June 2003 VOL. 9, NO. 6

IAPAC

MONTHLY

The Western Hemisphere tentatively faces its AIDS problem

June 2003

IAPAC MONTHLY

Volume 9, Number 6

126

The Western Hemisphere tentatively faces its AIDS problem

David Gilden

Latin American HIV cases are inching toward the 2 million mark. Caribbean countries have a 2.5 percent HIV prevalence rate—second only to sub-Saharan Africa's 9 percent. As increasing international attention focuses on the African continent, Foro 2003 explored how best to cope with AIDS epidemics in this region.

124

31% of African TB now due to HIV epidemic

Julian Meldrum

DEPARTMENTS

IAPAC Monthly (ISSN 1081-454X) is published monthly by the International Association of Physicians in AIDS Care. All material published, including editorials and letters, represents the opinions of the authors and does not necessarily reflect the official policy of the International Association of Physicians in AIDS Care, or the institutions with which the authors are affiliated, unless otherwise noted.

IAPAC Monthly welcomes responses to the material presented. Letters should be sent to Letters to the Editor, *IAPAC Monthly*, 33 N. LaSalle, Suite 1700, Chicago, IL 60602-2601 USA.

Nonprofit postage paid at Kenosha, Wisconsin, and at additional mailing sites. Address all editorial, business, and production correspondence to *IAPAC Monthly*, 33 N. LaSalle, Suite 1700, Chicago, IL 60602-2601 USA. Those submitting manuscripts, photographs, artwork or other materials to *IAPAC Monthly* for consideration should not send originals unless specifically requested to do so by *IAPAC Monthly* in writing.

To order reprints (minimum order required: 250 copies) or request permission to publish an *IAPAC Monthly* article, please call (312) 795-4991 or e-mail monthly@iapac.org.

REPORT FROM THE PRESIDENT

ADAP: Not all is rosy in the USA

José M. Zuniga

In regard to the global fight against HIV/AIDS, the popularly held understanding is that of a dichotomy. HIV-positive patients in economically developed countries, such as the United States, have access to antiretroviral therapy (ART) and, though this treatment is imperfect and not a cure, patient life is greatly improved and extended. On the other side of the dichotomy are people living in economically developing countries who have little or no access to ART, contributing to tremendous HIV morbidity and mortality rates.

There is, of course, a good deal of truth in this understanding. In wealthier countries, and even ones that do not guarantee healthcare as a civil right, such as the United States, programs have been established to purchase HIV treatment for the medically indigent. In poorer countries, these programs rarely exist, or are entirely out of scale with the problem. Within this generalization, however, there are sizable gray areas. In fact, US physicians attending the IAPAC Sessions 2003 (held May 15-16, 2003, in Chicago) discussed increasing economic impediments to HIV treatment in the United States. There is, in fact, a confluence of forces working to decrease the level of care available to HIV-positive patients in the United States just as the Bush Administration is gaining international attention for its measures to appropriately increase assistance to 14 African and two Caribbean countries struggling to contain their AIDS epidemics.

Since 1987, with the first government appropriation of funds to assist with the purchase of AZT, HIV patients within the United States have gradually come to benefit from increasingly equitable access to life-saving and -enhancing drugs to combat HIV and associated infections and complications. This was greatly accelerated

through the enactment in 1990 of the Ryan White Comprehensive AIDS Resource Emergency (CARE) Act and its drug access provision through Title II, which is most commonly known as the AIDS Drug Assistance Program (ADAP).

The congressional "earmarking" of funds for ADAPs is the fastest growing component of Ryan White CARE Act appropriations. Indeed, according to the US Health Resources and Services Administration (HRSA), federal funding for ADAP has increased 1,000 percent since the original appropriation seven years ago—from US$52 million in 1996 to US$639 million in 2002. In fact, total ADAP spending is higher since most state ADAP budgets are augmented by funding from their respective states, as well as from other Ryan White CARE Act programs, and through cost-saving strategies. In short, ADAPs have become essential vehicles in ensuring that uninsured and underinsured HIV-positive patients in 50 states, the District of Columbia, and five other jurisdictions gain access to myriad HIV-specific and -related drugs, as listed on individual state formularies.

Despite evidence of the essential role played by ADAPs in ensuring treatment to many of the 800,000-plus citizens of the United States who are currently living with HIV/AIDS, recent anecdotal evidence and testimony from across the country suggests that we are beginning to see a decaying of this safety net. While sheer US investment in ADAP has increased each year since the program's inception, various demographic shifts in HIV/AIDS incidence and prevalence over the past several years, in addition to various proposals to amend conditions for access to ADAP formulary drugs in several states, appear to be already having a marked impact upon the effectiveness of the ADAP system.

Overall, the minutiae of government funding for national, state, and local HIV/AIDS programs is a picture of confusion, fully discernable to a minority among those who work within and/or benefit from this broad system comprised of funding from the Ryan White CARE Act, Medicare, and Medicaid programs. Yet some sense of the current state of ADAP may be gleaned from cross-analysis of statistics pertaining to many of the communities deriving the most benefit from ADAP. Although examples of the gaps which are becoming evident in coverage provided by state ADAPs are witnessed across all racial, ethnic, and gender categories, the most evident example is seen within the African-American community.

HIV incidence within the African-American community, particularly among heterosexual women and men who have sex with men (MSM), has been on the rise each of the past several years. As such, the increased numbers of those infected within the African-American community when considered in combination with the disproportionate reliance of African Americans upon subsidized healthcare such as ADAP, have resulted in a burden on the system that has not been met with an appropriate increase in resources from

Continued on page 130

Atazanavir gets FDA Advisory Committee's thumbs-up

The US Food and Drug Administration (FDA) Antiviral Drugs Advisory Committee voted unanimously May 13, 2003, to recommend approval of Bristol-Myers Squibb's atazanavir (brand name *Reyataz*) despite concerns about the efficacy of the drug in HIV-infected patients who are antiretroviral treatment-experienced. Formal FDA approval could come as soon as June 2003.

Committee members concurred that Bristol-Myers Squibb had shown conclusive evidence of efficacy for atazanavir in treatment-naive HIV patients. Data presented at the meeting demonstrated that atazanavir had a clinical benefit equal to or better than nelfinavir and efavirenz in reducing viral load in treatment-naive patients. Patients in those studies also received additional therapy.

However, a trial comparing atazanavir to lopinavir/ritonavir in antiretroviral treatment-experienced patients showed that 65 percent of patients receiving lopinavir/ritonavir (400 mg lopinavir/100 mg ritonavir) twice daily achieved a viral load of less than 400 copies/mL HIV RNA compared to 47 percent of patients receiving 400 mg atazanavir once daily. Patients in the study also received two nucleoside reverse transcriptase inhibitor (NRTI) therapies.

Bristol-Myers Squibb presented further data at the meeting from another study in treatment-experienced patients who had failed more than one highly active antiretroviral therapy (HAART). At 24 weeks, 64 percent of patients receiving 300 mg atazanavir plus 100 mg ritonavir had less than 400 copies/mL HIV RNA compared to 62 percent of patients receiving lopinavir/ritonavir and 44 percent of patients receiving atazanavir 400 mg/saquinavir (*Invirase*) 1,200 mg. All of the patients also received tenofovir and an NRTI.

The FDA said, however, that it only recently received the 24-week data and will not have time to review it prior to the June 20, 2003, user fee deadline. Noting that the FDA must review the data to see whether it supports efficacy of atazanavir, Committee Chair Roy Gulick of Cornell University Weill Medical College said that use of atazanavir in the treatment-experienced population is "more of a quandary" for the committee.

The committee agreed that atazanavir's effect on lipids is a "clinical advantage" over other protease inhibitors, which are often associated with hyperlipidemia. In one study comparing atazanavir to nelfinavir, total cholesterol increased 5 percent in the atazanavir patients compared to a 25 percent increase for the nelfinavir patients.

However, the committee added that it would like to see further study of the correlation between reduced lipid increase and lipodystrophy.

While atazanavir showed only small increases or decreases in lipids compared to large lipid increases for other protease inhibitors, the rate of lipodystrophy was not reduced for atazanavir compared to the other therapies.

