perception of future economic status alone—are generally associated with fewer risk behaviors, and the impact of traditional family views on these behaviors varies with the level of economic development and types of external contact. The association between traditional gender role attitudes and a double standard in sexual permissiveness varies with the level of adolescent sexual activity in the site. Media exposure, and how adolescents acquire sex-related knowledge, has an influence on their sexual behavior; there appears to be more association between sexual activity and the acquisition of knowledge.
through the Internet than its acquisition through other forms of media—and in-home access to the Internet is associated with less traditional beliefs. Greater media exposure is associated with more sexual knowledge, more open attitudes toward premarital sex and more sexual activity, with foreign media related to greater acceptance of and participation in sexual activity than in-country media. Peer influence is greater among younger adolescents and also among those in more traditional settings.

**Online in Ghana**

Another collaborative study has discovered that there may be good potential, via the Internet, to deliver health information to youth in developing countries. The JHSPH’s Dina Borzekowski, assistant professor in Health, Behavior and Society, worked with Julius Fobil and Kofi Asante of the University of Ghana to explore adolescents’ online practices—especially their use of the Internet as a source of health information—in the capital city of Accra, Ghana. Online Access by Adolescents in Accra: Ghanaian Teens’ Use of the Internet for Health Information was published in Developmental Psychology in 2006.

Using samples of adolescents, the researchers found that 66 percent of in-school youth and 54 percent of out-of-school youth had gone online. Of those Internet users, 53 percent had sought online health information, a percentage that was fairly consistent across gender, age, ethnicity and school status. In addition, the youth reported great interest, high levels of efficacy and positive perceptions of online health information.

**Services in Uganda**

To learn the extent to which young people in Uganda are using or intend to use private and public-sector facilities for their SRH needs, Angela Akol, a former Gates Summer Institute participant, is pursuing a Gates Institute-funded study to identify their preferences. She hopes that her findings will provide useful suggestions to reproductive health programmers and policymakers for sustainable involvement of the private sector in adolescent health and development.

The qualitative and quantitative data are still being analyzed, but preliminary indications are that young people use both public and private facilities for their health needs. In fact, 64 percent have used a public health facility and 75 percent have used a private facility. However, only 36 percent of the young people have ever sought SRH services.

**Intervention in Shanghai**

Many public health professionals would like to develop an effective education and service model that would improve the knowledge and sexual behavior of young people. Using three vocational schools as study sites in Shanghai, China, Xiaowen Tu, in collaboration with Laurie Schwab Zabin, professor in Population, Family and Reproductive Health (PFRH), is comparing intervention education models in two different schools, with a third school as a control. Model 1 has a school health educator and a school counselor who implement intervention activities. Model 2 has, in addition to conventional sex education, an SRH service provision component and educational activities implemented by two counselors. The control school has no interventions.

Although the five-year study is not complete, data collected at baseline and midterm have been analyzed. At baseline, there are no significant differences among the intervention and control school populations in their sexual knowledge, self-satisfaction, safe-sex intentions and sexual behaviors. At midterm, the youth in the intervention school, especially in the Model 2 school, are more likely to have safe-sex intentions, although no significant difference is found in sexual behavior. Knowledge of HIV/AIDS and its transmission is significantly higher in the intervention schools than the control school, and greater in the Model 2 than Model 1 school.

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There are 1.773 billion young people between ages 10 and 24 in the world (27 percent of the world’s population). 1.537 billion of them live in low-income settings.

About two-thirds (65 percent) of the youth think that private-sector services are affordable, but, surprisingly, they report public facility services to have shorter waiting times, cleaner premises, friendlier workers and more available medicines. Among the 46 percent who have used both types of facilities, 61 percent are more satisfied with public services. While more than half of the youth are aware of the risk of sexually transmitted infections (STIs) and unwanted pregnancy, only a few (15.9 percent) know they can obtain family planning, postabortion care, or STI treatment and prevention services from these facilities.
Communication rarely flows easily between parents and their adolescent children—anywhere in the world. Paulina Tindana, MHSc, already knew that, and she also understood that discussions of sexual matters are even more difficult. Undaunted, she seized an opportunity to study that very topic in her native Ghana, hoping to identify effective approaches to such important conversations. The results of her research, while promising, are complex.

“There is a consensus in the literature that it is important to communicate sexual and reproductive health information to adolescents,” she says, “but the best way to do so is not clear. I chose to focus my research on communicating reproductive health information to rural adolescents because I wanted to find effective ways of ensuring that this information reaches those who need it most.”

**Debunking Conventional Wisdom**

Tindana has worked in Navrongo for 12 years. In 2005, she began a Gates Institute–funded qualitative study using face-to-face interviews and focus group discussions with rural in-school and out-of-school adolescents and parents in the Kassena-Nankana District. Some of her findings surprised her.

“Our study did not confirm the ‘general knowledge’ that discussion of sexual issues is taboo in rural Africa,” she observes. “Instead, parents expressed the view that discussing reproductive health issues with adolescents would encourage them toward sexual practices before they were ready. The adolescents were also of the view that their parents would see them as promiscuous if they initiated discussions of sexual issues.”

As with many preconceptions, Tindana found these concerns to be invalid. “I haven’t come across any research findings showing that children who talk about reproductive health with their parents are more promiscuous,” she says. “Studies in the U.S. have shown that adolescents who communicate about such issues with their parents are less likely to engage in risky sexual behavior. Why would the case be different in an African setting?”
Tindana also discovered that parents in her study believe the abolition of such traditional practices as female genital mutilation has made rural adolescents more promiscuous. “Again, there is no proof that this is true,” she insists, “but these are issues we need to clarify with the community.”

Adapting to a Changing World
Tindana’s work in Navrongo shows that people are generally open to change and are willing to incorporate new means of communication. “But our respondents suggested that no single channel of communication is adequate,” she says. “We need to find an effective way to combine both modern and traditional methods of communicating reproductive health information to adolescents.”

Tindana is witnessing inevitable social change as a result of modern technology, and rural adolescents are no longer isolated from the larger world. She notes that a 2004 national survey of adolescents in Ghana indicates that they obtain information on HIV/AIDS and contraceptives primarily through the media. “Technology is playing a major role in information transmission,” she says. “Six years ago, mobile phones were non-existent in this district, but they are now common in even the remotest village.”

Despite such swift transformation, however, Tindana expects some things to remain the same. “Not everyone believes that information technology is the most effective way of reaching adolescents,” she says. “Some parents are concerned that communication channels such as television expose young people to certain vices. Adolescents will continue to rely on parents for information, and parents will play a significant role in controlling exposure to information.”

