NIGERIA AIDS Outlook

AN UPDATE FROM THE AIDS PREVENTION INITIATIVE IN NIGERIA | Fall 2005

THE PLUS IN PMTCT PLUS

APIN Plus is scaling up its prevention-of-mother-to-child-transmission-of-HIV (PMTCT) program to provide treatment for as many as 45,000 pregnant women.

Now providing antiretroviral therapy to eligible mothers and infants are four APIN Plus sites—University College Hospital, Jos University Teaching Hospital, Plateau State Specialist Hospital, and the University of Maiduguri Teaching Hospital—and 19 satellite clinics. Now in its second year, APIN Plus plans to expand to two tertiary sites—Lagos University Teaching Hospital and 68 Military Hospital. To ensure the success of this expansion, APIN staff members and their affiliates are training health care workers, expanding laboratory capacities, and strengthening counseling services.

The approach these experts are taking is known as PMTCT Plus. Some critics have argued that providing HIV-infected women with antiretrovirals only to prevent transmission to their babies fails to take the women themselves into consideration; saving these women's lives should receive equal priority with decreasing transmission to infants. PMTCT Plus calls for a more inclusive approach to the management of care of HIV-infected women, their infants, and their entire

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PHOTO: DOMINIC CHAVEZ

Mission Possible

At first Dr. Sunday Pam refused; he couldn't possibly start a clinic for HIV-infected children. He lacked the staff, the funding, and the time. But even as he was explaining to his department head the pressures on his overburdened neonatology practice, already he knew the practical would yield to the idealistic. Already he knew he would find a way to achieve the impossible.

For years the parents of Dr. Pam's newborn patients had entreated him to care for their infected children. The adults were receiving care at an HIV/AIDS clinic that Professor John Idoko had been running at Jos University Teaching Hospital since 1997; the clinic has since evolved into an APIN Plus clinic. But no organized care services existed for children living with HIV in Jos. Diagnoses were difficult to make and support services were nonexistent.

"To start the clinic, I first enlarged my team by recruiting other pediatricians and nurses," Dr. Pam says. "I had to explain that this new component of our clinic would not be grant supported, and we would be undertaking those extra hours without pay. My colleagues all remained enthusiastic and, with tremendous support from the leadership of Jos University Teaching Hospital, we launched the Pediatric Infectious Diseases Clinic."

Dr. Pam deliberately avoiding using "HIV" or "AIDS" in the clinic's name. "We figured that if we labeled it 'AIDS,'" he says, "parents might keep their children away for fear of stigmatization."

The clinic opened in May 2002 with limited hours. A year later a dedicated full-day clinic was instituted, and more recently Dr. Pam's team supplemented those hours with an additional afternoon to accommodate the expanded patient load. The clinic now has two wings, one for HIV-exposed infant follow-up and another for antiretroviral

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ABOVE: A young girl accompanies her mother to a clinic in Jos that specializes in preventing mother-to-child transmission of HIV.

THE PLUS IN PMTCT PLUS

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families. It is designed to promote wellness and to improve health care for HIV-infected mothers and their families by providing a continuum of services from patient education to nutritional support, prophylaxis for opportunistic infections, and antiretroviral therapy.

"As we expand our programs, it is important to incorporate the PMTCT Plus approach in order to promote the health of the entire family," says Professor Isaac Adewole, provost of the College of Medicine at the University of Ibadan. "PMTCT Plus builds on successful PMTCT programs to create high-quality HIV care. And the approach has the added advantages of prolonging mothers' lives and reducing the burden of orphanhood."

Experience from southern Africa has shown, Professor Adewole adds, that the benefits of PMTCT Plus go far beyond providing antiretrovirals, especially when PMTCT is incorporated into existing maternal and child health services, infant welfare clinics, and immunization programs. Such a broad-based approach helps motivate health care providers, improve AIDS awareness, involve male partners in HIV prevention efforts, and facilitate clients' access to HIV/AIDS care and support.

To meet these challenges, APIN Plus is now focused on training counselors, nurses, and doctors in such areas as informed consent, advocacy in communities, and antiretroviral therapy protocols. ■

PHOTO: DOMINIC CHAVEZ

Ethics in the Delivery Room

MARY, A 26-YEAR-OLD LIVING WITH HIV, has been visiting the prenatal clinic since her fifth month of pregnancy. When her obstetrician tells her about the success of nevirapine in preventing transmission of the virus to babies, Mary agrees to enroll in a study on the rate of antiretroviral resistance among HIV-infected pregnant women.