Of side effects, dosing, and food requirements

The 400 mg dose of atazanavir was selected because it was associated with a lower incidence of hyperbilirubinemia, which the committee concluded is not an indicator of liver damage. Baseline bilirubin levels appear to predict who will develop the greater bilirubin elevations that lead to jaundice, and could be used to screen out patients who may experience this side effect before starting treatment. The form of hyperbilirubinemia seen in atazanavir-treated patients (unconjugated) is not sufficiently serious to warrant a dose reduction, advised Kenneth Sherman of the University of Cincinatti, the committee's expert hepatologist. Dose reduction, given the relatively low inhibitory quotient of atazanavir, might lead to treatment failure, thus discontinuation is the preferred option.

There was some disagreement over the implications of cardiac disturbances seen in small numbers of patients (QT prolongation and PR interval). While some committee members felt that ECG monitoring was advisable at baseline, it was concluded that monitoring was only appropriate for people with existing heart conditions or concomitant medication known to affect QT or PR interval, and that atazanavir did not warrant any greater concern than other protease inhibitors already licensed.

On the critical question of what food atazanavir could be taken with, Bristol-Myers Squibb revealed that taking the drug with a light meal of around 350 calories resulted in higher drug availability, while a larger meal of around 900 calories and high in fat resulted in similar drug availability to taking atazanavir on an empty stomach. Several unresolved issues remain in this area, including: What is the effect of a meal greater than 900 calories? Is the blunting of absorption mediated by fat, or by food volume? How long after a large meal should patients wait before taking atazanavir for the best results?

As with nelfinavir, without further data the food issue may come back to haunt Bristol-Myers Squibb, given the relatively low genetic barrier to resistance for this protease inhibitor. Low drug levels could lead to resistance, especially in patients with a genetic tendency toward lower blood levels of drugs metabolized by the cytochrome p450 3A4 route. ■

Editor's Note: *Compiled and adapted from "Bristol Reyataz Broad Label Endorsed By Committee Despite Concerns About Use In HIV Treatment-Experienced Patients," FDAAdvisoryCommittee.com, May 13, 2003; and "Atazanavir Approval Recommended in US," aidsmap.com, May 14, 2003.*

NIAID comments on AACTG Study A5095

Editor's Note: *The US National Institute of Allergy and Infectious Diseases (NIAID) recently issued a communication to HIV/AIDS care providers regarding interim results from a Phase III, randomized, double-blind comparison of three protease inhibitor (PI)-sparing regimens for the initial treatment of HIV infection. As a courtesy to members of the International Association of Physicians in AIDS Care (IAPAC),* IAPAC Monthly *is publishing said communication regarding Adult AIDS Clinical Trials Group (AACTG) Study A5095.*

A recent review of the [AACTG Study A5095] by [the NIAID] Data and Safety Monitoring Board (DSMB) found that in antiretroviral treatment-naive patients, a combination preparation of three nucleoside analogues, Trizivir, was inferior to two other efavirenz (EFV)-containing treatment regimens being evaluated in the study. The data met pre-specified guidelines for stopping this one arm of the study based on virologic failure. There were no concerns about the toxicity of the study drugs.

Antiretroviral-naive patients randomized to receive a combination of abacavir (ABC), lamivudine (3TC), and zidovudine (ZDV) [otherwise known as ABC/3TC/ZDV or Trizivir] experienced virologic failure earlier and more frequently than patients who were randomized to receive either of the two other treatment regimens being evaluated in the study. The two other treatment regimens are:

1) a combination of 3TC and ZDV (Combivir) plus EFV
2) the combination ABC/3TC/ZDV plus EFV. Study drugs were given in a double-blind, placebo-matched manner.

A total of 1,147 antiretroviral-naive patients were followed for changes in their viral load and CD4 counts. Virologic failure was defined as having an HIV RNA level in plasma above 200 copies/ml (measured by the Roche Amplicor HIV-1 test) at least four months after starting study treatment.

After an average of 32 weeks on study, a total of 167 study volunteers experienced virologic failure: 21 percent in the group receiving ABC/3TC/ZDV versus 10 percent in the other two groups combined. Virologic failure occurred sooner and more often in those receiving ABC/3TC/ZDV alone, regardless of their initial viral load (whether above or below 100,000 copies/mL). Although data on CD4 counts were not available at the time of the interim analysis, the DSMB felt that they would not reverse the outcome. As a result of these data, the DSMB recommended that the ABC/3TC/ZDV treatment arm be stopped.

Therefore, the study volunteers receiving ABC/3TC/ZDV have been unblinded as to what treatment they were taking, and they have been asked to remain in the study for continued follow-up. These volunteers have been offered several alternatives to the use of ABC/3TC/ZDV alone. GlaxoSmithKline, one of the pharmaceutical companies involved with this study, is also working with [the NIAID Division of AIDS] and the A5095 Study team to provide ABC/3TC/ZDV outside the study for patients who choose this option.

Study volunteers originally given one of the other two drug treatments will continue on the study as planned and will not yet be unblinded. They will, however, be told that they are receiving a combination treatment that contains EFV. All study volunteers will continue to be followed for approximately two years after the last subject is enrolled—until approximately September 2004. This follow-up period will allow a comparison of the 3TC/ZDV + EFV and ABC/3TC/ZDV + EFV groups. It also will allow more information to be collected from all three groups about how to use antiretroviral drugs.

Although [NIAID is] confident of these findings, they have not been presented at a scientific meeting, peer reviewed, or published. These results will be submitted to the upcoming International AIDS Society meeting in Paris (July 2003), and further analyses (eg, CD4 count and adherence data) will be forthcoming. A manuscript is in preparation. It is important to consider this interim study finding in the context of published results, particularly those from prior studies that investigated either triple nucleoside regimens or EFV-based regimens. The risk of virologic failure is clearly an important factor in selecting an initial antiretroviral regimen.

Other factors such as safety, toxicity, adherence, preservation of future treatment options, access, cost, and other issues also remain important in selecting the optimal first regimen for an individual patient. ■

PERSPECTIVE

Time to scale up the fight against AIDS in Europe

Christine Katlama

The world HIV epidemic is now entering its third decade. Throughout the past 20-plus years, HIV has infected more than 42 million people, and killed over 3.1 million young adults and children worldwide as of June 2002. However, HIV is a relatively slow killer, which means that it leaves time to react. Indeed, HIV can now be deterred by highly active antiretroviral therapy (HAART), which disables the virus's ability to rapidly destroy the human immune system. Thus, this is the right time to react against HIV. This is an opportunity that should not be missed.

The HIV epidemic in Europe is very contrasted. On one extreme, Western Europe has a relatively controlled epidemic and is increasingly facing the problems of HIV infection as a "chronic disease" with long-term complications associated with HAART or the problems of resistant virus that have developed over time in patients with inadequate antiretroviral therapy. On the other extreme, Eastern Europe is facing a young but rapidly growing AIDS epidemic and, up to now, very few measures to prevent it and provide access to treatment.

The global HIV epidemic is spreading faster through the countries of Eastern Europe and the former Soviet Union than anywhere else in the world. Because of the dramatic social upheaval in the last decade there is a steep rise in injection drug use and we all know that the rise in HIV infection follows the same trend (in the Russian Federation up to 90 percent of the registered new infections are officially attributed to injection drug use).

Overcrowded and unsanitary prisons facilitate the spread of HIV and, of course, threaten the wider population once the prisoners are released and go back to the outside world. And while injection drug use remains the predominant mode of HIV transmission in the region, very high rates of sexually transmitted infections are still found in the whole region threatening the whole of these populations.

It is now urgent to act quickly before the HIV epidemic spreads further and thousands more die. The number of patients living with HIV/AIDS is estimated to be 1.7 million in Europe with an epidemic now growing fast in Eastern Europe (with 1.2 million infected people).

Eastern Europe is now experiencing a situation similar to Africa: an ever increasing number of infected patients, no access to treatment, and a lack of qualified physicians and care structures. And while a lot of actions have been engaged in Africa at different levels of initiative, it seems the situation in Eastern Europe is still not completely apprehended. In this context, it is important to set up everything possible to try and prevent the enormous HIV epidemic everywhere in the world including Eastern Europe.