Finding the Right Combination
One trusted tradition in Ghana is the community durbar, a gathering of chiefs, elders and other adults who discuss issues that affect the community. “A durbar is a very useful tool for getting information to the wider community and mobilizing it for action,” Tindana says. “Community durbars and traditional storytelling could be important in reaching rural adolescents with information.”

The parents’ role, too, will be more effective if reproductive health information is viewed as valuable. “Parents traditionally don’t provide information to adolescents until they consider them ready for marriage,” says Tindana, “and the information centers on life skills, personal hygiene and housekeeping—not reproductive health. Parents admit that traditional control mechanisms are no longer functioning, and they are looking for solutions.”

Getting the right information to adolescents at the right time will depend, then, on a creative melding of traditional community leadership, new technologies and effective parenting. Tindana is confident it can be done. “If we can get things right with our adolescents,” she says, “we will be building a more stable and healthy generation.”

“I AM ESPECIALLY INTERESTED IN FINDING EFFECTIVE WAYS OF COMMUNICATING AND ENGAGING COMMUNITIES IN HEALTH RESEARCH. THIS WILL ENSURE THAT APPROPRIATE INTERVENTIONS ARE DEVELOPED.”

—PAULINA TINDANA
Out-of-school female adolescents are generally known to experience a dangerous level of sexual and reproductive health risks. Using data collected on 332 randomly selected female adolescents and their parents or guardians in Mushin Market, Lagos, Nigeria, Kofoworola Odeyemi, a University of Lagos lecturer and former Gates Summer Institute participant, is studying their sexual behavior patterns and determinants.

In the study, most of the adolescent girls have expressed a desire to receive sex education from their parents and health workers, yet peers are their main source of information. Study results show the existence of myths and misconceptions concerning sexual intercourse, as well as a lack of knowledge regarding contraception. Most of the adolescents are sexually active, and an exchange of sex for money or gifts occurs commonly. Less than a third of the adolescents used condoms during their last intercourse, and many said that they had been forced to have sex.

Poverty was identified as a major reason for adolescent sexual intercourse. The findings underscore the need for interventions to reduce poverty, enhance life skills and increase adolescents’ awareness of reproductive health issues.

Displaced Youths
In the Kathmandu Valley in Nepal, many vulnerable young people have been forced from their homes as a result of a decade-long conflict. These internally displaced adolescents and youths are now living in a strange environment with few or no social safety nets. In a study to examine the problems and constraints that these adolescents may face in seeking sexual and reproductive health care, Babita Thapa, a former Gates Summer Institute participant who works with Family Planning Association of Nepal, is collaborating with Anand Tamang of Nepal’s Center for Research on Environment, Population and Health Activities. Their study combined quantitative and qualitative methods.
The researchers held 808 structured interviews with individual youth and conducted eight focus group discussions. Two-fifths of the respondents had heard of sexual abuse; of those, 84 percent understood "rape" as sexual abuse. Awareness about STIs was high among boys (88 percent) but lower among girls (64 percent). One in five girls and one in ten boys had faced sexual and reproductive health-related problems in the past year. Only about half (55 percent) of the respondents who had experienced such problems sought advice or treatment, and less than half (46 percent) had visited a government hospital for their most recent SRH problem. Those who did not seek advice or treatment considered their SRH problem "not serious" (56 percent) or were put off by expensive service charges (21 percent), lack of information on treatment sites (11 percent) or shyness in seeking treatment (11 percent).

Attitudes and Behavior
In Uganda, another study is assessing adolescents’ sexual and reproductive health knowledge, attitudes and practices; their use of adolescent-friendly reproductive health services; and the support they receive from the community. Sarah Byakika, another Gates Summer Institute participant and Deputy District Director of Health Services in Jinja, Uganda, collected data from adolescents and parents using qualitative and quantitative methods. The qualitative data analysis indicates that adolescents and parents are knowledgeable about the main SRH problems of adolescents, including unwanted/early pregnancy, infections from unprotected sex and death from abortion. They are also aware of drug abuse, alcoholism, forced marriage, child labor, child abuse and poverty. Contributing factors include polygamy, divorce and early marriage as well as orphanhood, which sends many children to the streets.

While most parents would prefer youths to delay sex until at least 18, many approve of unhindered access to contraceptives and other reproductive health services. A decision to choose or avoid reproductive health services is influenced by adolescents' perception of the causes of disease, the attitudes of health workers and the availability, affordability and confidentiality of services. Finally, local council officials view government policies as too broad to handle the complex reproductive health problems of adolescents, and little or no money has been budgeted for that purpose.

Migrants at Risk
Another study that has looked at vulnerable youth focuses on the unmet sexual and reproductive health needs of unmarried migrant youth in Shanghai, China, with the objective of exploring appropriate interventions. Shuangling Zhao and Ersheng Gao of the Shanghai Institute of Planned Parenthood Research in China and Gates Institute founding director Laurie Schwab Zabin studied the characteristics and daily life of subgroups of unmarried migrants as well as their sexual and reproductive health behaviors.

Most of the unmarried migrants change jobs frequently, working for more than eight hours per day with no social insurance or support. They have few contacts with local residents. Their simple social network is based mainly on kinship and is almost totally confined to other migrants. Most have no long-range career plans.

Premarital sexual practice is common and generally unprotected, especially at sexual initiation. Youth lack adequate knowledge of contraception and use ineffective (natural) methods, including rhythm, washing and douching after intercourse. Compared with local residents, unmarried female migrants are more likely to engage in commercial sex, often without condoms. Unmarried migrants are at high risk for sexually transmitted diseases, unwanted pregnancies and abortion. Fear of embarrassment and lack of money are major barriers to seeking reproductive health services, putting this “floating population” at risk.
Interesting lives tend to be full of unintended consequences. The life and career of Adesegun Fatusi, MD, MPH, is a case in point. For one thing, it is no small miracle that he emerged relatively unscathed from the turbulent suburban streets of Nigeria’s mega-city, Lagos. And he might have reacted differently to the widespread dysfunction he witnessed in health care. But he negotiated the twists and turns skillfully, finally arriving at a prestigious position in the world of public health.

Fatusi is a faculty member of Obafemi Awolowo University (OAU) in Ile-Ife, Nigeria, and head of its Department of Community Health. He is physician-in-charge of the Urban Comprehensive Health Centre in the University’s teaching hospital and is project director of an organization dedicated to promoting the reproductive health of campus-based youth. He chairs the National Adolescent Health Working Group, which advises Nigeria’s Federal Ministry of Health, and he has other credentials too numerous to mention. He does not take his responsibilities lightly or his good fortune for granted.

After seeing gentle physicians “touch lives positively,” Fatusi decided to be a doctor—but he did not intend to practice in the field of public health. He was choosing between surgery and an obstetrics-gynecology career when, in final medical school examinations, he unexpectedly received his only distinction in community health.