At nine months, labor pains send Mary to the clinic, where she swallows a dose of nevirapine and delivers a baby boy. Two days later, though, she decides to take her infant home; she has changed her mind about letting him receive his follow-up dose of nevirapine. After all, he looks healthy, and her uncle, a traditional healer, has advised her not to allow it. Mary tells her obstetrician not to administer the syrup and insists on going home. How should the doctor respond?

A range of HIV experts debated this ethical dilemma, as well as several others, at the Harvard PEPFAR and APIN Plus PMTCT Plus and Pediatric Care Conference, held in Abuja in late spring. In this case, they agreed, the obstetrician must respect Mary's decision to withdraw her consent for participating in the study. "The physician could certainly restate the potential benefit of nevirapine for the baby," says Professor Phyllis Kanki, director of APIN and principal investigator of the Harvard PEPFAR program. "But the patient must be granted autonomy in making the decision on behalf of her baby."

The key ethical principles guiding such studies, Kanki adds, are respect for persons, beneficence, and justice. The first principle endows research subjects with autonomy in decision-making; those considered to be vulnerable—especially women in labor, fetuses, and neonates—carry extra protections. Beneficence calls for the good to be maximized and the potential harm from research to subjects to be minimized. And justice ensures more than fairness to the individuals, classes, and communities involved; it also demands that the benefits of research accrue to those bearing its burdens.

Professor Kanki emphasized as well the critical importance of informed consent, which must be voluntary and free from pressure or coercion. In one scenario the participants explored in depth, for example, Charity, a young woman not previously enrolled in the study, was deemed incapable of providing voluntary consent because her labor pains were distracting her from fully absorbing the researchers' explanation of the study's purpose.

Sessions leaders then began adding variables to Charity's situation to explore issues around legally authorized representatives. The leaders painted other hypothetical pictures as well, such as one for an uninfected woman who mistakenly receives a positive HIV test and another for a pregnant woman whose best friend delivers an HIV-infected baby despite receiving a dose of nevirapine.

"Issues surrounding the delivery of babies to HIV-infected mothers can quickly become complicated," says Professor Kanki, "and health care workers need to be well versed in AIDS-related ethics to be able to respond appropriately when they confront the unexpected." ■

ABOVE: An obstetrician delivers the baby of a young HIV-infected mother in Jos.

When Is Breast Best?

A MOTHER WITH HIV GIVES BIRTH TO A baby girl, who survives labor and delivery without becoming infected, only to contract the virus later while nursing. It's a heartbreak those in the HIV field work hard to prevent.

Yet in many African nations the issue is more complex than it might seem at first glance. "Breastfeeding is the commonest source of heat at prevention-of-mother-to-child-transmission-of-HIV meetings," said Professor Isaac Adewole, provost of the College of Medicine at the University of Ibadan. "At odds tend to be obstetricians and pediatricians, advocates for HIV prevention and advocates for child survival, and competing numbers, largely in sub-Saharan Africa—300,000 transmissions of HIV through breastfeeding, compared with 1.5 million deaths among infants deprived of life-sustaining breast milk."

Professor Adewole made his remarks last spring at the Harvard PEPFAR and APIN Plus PMTCT Plus and Pediatric Care Conference in Abuja. There participants reviewed HIV transmission studies that show that, in the absence of specific interventions, the rate of perinatal transmission of HIV in sub-Saharan Africa ranges from 25 to 40 percent.

Those interventions are key. Mother-to-child transmission rates in the developed world have significantly fallen, largely because of the availability and widespread use of effective antiretroviral treatment protocols, elective Caesarean delivery, and avoidance of breastfeeding. By contrast, sub-Saharan Africa—with its elevated HIV infection rates, high fertility rates, tradition of prolonged breastfeeding, and delays in introducing and scaling up prevention-of-mother-to-child-transmission initiatives—now accounts for more than 90 percent of the world's HIV-infected infants.

"We estimate that 30 to 35 percent of mother-to-child transmission of HIV in sub-Saharan Africa occurs through breastfeeding," said Professor Adewole. "It is therefore important that, even in settings where antiretroviral treatment is not available, HIV-infected pregnant women be counseled about all available infant-feeding options."

Complicating the issue, Professor Adewole added, is the near universality of breastfeeding in Nigeria. Deviation from the practice is not only frowned upon, but it can also raise suspicion among in-laws and family members. A mother not breastfeeding her baby may suffer stigmatization; some women even need the consent of their husbands or in-laws before they can choose formula feeding. In Professor Adewole's experience, many women who opt for breast milk substitutes during prenatal counseling sessions often later change their course to please family members. The cost of breast milk substitutes also poses a significant barrier.