Too many countries with intermediate gross national product (GNP) still have no policy of access to antiretroviral therapy. In those countries, if you have no personal wealth and cannot afford the huge cost of a tri-therapy you just die.

In most of the sub-region's countries, developing countries, and countries which have no policy toward HIV, there is an enormous lack of facilities and manpower to deliver comprehensive HIV care and this can only be solved by training and education of the local physicians and medical staff.

This is why the European AIDS Clinical Society (EACS) was founded by a few European physicians. Its main objective was to create links between European physicians and scientists. It has now grown and has enlarged its objectives and missions to education and training of physicians involved in the care of HIV patients.

Education and training are now an essential part of EACS's mandate. Indeed, EACS offers scholarships every year to young physicians (European and non-European). Those selected undergo a four-month training in one of the selected clinical units of the EACS. This Medical Exchange Programme for Young HIV Physicians is very popular, especially among eastern European and developing countries as both these two regions are in urgent need of help and assistance. The applicants are selected based upon their curriculum vitae and sign of commitment, and they are expected to share their newly gained knowledge with their colleagues and make the best use of it once back home, to the benefit of their patients.

In August 2003, EACS will organize its first advanced HIV course on the management of HIV treatment and complications. The program for this three-day course is largely inspired by the Global AIDS Learning & Evaluation Network (GALEN) training material created by the International Association of Physicians in AIDS Care (IAPAC). Once again, behind the course itself is the will to make physicians meet and create a network of information and knowledge, link their energy and capacity together. Pharmaceutical companies and foundations will be widely solicited to sponsor the expected 40 physician participants and give them an opportunity to train.

EACS has also established a panel of European HIV-treating physicians and diagnosticians who have met to produce HIV treatment guidelines. These guidelines are designed to assist in the care of HIV patients and to establish a standard of clinical practice across Europe. The document, entitled "European Guidelines for the Clinical Management and Treatment of HIV Infected Adults in Europe," is currently

being edited and will soon be published as a supplement to the journal *AIDS*.

The fight against AIDS must be an emergency measure everywhere. Europe must be involved in this battle. This is the role and responsibility of politicians, public health authorities, physicians and patients, particularly in those countries that claim to be democracies. ■

Christine Katlama is Professor in Infectious Diseases at the Hôpital La Pitié–Salpêtrière in Paris, and serves as President of the European AIDS Clinical Society (EACS), with which the International Association of Physicians in AIDS Care (IAPAC) is collaborating through a Memorandum of Understanding.

IAPAC opens Technical Annex in Geneva

Former WHO Medical Officer appointed Vice President/Chief Medical Officer

Public health experts agree that, among other HIV treatment-related activities needed in the developing world, a tremendous effort must be made to train and support physicians and allied healthcare professionals in HIV care.

Furthering its work in this area, the International Association of Physicians in AIDS Care (IAPAC) opened June 2, 2003, its IAPAC Technical Annex in Geneva, from which international medical education, capacity building, and technical assistance activities will be coordinated. Spearheading these activities will be IAPAC's newly appointed Vice President/Chief Medical Officer, Basil 'Vassily' P. Vareldzis.

Vareldzis earned his Medical Degree in 1986 from the Indiana University School of Medicine. He completed residencies in Family Medicine (1988) and Preventive Medicine (1993) at McGill University and Johns Hopkins University, respectively. In addition, he completed a Master's Degree in Public Health in 1992 at Johns Hopkins University School of Public Health. In addition to his academic credentials, Vareldzis brings vast experience to his new role of coordinating activities to benefit, and generate from, IAPAC's membership of over 12,800 healthcare professionals in 99 countries.

Having worked most recently as a Medical Officer in the World Health Organization (WHO) Department of HIV/AIDS, where he helped to develop the WHO's antiretroviral treatment guidelines for resource-limited settings, Vareldzis has a background that spans a variety of positions in direct care and international public health. He has worked as an HIV-treating physician since 1986. He founded the American Public Health Association (APHA) HIV/AIDS section; held academic appointments at Johns Hopkins University, Georgetown University, and Virginia Tech; served as CEO of a healthcare consulting company; and acted as a Senior Technical Advisor to the US Agency for International Development (USAID).

Vareldzis states that he is eager to begin work at IAPAC. He believes the association is addressing the AIDS pandemic via methods he regards as indispensable to stemming the devastation of a disease that currently infects 42 million people and could easily become, if it is not already, the most destructive disease in world history.

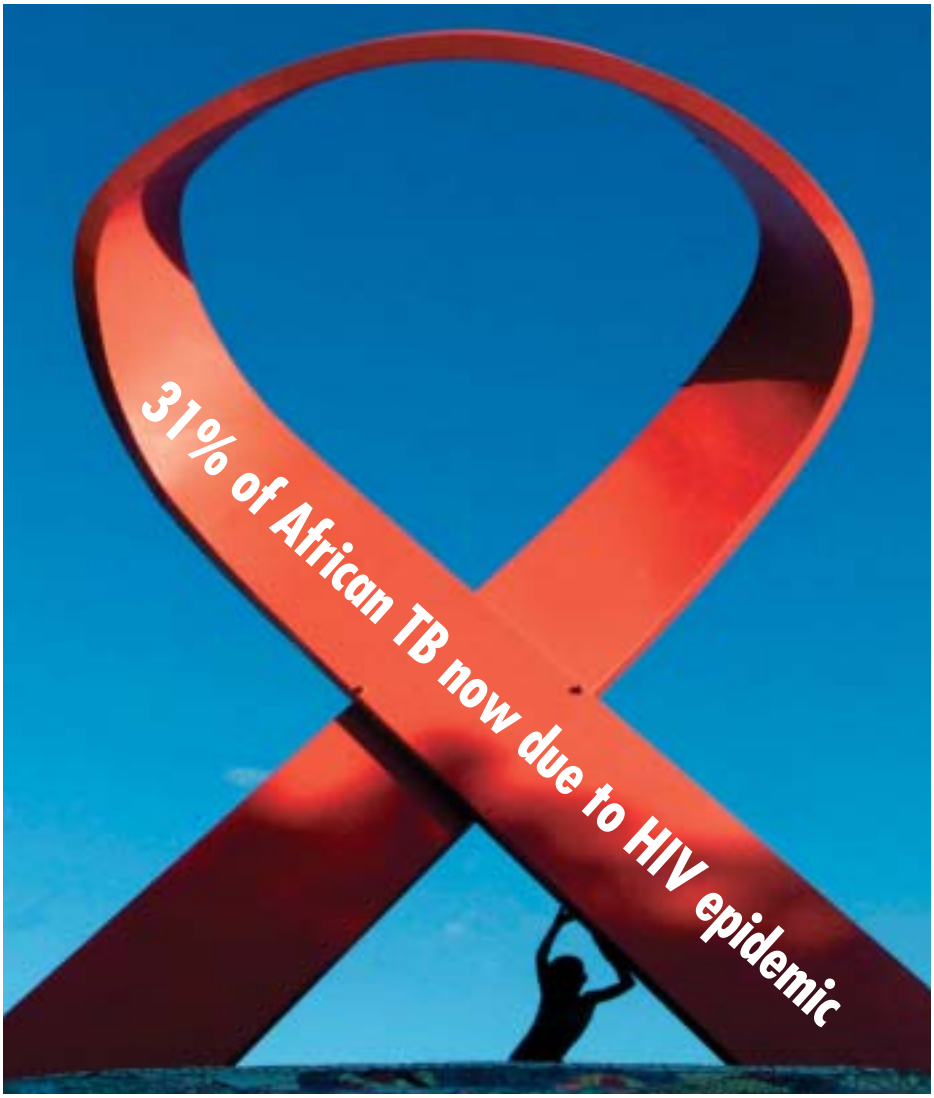
"IAPAC has a critical role to play in empowering the global healthcare community to treat HIV," Vareldzis said. Having trained 12,000-plus African healthcare professionals in southern Africa as exclusive training provider in the Diflucan Partnership Program (DPP), and initiated a much-needed training and certification program in the Global AIDS Learning & Evaluation Network (GALEN), he continued, "the association is poised to make increasing contributions; I am enthusiastic about further mobilizing the IAPAC membership in that direction."