“The events at my final examination set me off on a search, intellectually and spiritually, to understand the purpose for my professional future,” he says. “I realized that of all the medical disciplines, public health holds the greatest potential to impact the health of the greatest number of people. While as an obstetrician and gynecologist I can help save the lives of a few rural women who may be lucky enough to get to my clinic alive, I can save many more women by appropriate public health interventions. For the same amount of money needed to save a hundred girls who would come to my ward with severe complications of unsafe abortion, I can possibly save ten times that number by preventing unwanted pregnancies and other reproductive health problems through effective community-based adolescent health programs.”
Helping the Young Avoid Risk

Fatusi quickly narrowed his focus. "The issue of young people's health and development is not just a research interest or an academic pursuit for me," says Fatusi. "It is a life passion. Parents were not engaging their teenagers in discussion about sexual issues, and there were no programs in most schools to educate them. Health workers showed little interest. Young people were largely stumbling through life, and not surprisingly, many fell by the wayside. Others like me survived the challenges by mere chance."

Determined to lessen health risks for youth, he started a peer education group for university students and established special services for young people at the local health center. His research is also related to youth. "Reproductive health marks an important entry point into working with young people," he observes, "particularly in our environment where other risky behaviors—such as substance abuse, vehicular accidents and suicides—are at a comparatively low level."

In one recent Gates Institute–supported research study, Fatusi collaborated with Gates Scholar Wenjuan Wang to look at the relationship between age of sexual debut and self-reported STIs among Nigerian men aged 15 to 24. "Early sexual initiators were found to have a higher prevalence of risky sexual behavior," notes Fatusi. "Therefore, young adult males with a history of early sexual debut comprise a key group for the introduction of STI prevention." In addition, he is convinced of the importance of initiating measures among young men that would delay sexual debut and avoid multiple partners.

Putting Findings in Context

"My recent research has thrown up some interesting findings," Fatusi says. "National surveys in Nigeria, for example, have shown a disparity in sexual behavior between the more conservative North and the more educated South, with a higher proportion of adolescent females in the North engaging in sex. My work with Professor Robert Blum [chair of the Department of Population, Family and Reproductive Health] showed that the picture is confounded by marital status. By disentangling the early marriage factor, we actually found a lower prevalence of premarital sex in the North. We're getting a clearer picture of the psycho-socio-environmental factors in adolescent risky sexual behavior, which provide fresh angles for effective interventions."

Fatusi welcomes new challenges, and he is constantly adding more partners to his university's health network. Eventually, he would like to build partnerships so extensive that they will create "a public health institution without walls." That, of course, will be completely intentional.

"AS I REFLECTED ON MY EXPERIENCES, THE POSSIBILITY OF WORKING WITH YOUNG PEOPLE, WALKING BY THEIR SIDES AND HELPING THEM NEGOTIATE THROUGH THE DIFFICULT BENDS OF LIFE, BECAME IRRESISTIBLE."

—ADESEgun FATUSI
For each maternal death, 20 women experience serious pregnancy-related complications. Fistula, the most debilitating and devastating of maternal morbidities, is directly caused by prolonged and obstructed labor. In developing countries, the condition leads almost invariably to fetal death—in addition to maternal harm. If a woman survives the ordeal of difficult labor and is left with an obstetric fistula, she experiences constant leakage of urine and/or feces. No longer able to fulfill her societal roles of wife and mother, her life is changed forever. She is often deserted by her husband and stigmatized by society.

Fistula is preventable and treatable—and it was virtually eliminated a century ago in developed countries through improved, accessible obstetric care. Yet millions of women in developing countries continue to suffer from this dreadful condition, frequently because they marry early and start to bear children before they are physiologically ready.

The Gates Institute brings to the forefront the reproductive health needs of youth, especially in relation to contraceptive use, pregnancy and child-bearing. In July 2005, the Institute brought health professionals together for an international meeting in Baltimore titled “Prevention and Treatment of Obstetric Fistula: Identifying Research Needs and Public Health Priorities.” More than 70 clinicians and public health experts from the United States, Canada, United Kingdom, Africa, Asia and Latin America presented papers on public health and clinical aspects of fistula, and they discussed ways to address ongoing concerns.

In November 2007, *International Journal of Gynecology and Obstetrics* published a supplement that included 28 selected articles from the meeting. Assistant professors Saifuddin Ahmed, PhD, and Cindy Stanton, PhD, MPH, both of JHSPH, and associate professor René Genadry, MD, of the Johns Hopkins School of Medicine, edited the supplement. Based on the research, the editors called for standards in fistula nomenclature and definitions; classification and staging; and data collection instruments. They seek more information on the advantages of long-term follow-up after surgical repair. In addition, they recommend research to guide the design of fistula prevention programs at all levels.
Managing Pregnancy

Ambivalence continues to swirl around contraception and abortion, and many social and personal factors contribute to views on acceptability of each. Women and men around the world are often confounded in their decisions regarding methods of birth control. Their attitudes and behaviors are shaped by social context and cultural definitions of responsible sexual and reproductive behavior, largely filtered through gender roles. Their decisions are also strongly influenced by their partners, parents and families, whether directly through interaction or indirectly through normative expectations. Understanding the importance of social and personal influences on sexual and reproductive behaviors builds knowledge necessary for healthy pregnancies.

In 2006, the Gates Institute commissioned a multicountry research study on contraception and abortion called Managing Unplanned Pregnancies in Five Countries: Female and Male Perspectives on Contraception and Abortion Decisions. Our collaborators included the Guttmacher Institute in the United States, the Population Council in Pakistan, Cayetano Heredia University in Peru, El Colegio in Mexico and OAU in Nigeria.

Several key questions engaged the study team: Why are abortion rates as high as they are in an environment of widespread access to modern contraceptives? How is pregnancy perceived and managed pre- and postconception? Are contraception and abortion options viewed differently or in related terms? Above all, how do women’s and men’s perspectives differ?

The study group sought insights from the qualitative research phase and now recommends further investigation in a quantitative phase. Researchers particularly sought insights that could inform reproductive health care programs in participating countries. The following are findings from the qualitative phase:

- Contraceptive failure (accidental pregnancy) occurred frequently, with many voluntary terminations.
- In three settings (U.S., Peru and Mexico), women and their partners sometimes negotiated responsibility for contraceptive protection at the start of the relationship. Many men were aware of their partners’ menstrual cycles and safe days. In Nigeria and Pakistan, husbands/partners played a key role in determining the outcome of an unintended pregnancy.
- Very limited measurement of abortion stigma exists, yet it may be the most important factor preventing personal disclosure and, thus, accurate measurement of abortion behavior.