Formula feeding can carry its own risks. Some parts of Nigeria suffer from poor sanitation, a lack of proper energy sources for cooking, and limited access to clean water. Under those conditions, replacement feeding is often associated with a high incidence of diarrhea, respiratory diseases, and malnutrition, all of which increase morbidity and mortality among infants. The World Health Organization recommends that when replacement feeding is acceptable, feasible, affordable, sustainable, and safe, HIV-infected mothers should avoid breastfeeding; otherwise, mothers should choose exclusive breastfeeding for the first months of their infants' lives.

Some researchers have suggested that, when replacement feeding is problematic, the best scenario would be to combine several weeks or months of postnatal antiretroviral prophylaxis of HIV-exposed infants with weaning at about six months. "This suggestion, along with the administration of triple antiretrovirals to mothers," Professor Adewole said, "may be the best strategy for the foreseeable future." ■

ABOVE: A mother watches her newborn sleeping at an APIN-sponsored clinic in Jos that specializes in preventing mother-to-child transmission of HIV.

PHOTO: DOMINIC CHAVEZ

APIN and APIN Plus—the Nigerian component of the Harvard PEPFAR program—have undertaken a number of initiatives in Borno State, the most recent to be added to APIN's target states.

In its efforts to prevent mother-to-child transmission of HIV, for example, the APIN Plus program at the University of Maiduguri Teaching Hospital (UMTH) offers voluntary counseling and testing in its antenatal clinic, a modified obstetrics practice, a nevirapine dose to both women in labor and their newborns, free breast milk substitutes to new mothers, and antiretroviral therapy for pregnant women.

Also through APIN Plus, UMTH runs an antiretroviral therapy clinic that provides drugs to more than 2,300 patients. The clinic, led by Drs. Wadzani Gaschau and Musa Garbati, is already experiencing extensive overcrowding in its waiting and examination rooms, which is constraining staff efforts to add new patients. Clinic staff are also seeking to promote their patients' adherence to antiretrovirals through special counseling sessions and follow-up visits.

In addition, APIN personnel are helping to scale up four new sites in Borno—the Maiduguri State Specialist Hospital and the general hospitals in Bama, Biu, and Mungono.

"With HIV infection rates in Borno State estimated to be as high as 10 percent," says Dr. Gaschau, "we feel great urgency in launching and expanding these programs." ■

Mission Possible

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therapy. Nearly 400 babies are registered in the first wing and more than 200 HIV-infected children are enrolled in the second.

"When we first began seeing children with HIV, our biggest challenge was in providing them with antiretrovirals," Dr. Pam says. "The federal program subsidized the drugs for adults, who would pay 1,000 naira—about eight U.S. dollars—a month. But even when parents could obtain antiretrovirals for their children, the drugs cost as much as a hundred dollars a month."

Such a high expense can compromise children's adherence to the antiretroviral regimen—and allow viral resistance to develop, Dr. Pam adds. "Some parents, in the hope of getting price breaks, went to pharmaceutical representatives directly and stopped bringing their children to our clinic. I suspect many of those children already have developed resistance, and I know many have died."

MIRACLE WORKERS: Dr. Sunday Pam (far right), head of the Pediatric Infectious Diseases Clinic at Jos University Teaching Hospital, stands before the clinic with other members of his team.

PHOTO: COURTESY OF SUNDAY PAM

Dr. Pam remains haunted by the children whom he could not save when the program first began. He recalls in particular one eight-year-old girl with a beautiful smile, "Dije," who had contracted the virus several years earlier from a blood transfusion. She had developed not only the characteristic lesions of Kaposi's sarcoma, but symptoms of tuberculosis as well. With her $CD4^+$ count plummeting, Dije needed immediate antiretroviral therapy. But her mother could not afford the drugs.

"The child was deteriorating daily, and we desperately tried everything we could to get her the antiretrovirals," Dr. Pam recalls. "Finally, her mother was able to raise some money and buy the drugs. But this shy, intelligent girl received the medication for only two weeks before she died. We all felt devastated."

The situation has since improved dramatically, Dr. Pam says. "One major change in the picture is that the federal government has begun subsidizing antiretrovirals for children. And now, through the Pediatric Clinical Care Program of APIN Plus, which started this fall, the government is providing the drugs and APIN is providing the care and monitoring."

Dr. Pam can now take inspiration from the transformation of his patients. Eight-year-old "Tik" began antiretroviral therapy in the spring, and within two months her viral load had dropped to an undetectable level. "I was so excited," Dr. Pam says, "because it confirmed that achieving undetectable viral loads in Nigerian kids was indeed possible. This is a good sign of adherence to therapy and it gives credibility to the work of our team." ■

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