Geneva was chosen for Vareldzis's base of operations within IAPAC because the Swiss city is home to many of the international organizations with which IAPAC partners in the global fight against HIV/AIDS. Along with the WHO, Geneva serves as headquarters for the Joint United Nations Program on HIV/AIDS (UNAIDS); the Global Fund to Fight AIDS, Tuberculosis and Malaria; and the International Treatment Access Coalition (ITAC), of which IAPAC is a founding partner.

"We have had, since 1996, a very effective means through antiretroviral therapy of treating HIV and prolonging and improving the lives of HIV-infected patients," Vareldzis stated. "While almost every international health organization agrees that access to this treatment must be vastly expanded, only about 800,000 of the world's 42 million people with HIV are treated with antiretroviral therapy. In addition to making antiretroviral drugs more affordable in the developing countries that have been hardest hit, we must make sure that healthcare professionals are armed with the knowledge they need to administer them properly—to manage their side effects and complications, to ensure patients adhere to prescribed regimens, to guard against drug resistance. This is where IAPAC shoulders its share of the burden."

IAPAC President/CEO José M. Zuniga said the IAPAC Technical Annex in Geneva will complement the work of IAPAC's African Regional Office (IAPAC-AFRO) in Johannesburg as well as the association's Headquarters in Chicago.

"Under the leadership of its Executive Director, Mulamba Diese, IAPAC-AFRO is training thousands of healthcare professionals how best to treat the lethal opportunistic infections associated with HIV, and continues to build capacity through which we may responsibly expand access to antiretroviral therapy," Zuniga said. "With Basil Vareldzis joining us in Geneva, IAPAC can build on this experience as we use GALEN and other educational and technical assistance vehicles to bring medical knowledge, including about the use of antiretroviral therapy, to HIV-treaters in resource-limited settings on the African continent and, indeed, around the world." ■



Julian Meldrum

A new World Health Organization (WHO) report of the burden of tuberculosis (TB) has found that most of the world's largest and fastest-growing epidemics of TB, in Africa, are increasingly attributable to the effects of HIV. The report was published in the *Archives of Internal Medicine* by EL Corbett et al under the title, "The Growing Burden of Tuberculosis: Global Trends and Interactions with the HIV Epidemic."

The report's authors, based at the London School of Hygiene and Tropical Medicine, use mathematical models to compile and assess information from published studies and a network of experts to estimate that 9 percent of the estimated 8.3 million new cases of TB in the year 2000 would not have happened, but for HIV. (They stress that all of their figures are subject to uncertainty: for example, the range for those just given is 7 percent to 12 percent out of a total of 7.3 to 9.2 million.)

However, this proportion rises to 31 percent in Africa south of the Sahara, the region with the highest proportion of people living with HIV. It is no coincidence that this is also the WHO region with the highest global TB incidence, at 290/100,000 people per year, and the fastest-growing caseload, increasing by 6 percent per year.

Half of all new TB cases, 4.4 million, were in five Asian countries where only a small proportion are currently attributed to HIV: India, China, Indonesia, Bangladesh and Pakistan. In all five countries, TB rates declined between 1997 and 2000. However, in India 3.4 percent of TB cases and 4.8 percent of TB deaths are due to HIV – and the total number of co-infected people in Asia exceeds 2 million.

In Southern Africa, the balance looks very different. In South Africa, 50 percent of tuberculosis cases (and almost 59 percent of TB deaths) are attributed to HIV and the number of people co-infected with HIV and *Mycobacterium* tuberculosis is 2 million—8.3 percent of the adult population. South Africa's TB incidence grew by 8.7 percent per year between 1997 and 2000. Other countries in the region, from Namibia and Botswana through to Zimbabwe, Zambia, Malawi and Mozambique, have problems on a similar or even greater scale.

Although absolute figures are much smaller in more developed countries, the impact of HIV on TB is very substantial in the United States, where 26 percent of TB cases are attributed to HIV, and even in parts of western Europe such as Spain, where both diseases are concentrated among injecting drug users.

In contrast, the largest European epidemic, in Russia, has yet to show any connection between HIV and TB. (This is likely to change dramatically, however, considering the rates of both diseases among populations of injecting drug users and prisoners.)

The report notes that the most successful public health campaigns against TB in recent years—in China, Peru, and Vietnam—have been in countries with relatively low levels of HIV. It stresses that TB can still be treated where HIV is widespread but admits that turning the epidemic around will require more than the WHO DOTS program. Antiretroviral treatment for HIV is identified as one of a number of measures that can reduce the rate of active TB among those exposed to TB and also save lives among those who do have active TB.

"There is urgent need to implement a strategy of extended scope combining intensified TB case finding and treatment, HIV prevention, and the identification and treatment of latent *Mycobacterium* TB in coinfected individuals," according to the report's authors. "Controlling HIV-related TB will require a massive global effort. The estimates in this article provide a measure of this challenge, and suggest ways to monitor the impact of efforts to control HIV-related TB." ■

Julian Meldrum is Newsletter Editor and Publications Officer with Body Positive, *a patient-oriented publication based in London. His article originally appeared on aidsmap.com, and is re-printed here with permission from the publisher.*

The Western Hemisphere tentatively faces its AIDS problem

David Gilden

Two decades into the pandemic, AIDS is finally beginning to strike a more prominent chord among the masses within Latin America and the Caribbean. The response struggles to catch up with the tremendous growth and change taking place in these parts of the hemisphere. But at least glimmers of hope and action—and some downright successes—can be gleaned. And there is a community that will demand further action. This much was evident from the 2nd Forum on HIV/AIDS/STD in Latin America and the Caribbean (Foro 2003), which took place during a warm spring week in Havana from April 7-12, 2003. About 1,500 attendees from every country in the hemisphere came for a week of review and critique of current AIDS strategies—or the lack thereof.

At the start of Foro 2003, Peter Piot, Executive Director of UNAIDS, addressed one of the conference's main challenges: "Today, across Latin America and the Caribbean, AIDS threatens to entrench itself in the most marginalized populations: not only the familiar ones but also in prisons, in poor migrant workers, and in ethnic minorities. But these populations have been left almost untouched by prevention efforts. Men who have sex with men are nearly half the epidemic in many parts of the region, but in countries for which data exist, they attract only a tiny part of prevention spending… Only half the people living with HIV in this region who need HIV drugs to save their lives have access to those drugs. An alliance between government and civil society is meaningless if people's most basic expectations are not met. Meeting this region's needs in both prevention and care requires a strong AIDS movement able to keep AIDS high on the political agenda."

Food for the virus

The UNAIDS *Report on the Global HIV/AIDS Epidemic 2002* includes a set of maps tracing HIV prevalence since 1986. The Latin American map shows a deepening red tinge in many countries as the total number of people living with HIV inches steadily toward the 2 million mark. Still, the epidemic represents a patchwork in the region. Some countries, such as Brazil, have a relatively large HIV population centered in more traditional risk groups, such as gay men, intravenous (IV) drug users, and sex workers. Brazil's HIV prevalence in 15- to 49-year-olds remains moderately low (0.7 percent), but the Caribbean countries have a 2.5 percent prevalence that is second only to sub-Saharan Africa's 9 percent. Here, there is considerable heterosexual transmission, and women make a third of the population with HIV.

Havana may be seedy and overcrowded, but the northward-facing city on the Gulf of Mexico retains a nineteenth century colonial charm that has dissipated elsewhere. Beyond Havana's disheveled splendor, Latin American cities have imploded under the weight of unchecked growth. From São Paulo to San Salvador to the gates of San Diego, swollen shantytowns—*favelas*—take in the urban migrants. "Social services are not available in any timely fashion," said Alberto Concha-Eastman, "You need to see how bad it is."

Concha-Eastman is Director of Violence Prevention at the Pan American Health Organization (PAHO), the regional office for the Americas of the World Health Organization (WHO). "My specialty is juvenile violence. In Central America, I have seen how violence contributes to HIV risk," Concha said. Indeed, with drug use and incarceration rampant, HIV has fertile ground. One study of male Honduran prisoners found an HIV prevalence of almost 7 percent, including a rate of 5 percent among 16- to 20-year-olds.