Although most interviewees, especially in focus groups, condemned repeat abortion and supported postabortion contraception, whether they were then able to use contraceptive use effectively was unclear. The perceived benefits of contraceptive use appeared to decline with the time elapsed since the last abortion.
Without question, Gates Scholars are exceptional public health professionals. Their achievements are noteworthy, but their selection also rests on something less tangible—their potential to make even greater contributions as they advance in the field. Around the world, Gates Scholars are conducting research that illuminates important issues.

**China: Implications of Rapid Social Change**

"For the last two decades, as China has been emerging as an international superpower, we have witnessed unprecedented socioeconomic development," says Gates Scholar Jianhua Yang, PhD. "Young people have become more open to new ideas and lifestyles, and adolescents face increasing risk from premarital sex and abortion." Yang’s dissertation research found that both rural and urban high school students have little sexual knowledge, and they are ill-prepared to protect themselves.

"Adolescents are facing tremendous difficulties in making informed decisions regarding their sexuality," he says. "Schools and families play weak roles in determining students’ sexual knowledge and attitudes. Peers tend to be the most important source for such information. My findings have profound implications for adolescent reproductive health interventions in China."

Yang, who works in the Beijing office of PATH (Program of Appropriate Technology in Health), is involved as principal investigator or manager for several ongoing research projects. "I want to improve adolescents’ awareness and capacity for self-protection from the consequences of unprotected sex in an HIV era," he says.

**India: Assessing the Effectiveness of Interview Methods**

"Sexuality and sexual relationships are still circumscribed by strict social norms in India," says Jaya, DrPH, who received a Gates Institute dissertation grant and now works with the Public Health Foundation of India. "I wanted to understand the pathways through which adolescents acquire knowledge, develop attitudes and engage in behaviors related to their sexual and reproductive health."

For her dissertation research, Jaya conducted a methodological experiment among unmarried urban adolescents in Delhi to assess reporting techniques. "I implemented a community-based randomized trial—enrolling 583 boys and 475 girls aged 15 to 19—to compare three interview methods: face-to-face interviews, Audio Computer Assisted Self Interviews (ACASI) and interactive interviews," she says.
Her findings were not anticipated. “Though computer-based methodologies are encouraged to increase honest reporting of sensitive behaviors,” she notes, “my findings show that in economically disadvantaged, low-literacy settings, young people are more likely to report sexual behaviors and experiences in culturally specific interactive interviews. In addition, ACASI did not uniformly lead to higher reporting. Girls, in particular, reported sexual behaviors more often in face-to-face interviews. Computer-based methodologies cannot be assumed to be the gold standard across all settings.”

**Uganda: Troubling Questions about Risky Behaviors**

Uganda's battle against HIV/AIDS is recognized as a public health triumph, but recent trends indicate that the "miracle" may be fading. A Gates Scholar from Nigeria, Chizoba Wonodi, is dissecting the dynamics. "Experts debate which of Uganda's ABC components—Abstinence, Be faithful and Condom use—should take credit for the dramatic decrease in HIV prevalence in the late '90s," says Wonodi. "Most agree that the epidemic's decline was accompanied by positive sexual behavior changes on all fronts. Recent data, however, suggest that some high-risk behavior may be on the rise again."

Working with the Rakai Health Sciences Program, Wonodi is studying HIV risk exposure among adolescent and adult men in Rakai by examining the frequency of unprotected sex acts with a potentially high-risk partner over 12 years. "This is a novel approach to evaluating HIV risk behavior," she says. "The Rakai team has observed unique trends, where protective behavior, such as condom use, is rising—but risk behavior, such as sex with multiple partners, is also rising."

Wonodi wants her work to help guide policy and funding debates. "If we are to beat the HIV/AIDS epidemic," she adds, "we must succeed with young people. If we can raise a generation of HIV-free adolescents, we can deliver a future without the disease."

**Uganda: The Vulnerability of Orphans**

Doctoral student Esther Kaggwa is also conducting research related to HIV/AIDS, but her focus is on the 13 percent of children under the age of 18 in her native Uganda who have lost one or both parents to AIDS. Her study, funded by the Gates Institute, centers on the reproductive risks of orphans and other vulnerable adolescents. "Orphans are at a high risk for sexual exploitation,” Kaggwa observes, “and poverty, discrimination, psychological distress and other adverse circumstances increase the likelihood of their making poor choices. My research, which includes more than 1,200 secondary school students, explores differences in sexual experiences—such as age at first sex, multiple partners and use of contraceptives—between orphans and nonorphans in Mukono township. Ultimately, I hope to understand which aspects of orphanhood are most likely to increase sexual risk."
The Gates Institute has established partnerships with nine academic institutions in Egypt, Ethiopia, Ghana, Jamaica, Malawi, Nigeria and Pakistan, where it works toward capacity strengthening in four primary areas—curriculum development, actionable research, teaching infrastructure and program practice.

**Egypt**

During 2007, the Department of Public Health and Community Medicine at Assiut University conducted five training workshops intended to serve capacity building in reproductive health research and services. One of the workshops was organized with the Population Council—WANA, Egypt Office, and is now included in the Department’s postgraduate training. Another workshop, conducted in March 2007, offered two courses in health service delivery and cost analysis, the second of which was taught by the Institute’s David Bishai, associate professor in PFRH, as well as a third workshop on quality improvement. The latter two workshops, which focused on improved reproductive health service delivery, were directed at primary health care physicians.

Three Assiut University faculty members received grants to conduct research in different areas of reproductive health, including domestic violence, reproductive health knowledge among secondary and technical students, and effectiveness of family planning services delivery by mobile clinics. Three MPH students were awarded Mahmoud Fathalla Scholarships, named in honor of the internationally distinguished faculty physician, researcher and reproductive health advocate. A new computer lab with Internet access was established in the Department for use by the postgraduate students.
**Ethiopia**

In October 2007, the **Department of Community Health** at **Addis Ababa University** (AAU) became the University’s **School of Public Health**, comprising four academic departments, one of which is the **Department of Reproductive and Family Health**. The transformation of the Department to a School resulted from the expansion of programs and enrollment since 2003, when the Department initiated its collaboration with the Gates Institute. In 2007, the Department graduated 15 MPH-track reproductive health students, and it admitted 13 new students into that same program.

Through this partnership, 17 AAU faculty members have updated their skills by auditing relevant JHSPH courses in Baltimore and updating their research skills. Under the mentorship of a Johns Hopkins faculty member, Damen Haile Mariam, PhD, spent the summer of 2007 at JHSPH furthering his research interest in health policy, health economics and financing as they relate to SRH.

In January 2007, the Department collaborated with Addis Continental Institute in Public Health to organize a two-week course on Reproductive Health and Development. The course replicated the content of a Gates Summer Institute course and attracted 33 participants from academia, from governments and from nongovernmental organizations, at both federal and regional levels. The Gates Institute sponsored Johns Hopkins faculty to co-instruct in the workshop.