These *favelas* represent a kind of research no-go zone, and one can only speculate on the rate of HIV transmission there. But *favelas* and their gangs are just one part of a great mosaic of social evolution that drives the hemisphere's AIDS epidemic.

New possibilities

Sitting in his Port-of-Spain office at the Caribbean Epidemiology Centre (CAREC), a Regional Center of PAHO, Bilali Camara ticks off the reasons that his region, the Caribbean, is especially hard hit: "There are a number of cultural issues, including number of sex partners, types of sexual practices, and IV drug use. People are very poor here and have few means to change their behavior. And there's a lack of resources to deal with sexually transmitted disease. Also, the stigma against homosexuals is very strong. The power of the church prevents condom promotion and sex education in the schools. All these things have hindered our efforts to block AIDS."

Camara now sees rays of light piercing this dark picture: an initiative led by the Caribbean Community (CARICOM) has negotiated 90 percent price reductions for several antiretroviral drugs, and pilot treatment programs are springing up throughout the islands. Price reductions of between 30 to 83 percent were also realized in Central America in January 2003, where Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama provided another example of the advantage of regional negotiations to lower the price of medication. However, while the price of the drugs is down in many countries, the price of laboratory tests and the state of care infrastructure remain serious problems. Improved infrastructure and healthcare training will be critical to expanding the current programs.

Even in countries throughout Latin America and the Caribbean that now supposedly guarantee HIV care, access to treatment is still highly limited. For example, as a result of a complaint brought by Panamanians with HIV to the Inter-American Commission on Human Rights (ICHR), Panama has agreed to treat every person who has advanced HIV disease. Of the 2,000 persons identified as needing treatment, some 1,500 are actually receiving care. But there are an estimated 23,000 Panamanians who have HIV. Although most are not yet known to the medical authorities, they will all someday end up at clinics' doors. The strength of Panama's commitment will then be sorely tested.

A relatively new force established to support enhanced treatment efforts, of course, is the Global Fund to Fight AIDS, Tuberculosis, and Malaria. It recently approved grants to many countries in Latin America, but there are grave concerns about the sustainability of this money.

Honduras, for example, restricted the size of its program to only 300 treatment slots, partly out of fear of finding itself saddled with an open-ended treatment commitment. Currently, there are an estimated 60,000 Hondurans with HIV, 90 percent are unidentified, and only about 500 are receiving treatment.

"The same thing happened in Ecuador and several other countries. The countries are only asking to treat some hundreds while they have tens of thousands of people with HIV. They are afraid of the scale-up and that the Global Fund will run out," said Richard Stern, who directs the Agua Buena Human Rights Foundation in Costa Rica.

Honduras was the subject of an ICHR complaint, through which the handful of petitioners obtained care last fall. Things took a nasty turn the same week as Foro 2003 when Honduran physician José Roberto Trejo was mysteriously murdered in his clinic. "Trejo was an outspoken critic of Honduras's AIDS policies who ran a private clinic for 100 patients. This was a horrible humanitarian disaster for those people and for his family," said Stern.

The treatment-prevention mix

Such a political killing would be exceptional for contemporary Honduras, but much more pervasive is the vigilante murders of street youths, about 200 per year in recent times. The killings are the most sensational symptom of a region-wide intolerance or neglect of marginal groups, including persons with HIV and the populations from which they largely come.

Robert Carr, Executive Director of Jamaica AIDS Support, said of his country, "HIV discrimination is a byproduct of the stigma surrounding men who have sex with men and sex workers. There has been some progress at the community level, and the public health sector is beginning to come around. But we're still getting crisis calls from hospitals, where people are put in a corner and ignored. We now have several people at each hospital whom we can contact for help. But hospitals are not yet a safe space."

Alleviating such intolerance is vital to successfully integrating persons with HIV into society and to ensuring effective care and prevention efforts. Even the planning for future treatment needs depends on it since as things stand, people are often reluctant to come forward for HIV testing and are hesitant about continuing to access the healthcare system in the face of stigma and the threat of physical danger. The healthcare provider can be the first agent of change in this regard.

Additionally, it is acknowledged among many clinical and public health experts within the region that the success of prevention, care, and treatment efforts will hinge to a large extent upon their integration within the clinical setting itself. Describing the need for integrated care to increase patient outcomes and reduce stigma and discrimination, Rafael Mazín, Acting Coordinator of PAHO's Regional Program on AIDS/STI, noted that many new treatment programs are a crucial step forward, but they still rarely represent integrated care.

"If a patient comes to us and we identify conditions to be treated, we also have to discuss behavioral patterns," Mazín said. "When an HIV-positive person comes to us, for example, we must not only treat, but need to discuss living patterns that can serve to prevent opportunistic infections, further transmission of disease, and increase quality of life. This is integrated care—providing treatment and fostering preventive behaviors. If all we do is write prescriptions, that's neither real care nor prevention."

Unlike many other regions of the world, HIV drugs are a safer subject in much of Latin America and the Caribbean, with many governments (especially in Latin America) reluctant to get into controversial, unsavory topics such as sex and addiction. Panama, once again, has built one of the better antiretroviral treatment programs in Latin America. Yet it is just turning to organizing prevention programs following a World Bank-funded workshop this past spring.

"Providing treatment seems to be a committed response because one is offering something tangible. But if in treating HIV one ignores sexuality, sexual education, and other behavioral issues relating to transmission of disease, this commitment is only half-hearted," said Mazín.

Integrated care has been advocated for several years now in Latin America and the Caribbean through collective efforts of various regional and international groups, contributing to increasing understanding of the way in which prevention, care, and treatment work in synergy. PAHO, for its part, has worked to support regional and national AIDS activities within the framework of an approach known as "building blocks," building on recommendations for care, treatment, and social support of people living with HIV/AIDS in the region, jointly put forward by PAHO, UNAIDS, and the International Association of Physicians in AIDS Care (IAPAC) in 2000.

One thing seems pretty clear among expert observers: that treatment alone cannot block the AIDS epidemic. "We have to be careful not to assume that everything will be fine when care and treatment exist. This will not stabilize the epidemic," said Bilali Camara of CAREC.

In fact, there are several model programs in Latin America and the Caribbean that do indeed show signs of effectively limiting HIV's extent. These are in Brazil, Haiti, and Cuba, and all three are marked by highly focused HIV prevention activities. Brazil and Cuba are further noted for the locally produced generic drugs that form the basis of their extensive HIV treatment programs. Haiti, remarkably, has provided little antiretroviral treatment.

Brazil: Halving the cost, halving the HIV rate

With a population of 176 million people and a gross domestic product (GDP) of US$1.3 trillion, Brazil has become the powerhouse of Latin America. It also has the largest HIV-positive population, some 600,000 of its inhabitants. With a national population four times that of Mexico, the prevalence of HIV in Brazil is also twice that of Mexico's. Still, things could be worse: In 1992, the World Bank predicted that 1.2 million Brazilians would have HIV by the turn of the century.

Marco Antônio de Ávila Vitória, who heads the Diagnostic and Treatment division of Brazil's National STD/AIDS Program, attributes the difference to his country's exemplary mix of treatment and prevention strategies. He noted, "The early governmental commitment, the balanced approach in terms of prevention and care, a multisectoral mobilization and a human rights perspective in all actions, with major participation of civil society in this process, are the probable reasons for our success in controlling the epidemic."

Brazilian health authorities now have 120,000 people on treatment. Most are receiving domestically produced generic antiretroviral combinations at a cost of US$400 to US$500 a year. (Others are receiving newer drugs such as Kaletra or Sustiva, which are only available from foreign sources and boost the annual cost

to US$2,000.) The government claims to save US$200 million per year over what it would spend on palliative care if the anti-HIV drugs were unavailable.

The drugs have brought a recognition that HIV is not a "death sentence" but a treatable disease. Cutting HIV down to size has enabled more rational discussion, including laws to protect HIV-positive persons against discrimination. It has enabled campaigns to encourage testing and counseling of persons infected with the virus. There are also major prevention programs aimed at sex workers, men who have sex with men, and intravenous drug users. These include participation by some 600 nongovernmental organizations, and condom distribution and syringe exchanges form a central part of the strategy.