In August 2007, two of the Department’s faculty participated in a “Child Health in Africa” Curriculum Workshop, held at the University of Ibadan, Nigeria, and sponsored by the Gates Institute.

In March 2008, the Department will complete the first five-year phase of its Gates Institute grant. In anticipation of this milestone, a three-member evaluation team visited AAU in December 2007, to assess the School’s five-year partnership program’s achievements. The team’s report has recommended inviting a renewal proposal.

**Ghana**

In February 2007 (retroactive to August 2006), the **School of Public Health** at the **University of Ghana**, Legon was approved as a Faculty within the College of Health Sciences. The new Faculty (still referred to as the School of Public Health) is composed of six departments, one of which is the **Department of Population, Family and Reproductive Health** (PFRH), headed by Kofi Asante, MD, MPH. Isabella Quakyi, PhD, the School’s director, was accorded dean status. Although she has since officially stepped down from the deanship, she continues to lead the Gates partnership program there.

Also in February, the School of Public Health, in collaboration with **Kwame Nkrumah University of Science and Technology** (KNUST), organized a one-week course on Adolescent Sexual and Reproductive Health (ASRH) in Akosombo, Ghana. The 35 workshop participants, including two from Nigeria, were composed of academicians, health program managers and policymakers. Robert Blum, professor in PFRH at JHSPH, Adesegun Fatusi (OAU, Nigeria), Sally Ohene, Phyllis Antwi, MPH, and Rejoice Nutakor served as resource persons.

Among other relevant activities this year, the School organized a second workshop on "Strategic Leadership and Management," attended by 49 participants, mainly graduate public health students. The School conducted two research projects on family planning and immunization at its new site at Ga East District in Ghana. School faculty published 11 articles and monographs during the year. Two new full-time and two part-time faculty increased the PFRH department’s faculty. Nine students graduated in 2007 in the MPH-reproductive health track, while a total of 16 new students were admitted.

The construction of the PFRH department’s building is complete and classes are held in it. The School also initiated and completed the installation of a VSAT platform at Nkwanta District Health Service through a donation by the **Taiwan Department of Health** to enhance field research and training in reproductive health. The PFRH department was able to leverage extra funding, mostly from a World Bank-initiated Teaching and Learning Innovation Fund.

A total of $393,728 in external grant funding has been leveraged this year.

The **School of Medical Sciences** at KNUST has added two more faculty with reproductive health interests to its Community Health Department: Agatha Bonney, MPH, seconded by the Ghana Health Service (GHS), and Emmanuel Nakua, a London School of Hygiene and Tropical Medicine–trained biostatistician. One of the four faculty recipients of seed research grants completed his study on “The Effects of Local Aphrodisiacs on Male Sexual Function as well as their Hepatotoxic and Nephrotoxic Effects,” the results of which have been published in the KNUST journal. Two other reproductive health-related articles were published by faculty during the year. Eighteen students have graduated from the MPH-reproductive health track program in 2007 and another 20 new students were admitted. Two KNUST faculty members audited courses in population and reproductive health (sponsored by the School and the University of Ghana) at JHSPH this year.
Jamaica
Under a 2006 planning grant and in collaboration with Gates Institute–affiliated faculty, the University of West Indies in Jamaica has developed core graduate courses in reproductive health for distance education and Web-based access by Caribbean institutions; upgraded faculty skills and provided graduate training in population analysis, social research and reproductive health; and initiated collaborative research to expand knowledge of the factors shaping adolescent reproductive health behavior. This latter effort has provided a base for institutional strengthening by establishing a campus-based network of professionals trained in reproductive health. The network includes faculty in the Fertility Management Unit within the Department of Obstetrics and Gynaecology, the School of Nursing, the Department of Community Health and Psychiatry, the Department of Sociology, Psychology and Social Work, and the Caribbean Institute of Media and Communication. In order to facilitate access by students in a wide range of programs, including existing and proposed Masters-level programs in population, health, communication and behavior change, the five new graduate courses will be offered in 2008 through the University School for Graduate Studies and Research.

Malawi
The Center for Reproductive Health at the University of Malawi launched a number of research studies in 2007, including Obstetric Fistula in Malawi; Male Sexual and Reproductive Health Needs in Malawi; and Auditing Life Events Affecting Maternal Health in Malawi. During the summer and fall of 2007, the Center hosted two Gates Institute interns, Marissa Pine and Deborah Sitrin, both of whom are PFRH masters’ students at JHSPH. While Pine assisted with analysis of the obstetric fistula data, Sitrin assisted with analysis of the male reproductive health data. The study reports are being finalized in early 2008 and are being rendered for journal publication. Auditing Life Events is a longitudinal study that records lifetime events of female cohorts from birth to death with the goal of collecting data that will help policymakers to initiate measures to reduce maternal and neonatal mortality and morbidity. The Center for Reproductive Health funded the pretesting of the tools for this study in 2007. Center-affiliated faculty and staff have published two journal articles in 2007, while four other articles are in press.

The Center continues to collaborate with the Ministry of Health by conducting in-service training for their staff. The Center also provides funding support to six MPH students and 10 undergraduate medical students who all receive instruction in core reproductive health matters. Networking and advocacy continued through strengthened collaboration with other organizations, including Christian Hospital Association of Malawi (CHAM), University of Pennsylvania, Columbia University, the Finnish Ministry of Foreign Affairs, JPHIEGO, World Health Organization (WHO) Geneva, and WHO Malawi. The Center also organized a public lecture on menopause, drawing more than 100 attendees.

In May 2007, the Center director, Agnes Chimbiri, PhD, resigned, and Frank Taulo, MPH, now serves as acting director. Linda Kalilani, PhD, MPH, was appointed deputy director.

The Center completed the first five-year phase of Gates Institute support in December 2007. In anticipation of this milestone, a three-person evaluation team assessed the Center’s achievements over those five years, and the team’s report has recommended inviting a renewal proposal from the Center.

Nigeria
The Department of Community Health at OAU at Ile-Ife accomplished a number of reproductive health training and research benchmarks this year. It held its third academic retreat, reviewed the MPH curricula in the population and reproductive health track, and reviewed the evaluation of teaching activities. It organized four short-term training (certificate) courses on data collection and analysis, enhanced maternal care services, expanded life-saving skills for doctors and implemented
nutritional programs at the primary health care level, with a total of 124 participants. The department admitted 32 students into the MPH-reproductive health track program, 25 of whom are in the Executive MPH program. Five MPH students received scholarship awards. Two faculty members—Peju Esimai, MBChB, and Opeyemi Abiola—audited courses at JHSPH. Abiola also worked on her PhD proposal to examine fertility intentions in relation to HIV risk and infection, under the mentorship of Stan Becker, PhD, professor in PFRH at JHSPH. Adesegun Fatusi spent three months at the JHSPH to complete a number of adolescent sexual and reproductive health studies. Statistician Sola Asa attended a Center for Adolescent Health workshop in Baltimore. Seven faculty members were supported to attend the child health module workshop in Ibadan. Finally, the faculty published a total of 31 reproductive health-related articles and monographs in 2007.

In August 2007, the Center for Population and Reproductive Health (CPRH) at University of Ibadan hosted “Child Health in Africa: Curriculum Development Workshop,” which was attended by local faculty, and by faculty from Johns Hopkins and partner institutions in Ethiopia and Ghana.

The CPRH, in collaboration with the University of California, San Francisco, conducted a trial of the Non-pneumatic Anti-shock Garment (NASG) to reduce maternal mortality and morbidity from obstetric hemorrhage. The study results indicated a significant positive effect. This is a landmark contribution by CPRH toward global efforts to reduce maternal mortality and morbidity in developing countries. The trial, sponsored by the MacArthur Foundation, has led the Foundation to award a new $11 million grant to Pathfinder International to scale up delivery of NASGs to Nigeria and India. The Nigerian government, through the Federal Ministry of Health, has incorporated the NASG as an intervention for safe motherhood. The CPRH director will serve as a technical advisor to Pathfinder International’s scale up in Nigeria.

The CPRH awarded reproductive health research grants to seven faculty. One faculty member, Oladimeji Oladepo, spent time as a visiting scholar with the Gates Institute, and another, Eme Owoaje, PhD, attended a Center for Adolescent Health workshop on the homeless population in Baltimore. A total of 31 articles and monographs were published by CPRH-affiliated faculty during 2007, and 53 MPH-reproductive health track students were admitted.

Pakistan

A new partner to the academic network in 2007 is the Health Services Academy of the Pakistani government’s Ministry of Health. Directed by Shakila Zaman, a renowned pediatric epidemiologist, HSA offers the premier MPH program in Pakistan. Gates Institute support has enabled three new faculty with reproductive health interests to be appointed and reproductive health course offerings to be strengthened. In November, Amy Tsui, director of the Gates Institute, co-instructed the core MPH course on reproductive health with two of the new faculty, Zubia Mumtaz and Saima Hamid, complementing both the Institute’s collaborative efforts with the Population Council to support a Small Scale Research Grants program for promising young scientists and also with the Ministry of Population Welfare to provide leadership training.
INDIVIDUAL DEVELOPMENT

A critical component of promoting reproductive health is the support and development of individual leaders committed to research, teaching and advocacy. The Institute’s support of dedicated individuals takes many forms: joint curriculum development, the Summer Institute for Reproductive Health and Development, Gates Scholarships, student internship awards, Gates Dissertation grants, bridge research grants for repatriating Gates Scholars and conference travel awards.

Curriculum Development for Child Health in Africa

Pediatrician Bernard Guyer, MD, MPH, professor, former chair of the JHSPH Maternal and Child Health Department, and member of the Gates Institute Executive Committee, noticed that many African public health and medical school curricula on child health were heavily clinically focused and often taught by pediatricians without public health backgrounds. Guyer and postdoctoral fellow Idoko Salifu, MPH, jointly drafted a modular curriculum that in July 2007 was vetted and enriched by faculty who teach child health courses at Gates Institute partner institutions in Ghana, Nigeria and Ethiopia. In August, the upgraded child health modules were shared at a workshop hosted and organized by the University of Ibadan. Participants numbered more than 30 and included faculty from institutions in Nigeria, Ethiopia and Ghana, and senior staff from the Nigerian federal medical centers and teaching hospitals who work in the areas of child health. The curriculum was further enriched and was provided to the participants for adaptation in their own teaching and applications. Several participants hope that the curriculum, now widely owned by the contributing participants, can continue to evolve in content and be coordinated through a secretariat.

Summer Institute

The Gates Institute held its fifth annual Summer Institute in Reproductive Health and Development from June 3 to 15, 2007, with 28 participants from 13 countries. The course attracted key reproductive health researchers, programmers and policymakers who hailed from nongovernmental organizations, academia, research centers and governments. The course objective was to enhance analytical skills through critical review of published research and through the application of analytic software to available data from surveys and cross-national indicator databases.
Course instruction was led by Michelle Hindin, PhD, MHS, associate professor in PFRH, and by Amy Tsui, with contributing lectures by Gloria Asare, DrPH, MPH, from the Ghana Health Service, and by teaching assistants Ye Mon Myint and Li Liu. The participants contributed considerable expertise.

In 2007, Usha Ram, PhD, a 2006 Summer Institute participant and Reader at the International Institute for Population Sciences in India (IIPS), returned to organize a successful two-week workshop on Reproductive Health and Development. Henry Moseley, MD, MPH, professor in PFRH and a Gates Institute-affiliated faculty member, helped to co-instruct the course. The IIPS has a longstanding research and training collaboration with Michael Koenig, PhD, another Johns Hopkins Bloomberg School PFRH professor who receives Gates Institute support.

Gates Scholars

Four doctoral students continued as Gates Scholars in 2007. Wenjuan Wang (China) is completing her dissertation, “Sexually Transmitted Infections and Risky Sexual Behavior among Chinese Adults.” Ye Mon Myint (Myanmar, also known as Burma) will be examining “Husband-Wife Differences in Reporting Pregnancies and Outcomes among Married Couples in Rural Bangladesh.” Maria Perez-Patron (Mexico) is focusing on “A Life-Course Approach to International Migration: The Importance of Family,” and Chizoba Wonodi’s dissertation focus, as noted in the Uganda profile, is “Deconstructing Trends in Sexual Risk Behavior among Men in Rakai, Uganda, 1994-2006: Implications for HIV control.” All Gates Scholars in residence also are actively involved in various Institute projects, working closely with affiliated faculty.

Internships

The Gates Institute offers three- to six-month internship awards to continuing MHS and doctoral students at JHSPH. Students must locate their internships at partner institutions and be supervised by collaborating colleagues. The arrangement enables reciprocal enrichment of substantive knowledge, analytical skills and cultural understanding. The four students awarded 2007 internships are as follows:

- Marissa Pine and Deborah Sitrin, Center for Reproductive Health, University of Malawi, Blantyre, Malawi, precepted by director Frank Taulo
- Allison Stone, Nkwanta Health Development Center, Nkwanta, Ghana, a field site for the University of Ghana, Accra, precepted by Koku Awoonor-Williams, MPH
- Kirsten Vannice, School of Public Health, University of Ghana, Accra, Ghana, precepted by Isabella Quakyi

Dissertation Research Grants

The Gates Institute enables JHSPH doctoral students from developing countries who are pursuing research on population, family planning and reproductive health to apply for dissertation support. The funds can be applied toward field work, data analysis and writing expenses. In 2007, Esther Kaggwa, a PFRH doctoral student, received a dissertation award to study the role of orphanhood on sexual and reproductive health attitudes and behavior among Ugandan adolescents.