Unfortunately, the story is not over. HIV, originally centered in relatively well-educated residents of large cities, has gradually moved into less literate groups and the smaller cities. At present, 60 to 70 percent of the people with HIV are members of these poorer Brazilian sectors. Combating HIV will require new strategies and services to effectively reach these groups.

Haiti: Stabilizing the epidemic despite limited resources

If Brazil has more resources than most Latin American and Caribbean countries, Haiti has fewer. Yet that country, too, has stabilized its HIV levels. The first Haitian cases of AIDS were observed in the early eighties. They were largely associated with male Haitian sex workers and women who received (frequently unnecessary) blood transfusions while in labor. The epidemic rapidly became a heterosexual one, and HIV prevalence plateaued at the highest rate in the Western Hemisphere—above 6 percent in 15- to 49-year-olds. A year 2000 survey brought some good news, though. It found that HIV in pregnant women had declined to 4.5 percent compared with 6.2 percent in 1992.

Behind this reduction is broad AIDS awareness among the general population, according to Jean W. Pape who founded Les Centres GHESKIO (the Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infection) back in 1982. Part of this awareness is fostered by a government condom distribution program that sold 15 million discounted condoms last year.

"The political will began in 1991 when I started talking about vaccines," recalled Pape. "In preparing for vaccine trials, we educated the population about means of preventing HIV. This was a very broad effort involving all social sectors and religions. We conducted very large informative sessions for Haitians. All this put the focus on HIV and convinced the government to continue the effort."

Many medical measures were also taken even in the absence of specific treatment for HIV. The Haitian Red Cross gained control of the blood supply and ensured its safety. Also, GHESKIO trained 6,000 persons to diagnose and treat STDs without the use of lab tests, and the consequent reductions in Haiti's enormous STD rates helped reduce the risk of HIV transmission. In recent years, GHESKIO has begun using antiretrovirals to treat about 500 patients, and a similar number are now under care at a rural clinic run by the Harvard-based Partners in Health. Now, with Global Fund and other foreign grants promised, there are plans to treat about 3,000 patients. Still more patients at first will receive care for opportunistic infections.

"We want to move very fast," said Pape, "and add 150 patients per month." This program will involve a large training component, with GHESKIO training teams that will go out into Port-au-Prince and the countryside to train additional care providers in management of HIV.

Cuba: Following a different drummer

As in so many other aspects, Cuba's experience represents an anomaly in the AIDS pandemic. Although fewer than 60 miles across the Windward Passage from Haiti, Cuba's HIV rate is by far the lowest in the Caribbean, less than 0.1 percent.

With few foreign exchange reserves and a US embargo to contend with, the country has little regard for international patents. It also has made its biotech industry an economic priority. Cuba began producing generic AZT in 1998 and relied on donations for other antiretroviral agents. Production since then has steadily expanded to six other drugs. Cuba will add another three next year, including newer ones such as Viracept and Sustiva, which Brazil still imports. There are currently some thousand Cubans receiving HIV medications out of an estimated 4,500 HIV-positive citizens. Mortality has steadily dropped as treatment expanded—from 141 in 2000 to 80 last year. Total antiretroviral drug costs are running at less than US$1 million per year, compared with US$12 to US$15 million for the same drugs in the United States.

"I don't know whether this is intellectual property, and I'm not against people making money, but it is not social justice to charge so much," commented Jorge Perez, Cuba's chief HIV specialist.

Perez's team provides quality care, Cubans with HIV agree. "The doctors here are great," said one, "but outside the HIV clinics, there is discrimination within the bureaucracy." And the Cuban sanatoriums, the second unique part of Cuba's response, continue to generate controversy. Cubans with newly detected HIV are sent to them for at least three months, supposedly for education on how to protect others from catching the disease and how to care for themselves. Authorities also trace past sexual partners during this period.

About half the Cubans with HIV stay in the sanatoriums to receive care and support. People who evince a lack of responsibility can in principle be kept in quarantine indefinitely. But the system is flexible: One Cuban related, "I wasn't learning anything there, I just slept and ate, and I didn't like the way the social worker talked to my family. I made such a fuss that they let me out early."

While recognizing the criticism, it is hard to quarrel with success. With a reputation for sexual licentiousness and a large gay population, HIV threatens to move rapidly through the population of 11 million Cubans, as do other STDs that could further promote HIV transmission. Yet Cuba's overall STD rate remains very low, and only 500 to 600 new HIV infections are detected each year.

Cuba, too, is set to receive a Global Fund grant. Early this year, the Global Fund approved a five-year, US$26 million dollar proposal to enhance HIV treatment and promote safe sex in vulnerable groups.

Shaky legs

Paolo Teixeira, head of Brazil's National STD/AIDS program, in his speech at the conclusion of Foro 2003, warned that minorities, gay men, sex workers, and IV drug users are still excluded from treatment and prevention programs. Echoing UNAIDS's Peter Piot, Teixeira declared, "We are still wasting time on vague prevention methods" that do not address

the need for safer sex in high-risk groups. Teixeira also stressed the need for local production of antiretroviral drugs and held out the hope that Latin America and the Caribbean could be the first region to provide 100 percent anti-HIV treatment coverage. Even if finances are now tenuous, "we will come out of this conference better prepared to carry out our programs," he concluded.

Only 15 percent of the funds needed to meet a regional goal of treating 244,000 have been raised, Rodrigo Pascal, a Chilean community activist, warned the conference. It is hard to escape the conclusion that many of the improvements set to happen are based on the Global Fund grants—and the fear that these may never arrive. The Global Fund is suffering from a severe lack of new funding sources. First of all, the Global Fund needs US$2.2 billion more to fund current grants beyond their first two years. Then there is the new round of grants to be announced in October 2003: Global Fund officials project that they will amount to US$1.6 billion even though only US$300 million is now available for their initial payouts.

In an interview, Teixeira commented on the need for further US aid. He said, "The main thing the US can do is provide more money for the Global Fund. The present American stress on bilateral aid will be slower to implement and excludes many countries." Teixeira also dismissed as "tragic" continued US opposition to loosening patent protection to allow poor countries to import generic drugs.

There is still a long way to go to achieve an effective AIDS response in Latin America and the Caribbean, but the region does contain successful models that could be further developed and adapted. Latin American and Caribbean AIDS specialists and activists could achieve their mission and vision with greater resources and national commitment. These are considerations the United States, other industrialized countries, the United Nations, and other funders need to bear in mind when developing international AIDS policy and technical assistance strategies. ■

David Gilden is an HIV/AIDS policy writer in New York. He may be reached at dgilden@pipeline.com.

ADAP: Not all is rosy...

Continued from page 119

either state legislatures or the federal government.

Additionally, while 2002 and early 2003 statistics on HIV incidence within the United States remain unclear, it is reasonable to assume that if rates of infection among many populations that have depended most on ADAP remain constant or are increasing, then the modest 8 percent increase in US government appropriations for ADAP from fiscal year 2002 to 2003, combined with increased numbers of patients depending on ADAP, and the almost annual addition of new antiretroviral drugs, paint a troubling picture. Further disconcerting is that in addition to the marginal increase in spending on ADAP from US$639 million in 2002 to US$693 million in 2003—something that reflects a plateauing annual percentage increase in effect since fiscal year 2000—total federal transfers to states based upon the estimated number of Americans living with HIV/AIDS have actually decreased from 2002 to 2003, further limiting care and treatment available to populations most dependent upon ADAP and other Ryan White support programs.

As if the foregoing were not enough to cause concern, government changes will likely mean that fewer impoverished patients will be able to access government HIV assistance programs at the same time that people with low income make up a growing proportion of the newly HIV-infected. There is news from several states and municipalities, for instance, that mind-numbing state budget shortfalls may be partially made up by initiating or increasing the co-payment required of patients in purchasing antiretroviral and other drugs listed on state ADAP formularies. The most notable of these, until just recently, were significant co-payment increases being considered in California (from US$30 to US$50 per prescription), which were ultimately dropped due to widespread objection from patient and treatment groups. On a positive note, this success in limiting amendments to subsidized healthcare for those in greatest need attests to the continued potential for positive change through focused advocacy efforts. Additional state-specific factors complicating access include the income threshold at which patients qualify for coverage, state of disease progression at which patients qualify for coverage, and state-imposed enrollment caps, where they exist.