Bridge Grants

To facilitate Gates Scholars’ reentry to their home countries, the Institute offers them the opportunity to apply for two- to three-year bridge grants involving collaboration with Hopkins faculty. In 2006, two bridge grants were awarded to Gates MPH Scholars who graduated in May 2005. Richard Adanu, MBChB, MPH, of the University of Ghana Medical School and School of Public Health, is working with Geoffrey Cundiff, MD; Rob Gutman, MD, of the Johns Hopkins Medical Institutions; and Saifuddin Ahmed, MBBS, PhD, assistant professor in PFRH at JHSPH, to assess the prevalence of pelvic floor dysfunction (PFD) and obstetric injury in the country, as well as to investigate reasons why women do not deliver institutionally. Data analysis is currently underway.

Oladapo Olayemi, PhD, an obstetrician-gynecologist in University of Ibadan’s Obstetrics/Gynecology Department, received a bridge grant to examine possible autoimmune response pathways linking partner cohabitation, early pregnancy loss and hypertension in pregnancy, a condition that accounts for up to 20 percent of maternal deaths in Nigeria. His study involves collaboration with Donna Strobino, PhD, professor in PFRH at JHSPH, and the preliminary analysis indicates that early age at coitarche (first sexual experience) is protective against hypertension in pregnancy.

Conference Travel Award

The Gates Institute invited JHSPH doctoral students with interest and commitment to working in maternal health in developing countries to apply for a travel award to attend “Women Deliver: The 20th Anniversary Conference of the Safe Motherhood Initiative,” which was held in London in October 2007. Four students submitted application essays commenting on the September 2006, Lancet Maternal Survival Supplement. External faculty judged and selected Andreea Creanga, PFRH doctoral student, for the award. Her essay entitled “Promoting Skilled Birth Attendance: Who Should Be Attending?” concludes by advocating the training of midwives and doctors necessary for sustaining health center delivery of intrapartum care and for increasing the quality of maternity care, which would reduce maternal mortality.
POLICY AND PRACTICE

Although training and research in population and reproductive health are two major components of the Gates Institute program, the translation of education and research into policy and practice is equally critical to improving reproductive health of populations. The Institute continues to place strong emphasis on advocacy as a tool for achieving its goals, both by creating forums for meaningful evidence-based exchange, and by participating in partnerships in which policymakers in government or donor circles can take generated knowledge forward.

**The Mexico City Policy/Global Gag Rule: Its Impact on Family Planning and Reproductive Health**

Duff Gillespie, PhD, senior scholar at the Gates Institute and PFRH professor, was invited to testify on the Mexico City Policy before the House Committee on Foreign Affairs on October 31, 2007. The four-hour hearing enabled Committee members to hear about the impact of the Global Gag Rule on the ground in Ghana and Nigeria, and the value of contraception in preventing unintended pregnancies. Gillespie’s statement addressed the failure of the Mexico City Policy’s goal to prevent liberalization of abortion laws as well as the goal of reducing the incidence of abortions in the developing world. He also recommended a bipartisan effort to drastically reduce the number of abortions by providing high quality, voluntary family planning, necessitating a significant increase in U.S. government funding. Under the current administration, the U.S. State Department is requesting lower levels of USAID funding, effecting a significant decline in funding for family planning.

**Country Global Pathways—AdvocacyNigeria**

In 2005, the Gates Institute developed AdvocacyNigeria, a national advocacy initiative, with the goal of building a corps of reproductive health champions that promote reproductive health programs with policymakers and government leaders. In August 2007, the first Country Global Pathways (CGP) Coordination Meeting was held in London. The two-day meeting brought together five advocacy groups from Egypt, Mexico, Brazil, Tanzania and Nigeria to share experiences in their coalition building and advocacy activities.
Hajiya Bilkisu Yusuf, executive director of AdvocacyNigeria, the longest running of the five advocacy groups, shared the group's experience working with high-level government officials. AdvocacyNigeria has now attracted attention at the state level, where smaller advocacy coalitions have begun to emerge. Advocacy plans in seven northern Nigerian states of Bauchi, Kano, Katsina, Kaduna, Sokoto, Jigawa and Borno include provisions for free maternal and child health services, and a commitment for increased funding for reproductive health from national, state and local budgets. With 2007 elections leading to formation of a new federal government, AdvocacyNigeria is focusing its efforts on the upcoming Maternal Health Bill to be presented in October 2008 at the National Assembly.

Policymakers Visiting the Institute
- July. Agyeman Akosa, MBChB, former director general, and Elias Sory, MPH, current director, of the GHS. Akosa was a participant in the 2004 Gates Strategic Leadership course. The visit provided an opportunity for the Gates Institute and other Johns Hopkins programs to share their collaborative activities in health in Ghana.
- September. John Ihebereme, MD, manager of the Emergency Obstetric Care Project in Imo State, Nigeria. Ihebereme was a participant in the 2006 Gates Institute Summer Institute, and he has been overseeing the construction of emergency obstetric care facilities in the state. He extended the invitation of His Excellency, the Executive Governor of Imo State, Nigeria, to the Gates Institute’s director Amy Tsui to attend the launching ceremony integrating family planning into maternity care in the facilities.
- September. Betty McCollum, U.S. Rep, D-Minn. Congresswoman McCollum addressed the JHSPH about “Global Health and Congress,” stating that U.S. politics can be a barrier to improving health globally, particularly reproductive health. As a member of the State Department Foreign Operations Subcommittee and the Labor, Health and Human Services, and Education Subcommittee, which funds the Department of Health and Human Services, including the Centers for Disease Control and Prevention and the National Institutes of Health, she works to increase funding for programs that save lives.
RESEARCH PROJECTS

BURMA-THAILAND BORDER
Building Capacity for the Delivery and Assessment of Adapted Maternal Health Interventions for Internally Displaced Persons in Burma
Cynthia Maung, Mae Tao Clinic, Thailand
Chris Beyrer, Department of Epidemiology, JHSPH
This collaboration with the Mae Tao Clinic in the Burma-Thailand border region establishes a network of six standardized, locally staffed, mobile centers for capacity building and referral care within communities of internally displaced persons. Basic obstetric services and contraception will be provided through backpack health workers and maternity outcomes will be monitored and evaluated.