Much of the monitoring of and response to the shifting patterns of treatment access through ADAP continues to come through the National ADAP Monitoring Project undertaken jointly by the National Alliance of State and Territorial AIDS Directors (NASTAD), the Henry J. Kaiser Family Foundation, and the AIDS Treatment Data Network. In fact, monitoring reports for 2002 and 2003 shed important statistical light on anecdotal information that has recently been shared with the International Association of Physicians in AIDS Care (IAPAC) by US-based physician and allied healthcare professional members about increasing gaps in ADAP coverage.

Statistics themselves, however, do not always speak to the real issues faced by physicians and patients. Therefore, with a view to determining what critical issues must be addressed by IAPAC and partner organizations in ensuring the continued success of ADAP and the care that HIV patients deserve, I am requesting this month that HIV care providers submit to the association testimony of this system in transition. As such, I strongly urge you to relate concise details of your experiences and concerns to IAPAC's Director of Global Health Policy, Scott A. Wolfe, at swolfe@iapac.org. In so doing, you will allow IAPAC to document challenges that your practice or your patients are currently experiencing at the state level in ensuring access to critical drugs that all persons living with HIV/AIDS deserve to have available. Further, this will enable the association to present strong evidence of the impact that changing demographic, epidemiological, and political realities are having on the care available to HIV-positive patients throughout the United States.

In light of the concerns that many physicians, allied healthcare professionals, and patients throughout the United States have for the future of healthcare in general, and HIV care and treatment in particular, I thank each of you in advance for assisting IAPAC to make good on its promise of ensuring the best possible care for all persons living with and affected by HIV/AIDS. ■

José M. Zuniga is President of the International Association of Physicians in AIDS Care (IAPAC), and Editor-in-Chief of the IAPAC Monthly.

ABSTRACTS

AIDS

A randomized trial to study first-line combination therapy with or without a protease inhibitor in HIV-1-infected patients

Van Leeuwen R et al.

OBJECTIVE: To compare one protease inhibitor (PI)-based and two PI-sparing antiretroviral therapy regimens. *METHODS:* International, open label, randomized study of antiretroviral drug-naive patients, with CD4 lymphocyte counts ≥200 X 10^6 cells/l and plasma HIV-1 RNA levels >500 copies/ml. Treatment assignment to stavudine and didanosine plus indinavir or nevirapine or lamivudine. Primary study endpoint was the percentage of patients with plasma HIV-1 RNA levels <500 copies/ml after 48 weeks in the intention-to-treat analysis (ITT). *RESULTS:* In total, 298 patients were enrolled. After 48 weeks, the percentage of patients in the indinavir, nevirapine and lamivudine arms with HIV-1 RNA <500 copies/ml was 57.0 percent, 58.4 percent and 58.7 percent, respectively, in an ITT analysis. After 96 weeks of follow-up, these percentages were 50.0 percent, 59.6 percent, and 45.0 percent, respectively. The percentage of patients with HIV-1 RNA <50 copies/ml was significantly less for those allocated to lamivudine in an on-treatment analysis after 48 and 96 weeks of follow-up. Patients in the nevirapine arm experienced a smaller increase in the absolute number of CD4 T lymphocytes. There were no significant differences in the incidence of serious adverse events. *CONCLUSIONS*: A comparable virologic response can be achieved with first-line PI-based and PI-sparing regimens. The triple nucleoside regimen utilized may be less likely to result in viral suppression to <50 copies/ml, while the nevirapine-based regimen is associated with a lower increase in CD4 T lymphocytes.

AIDS 2003;17(7):987-999.

Archives of Pathology and Laboratory Medicine

Pathologic features of *Mycobacterium kansasii* infection in patients with acquired immunodeficiency syndrome

Smith MB, Molina CP, Schnadig VJ, Boyars MC, Aronson JF

CONTEXT: Mycobacterium kansasii is a slow-growing photochromogenic mycobacterium that may infect patients with human immunodeficiency virus (HIV) late in the course of acquired immunodeficiency syndrome (AIDS). The clinical features of pulmonary and extrapulmonary infections have been described in the literature; however, the pathology of infection has not been adequately addressed. *OBJECTIVE:* This report describes the pathologic features of 12 cases of *M. kansasii* infection in patients with AIDS. *DESIGN:* The medical records, autopsy protocols, cytologic material, and histologic material from patients with AIDS and concomitant *M. kansasii* infection at a tertiary care medical center during 1990-2001 were reviewed. *RESULTS:* Twelve cases were identified; six by autopsy, five of which were diagnosed postmortem. Four of the 12 cases had cytologic material and four cases had histologic biopsies available for review. Pulmonary infection was most common (9/12), and all patients in whom thoracic lymph nodes were assessed showed involvement (7/7). Abdominal infection was less frequent, with only 1 of 6, 2 of 6, and 2 of 6, demonstrating liver, spleen, and abdominal lymph node infection, respectively. Isolated infections without documented pulmonary infection included brain abscess (n = 1), ulnar osteomyelitis (n = 1), and paratracheal mass (n = 1). Cytologic and histologic material showed a wide range of inflammatory reactions, including granulomas with and without necrosis, neutrophilic abscesses, spindle-cell proliferations, and foci of granular eosinophilic necrosis. The *M. kansasii* bacillus was characteristically long, coarsely beaded, and frequently showed folded, bent, or curved ends. Intracellular bacilli were randomly or haphazardly distributed within histiocytes. *CONCLUSION: Mycobacterium kansasii* infection produces predominately pulmonary infection in late-stage AIDS with a high incidence of thoracic lymph node involvement and a much lower incidence of dissemination to other sites. Infection is manifest as a wide variety of inflammatory reactions on cytology and histology; however, the characteristic appearance of the bacillus on acid-fast bacilli stain and its intracellular arrangement in histiocytes can allow a presumptive identification.

Arch Pathol Lab Med 2003;127(5):554-560.

Teaching and Learning in Medicine

Challenges and opportunities for patients with HIV who educate health professionals

Hatem DS, Gallagher D, and Frankel R

BACKGROUND: Patient perspectives are valuable for clinical care and teaching. *PURPOSE:* To understand personal and programmatic effects of using HIV-infected persons as teachers in courses about care of HIV-infected people. *METHODS:* Semistructured interviews with HIV-infected faculty for New England AIDS Education and Training Center (NEAETC), addressing teaching decision and its personal, medical, and psychological consequences. Interview transcripts were analyzed via iterative, consensus building. *RESULTS:* Participants reported consequences of teaching that benefited them as patients (finding healthcare providers, increasing their knowledge base, and receiving tangible rewards such as gifts). A deeper level of benefit was realized personally, increasing control over their life and disease. Relationships, personal and professional, changed, from unilateral to mutual, heightening a sense of their own empowerment. Teaching built support networks and aided in coping with difficult issues raised (negative emotions, informing significant others about their infection, death and dying). Program support was essential for participation, allowing numerous teachers to transform teaching from individual messages to universal lessons. *CONCLUSIONS:* The program was well received and well regarded by participating teachers. Convenience sampling does not account for nonparticipating faculty viewpoints or those who left the program, but concrete benefits can be expected if support and investment by the program is in place. Learning by these HIV-infected teachers fits the characteristics of transformational learning.

Teach Learn Med 2003;15(2):98-105.

Journal of Acquired Immune Deficiency Syndromes

Increased lipodystrophy is associated with increased exposure to highly active antiretroviral therapy in HIV-infected children

Vigano A et al.