CHINA
Comparative Study of Different Sex Education and Reproductive Health Counseling/Service Models among Vocational School Students in Shanghai
Xiaowen Tu, Shanghai Institute of Planned Parenthood Research, China
Laurie Schwab Zabin, Department of Population, Family and Reproductive Health, JHSPH
This four-year study of school-based interventions evaluates sex education and reproductive health services at three matched vocational schools. Separate interventions were put in place at two schools, and the third school was a comparison school. The high-intensity intervention involves dissemination of education materials, class discussion, and on-site counseling and service provision, while the low-intensity intervention involves only the dissemination of informational materials and class discussion.

ETHIOPIA
Voluntary HIV Counseling and Testing (VCT) Integrated with Contraceptive Services Study
Tilahun Giday, Pathfinder International/Ethiopia
Aklilu Kidanu, Miz-Hasab Research Center
Duff Gillespie, Heena Brahmbhatt and Heather Bradley, Department of Population, Family and Reproductive Health, JHSPH
This collaboration with Pathfinder International/Ethiopia and the Miz-Hasab Research Center will evaluate whether adding a family planning component to VCT programs fulfills an existing demand for contraception among VCT attendees, including both HIV-positive and HIV-negative individuals. Through a pre- and postintervention survey design, the study will explore VCT clients’ contraceptive use, fertility intentions, unmet contraception needs and barriers to contraceptive use.

GHANA
Community-Based Assessment of Pelvic Floor Dysfunction and Obstetrical Injury in Ghana (Bridge Grant)
Richard Adanu, Gates Scholar Alumnus, University of Ghana
Saifuddin Ahmed, Department of Population, Family and Reproductive Health, JHSPH
Robert Gutman, Department of Gynecology and Obstetrics, Johns Hopkins School of Medicine, Johns Hopkins University
Anyetei Lassey, Department of Gynecology and Obstetrics, University of Ghana Medical School
The primary goals of this study are to determine the magnitude of pelvic floor dysfunction and obstetric injury from poorly managed labors and to identify the reasons why women fail to utilize institutional delivery services in Ghana. The findings from the study will become the basis for addressing modifiable risk factors to prevent obstetric injury and for rehabilitating women suffering from pelvic floor dysfunction secondary to obstetric injury.

INDIA
Strengthening Institutional Capacity for Applied Family Planning/Reproductive Health Research and Training in India
Mari Bhat, Director, International Institute for Population Sciences (IIPS), India
Michael Koenig, Department of Population, Family and Reproductive Health, JHSPH
The objective of this collaboration is to strengthen institutional capacity for applied research and training on family planning and reproductive health issues at the leading demographic research and training center in India. The project supports a coordinated program of applied research, policy dissemination, student and faculty mentoring, and faculty development, which collectively aim to enhance IIPS’s ability to play a central contributing role in applied policy research and program implementation in India.

NIGERIA
Influence of Early Pregnancy Losses, New Paternity and Duration of Cohabitation on Risk of Hypertensive Disorders of Pregnancy in Ibadan, Nigeria (Bridge Grant)
Oladapo Olayemi, Gates Scholar, College of Medicine, University of Ibadan
Donna Strobino, Department of Population, Family and Reproductive Health, JHSPH
This study will test the hypothesis that by increasing the duration of preconception cohabitation, nulliparous women can be protected against pregnancy-induced hypertension. If findings support the hypothesis, then prolonging prepregnancy cohabitation by new couples may have a noncontraceptive benefit, that is, protection against pregnancy-induced hypertension. Such evidence can be used to motivate couples to delay first pregnancies.

PAKISTAN

**Funding Small-Scale Research Projects in Reproductive Health in Pakistan**

Zeba Sathar, Population Council (Islamabad)
Stan Becker, Department of Population, Family and Reproductive Health, JHSPH

This project provides funding for small-scale SRH research projects in Pakistan, where there has been little emphasis on research and evidence-based decision making. This joint program, implemented through a Reproductive Health Research Working Group and organized by the Population Council, will also have the dual aim of building the capacity of junior reproductive health researchers and filling the gaps in existing knowledge in the priority areas of reproductive health. The grant will enable collaboration between more experienced and established researchers who will act as mentors to junior researchers.

MULTICOUNTRY

**Managing Unwanted Pregnancies: The Relationship between Contraception and Abortion**

Fatima Juarez, El Colegio de Mexico (Mexico)
Akin Bankole, Ann Moore and Susheela Singh, Guttmacher Institute (U.S.)
Adekunbi Omideyi, Obafemi Awolowo University (Nigeria)
Nancy Palomino, Universidad Peruana Cayetano Heredia (Peru)
Zeba Sathar, Population Council (Pakistan)
Amy Tsui, Department of Population, Family and Reproductive Health, JHSPH

The objective of this project will be to learn how individuals articulate their decision making around reproductive behavior to gain a better understanding of perceptions and practice of contraception and abortion as means of birth control. This is a pilot study that will form the basis of a full study proposal to be submitted for external funding consideration.

A Study of Sexual and Reproductive Health among Adolescents and Young Adults in Three Asian Cities

Gao Ersheng and Lou Chaohua, Shanghai Institute of Planned Parenthood Research (SIPPR) (Shanghai)
Yi-Li Chuang and Baai-Shyun Hurng, Bureau for Health Promotion (Taipei)
Vinh Nguyen Duc and Nguyen Huu Minh, Ministry of Health and Institute of Sociology (Hanoi)
Laurie Schwab Zabin, Robert Blum and David Bishai, Department of Population, Family and Reproductive Health, JHSPH

This study’s aim is to assess the determinants of sexual behaviors and reproductive health of adolescents and young adults in three Asian cities with Confucian-based cultures—Taiwan, China and Vietnam—and the influences of their societies’ underlying traditions, in addition to social change at the community, family, peer and individual levels.

SMALL GRANTS

**Adolescent Sexual and Reproductive Health**

Angela Akol, Family Health International (Uganda)
Sarah Byakika, District Health Services, Jinja District (Uganda)
Kofo Odeyemi, Department of Community Health, College of Medicine, University of Lagos (Nigeria)
Babitha Thapa, Family Planning Association of Nepal (Nepal)
Paulina Tindana, Navrongo Health Research Centre, Navrongo (Ghana)

Following a competitive, peer-reviewed process, five former Summer Institute participants were awarded grants to conduct research on adolescent reproductive health. The five participants were from four countries—Nigeria, Ghana, Uganda and Nepal. The topics included improving access to quality reproductive health services for young people in Uganda; the effect of SRH education on out-of-school youth working in Nigerian markets; SRH service strategies for displaced adolescents in urban Nepal; and the use of traditional channels for SRH education to reach rural adolescents in Ghana.


**Ahmed S, Genadry R, Stanton C, Lalonde A.** Dead women walking: Neglected millions with obstetric fistula. S1-S3

**Stanton C, Holtz SA, Ahmed S.** Challenges in measuring obstetric fistula. S4-S9

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