OBJECTIVE: To assess body composition changes in HIV-infected children receiving highly active antiretroviral therapy (HAART). *METHODS:* Thirty-seven HIV-positive children were enrolled. Dual-energy X-ray absorptiometry (DXA) scans were performed in all HIV-infected children at baseline and after an additional 12 months of HAART and in 54 matched (for sex, age, body mass index [BMI], and pubertal stage) healthy controls. Abdominal MRI was performed in 14 of 37 HIV-positive children at baseline and in 28 of 37 HIV-positive children after additional 12 months of HAART. *RESULTS:* During the study period, mean HAART exposure increased from 39.3 to 50.9 months and the number of HIV-infected children with clinical lipodystrophy (LD) increased from 6 to 8, whereas mean BMI, CD4 percentage, and percentage of HIV-infected children with HIV RNA <50 copies/mL did not change. DXA scans showed an increase in lean mass, peripheral fat loss, and central fat accumulation in all HIV-infected children. As compared with controls, 70 percent and 84 percent of HIV-infected children showed DXA-detectable LD at baseline and at 12 months of follow-up, respectively. Mixed LD and central fat accumulation were the most common LD phenotype. At baseline and at 12 months of follow-up, intra-abdominal adipose tissue (IAT) was greater than in controls in 33 percent and 35 percent of HIV-infected children, and it was greater in those with LD than in those without. Peripheral fat loss and IAT content were associated with duration of HAART and were independent of immunologic stage of disease and immunologic response. *CONCLUSIONS:* Changes in body composition related to LD in HAART-treated children are frequent, precocious, and progressive. Duration of HAART negatively influences visceral adiposity and peripheral fat loss.

J Acquir Immune Defic Syndr 2003;32(5):482-489.

Kristen Ries

Vanity Fair readers have every month since 1993 enjoyed *The Proust Questionnaire*, a series of questions posed to celebrities and other famous subjects. In June 2002, *IAPAC Monthly* introduced "In the Life," through which IAPAC members are asked to bare their souls by answering 10 questions.

This month, *IAPAC Monthly* is proud to feature Kristen Ries, who is Professor of Internal Medicine and Director of the AIDS Program at the University of Utah School of Medicine, Salt Lake City, Utah.

What proverb, colloquial expression, or quote best describes how you view the world and yourself in it?
Always give back; one receives more than one gives in the end.

What activities, avocations, or hobbies interest you?
Reading, along with gardening, is my hobby. I am impressed how much humans could learn by history. (Unfortunately reading and gardening are hard to do at the same time, thus one always suffers.) The outdoors and nature give hope and strength.

If you could live anywhere in the world, where would it be?
I would still live in Utah. I chose this place because of the varied outdoors and the magnificence of the multiple terrains and climates.

Who are your mentors or real life heroes?
Barbara McClintock, the discoverer of the jumping genes, is a hero who made a remarkable discovery and continued to work even without support or deserved infrastructure. I am always attracted to people who persevere for intellectual reasons even if it isn't a popular project or a financially rewarding endeavor.

With what historical figure do you most identify?
I have always admired many of the historic discoverers in infectious diseases such as Semmelweis, Pasteur, and Reed. Reading of them is where I learned the value of seeing and observing and the difference [between] the two.

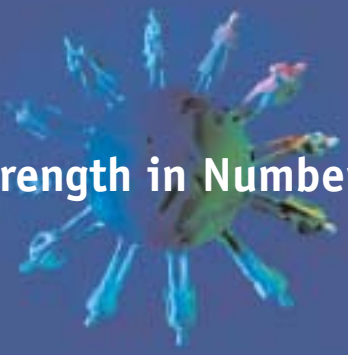
Who are your favorite authors, painters, and/or composers?
I prefer classics, realistic painting, and music. Vivaldi is my favorite composer. A local Utah artist, Randall Lake, is my favorite artist. He painted a painting named "A Silent Warrior" depicting an AIDS patient in the early 90s, which has been so healing to me. Reading? I'll read most anything, but prefer nonfiction.

If you could have chosen to live during any time period in human history, which would it be?
It's hard to imagine any other time. So much has happened in this lifetime. For years, I thought I was born too late and didn't fit into these times. Now, I try to imagine the future by thinking out of the box (as much as I can). Sometimes, I wish I could live to see the end of the story. I hope there will be a kinder time.

If you did not have the option of becoming a physician, what would you have likely become, given the opportunity?
I would have been a naturalist of sorts. We must be more kind to our surroundings as well to the humans.

In your opinion, what are the greatest achievements and failures of humanity?
We have achieved so much in the technical areas including the industrial revolution and now the computer revolution. Our humanism and ability to grasp what is meaningful for life lags far behind. Greed and power remain stumbling blocks to our future and the future of the earth. To still have war and to see people starve in the world is something I cannot accept.

What is your prediction as to the future of our planet one full decade from present day?
We seem to be on an exponential curve of technological advances. I hope to be proven wrong, but in 10 years I think we will be in a worse state for the average human as the gap between the rich and the poor increases. Yes, much more will be available, but only some will reap the benefits. We must discover what to do for the millions of humans who are left behind with the advance of technology. I think we will be a lot worse off as a world in 10 years, but that there will be a reawakening in progress. ■



[Strength in Numbers]

[IAPAC Welcomes New and Renewing Members]

In April and May 2003, the International Association of Physicians in AIDS Care (IAPAC) welcomed 127 new and renewing dues-paying members from seven countries and one US territory. IAPAC thanks the following physicians and allied health workers for their support of the association's mission to improve the quality of care provided to men, women, and children who are living with HIV/AIDS.

David Aboulafia, *USA*
Leonard Alberts, *USA*
Nelson Vallejo Almeda, *Puerto Rico*
Mario Alves, *USA*
Lee Anisman, *USA*
Rayapu Ramesh Babu, *India*
Jeffrey Beal, *USA*
Mitchell Brodey, *USA*
Karen Brudney, *USA*
Alan Bulbin, *USA*
David Butcher, *USA*
Ronelle Campbell, *USA*
Julio Cardenas, *USA*
Jaime Carrizosa, *USA*
Richard Cazen, *USA*
Pushpa Chandwani, *USA*
Jim Christensen, *USA*
Mindy Cimmino, *USA*
Roseann Ciuffo, *USA*
Robert Clark, *USA*
Lawrence Cone, *USA*
Timothy Cooper, *USA*
Hassan Danesi, *USA*
Edwin DeJesus, *USA*
Sanford DeLeon, *USA*
Judy Delmar, *USA*
Alex Dusek, *USA*
Christopher Echterling, *USA*
Richard Elion, *USA*
Boye Ernest, *Ghana*
Charles Farthing, *USA*
Rod Felber, *USA*
Evelyn Fisher, *USA*
Anita Fleenor-Ford, *USA*
Michael Foltzer, *USA*
Susan Forlenza, *USA*
Linda Frank, *USA*
Gerald Friedland, *USA*
David Friedman, *USA*
Jon Fuller, *USA*
Ricardo Galdamez, *USA*
Joel Gallant, *USA*
Joel Godbey, *USA*
Barry Hartman, *USA*
Diane Havlir, *USA*
David Henry, *USA*
Keith Henry, *USA*
Ross Hewitt, *USA*
Ronald Hirsch, *USA*
Joseph Hoagbin, *USA*
Vincent Jarvis, *USA*
Shashank Joshi, *India*
Sunectha Kalathoor, *USA*
Lori Kamemoto, *USA*
Ronica Kluge, *USA*
Gilbert Kombe, *USA*
Drew Kovach, *USA*
Steve Kravcik, *USA*
Francois Lebel, *USA*
Carl LeBuhn, *USA*
Stephen Lee, *USA*
Felix Leung, *China*
Thomas Liberti, *USA*
Emmanuel Lim, *USA*
Nathan Linsk, *USA*
L. Thomas Lochner, *USA*
Luis Maldonado-Arteaga, *Ecuador*
Katherine Marconi, *USA*
Gal Mayer, *USA*
Linda McGhee, *USA*
Edward McManus, *USA*
Azene Mengistu, *Ethiopia*
Judy Miyakawa, *USA*
Anthony Robert Morice, *USA*
Sugata Mukhopadhyay, *India*
Robert A. Myers, *USA*
Ronald Nahass, *USA*
Edward Oldfield III, *USA*
Sandro Olgiati, *USA*
Donna O'Neill, *USA*
David Parks, *USA*
Pablo Pella, *USA*
Robert Penn, *USA*
Daniel Perlman, *USA*
Richard Porwancher, *USA*
Richard Presnell, *USA*
Kathryn Presto, *USA*
Thomas C. Quinn, *USA*
Anita Rachlis, *Canada*
Nina Regevik, *USA*
E. Michael Reyes, *USA*
Frank Rhame, *USA*
David Rimland, *USA*
Pablo Rodriguez, *USA*
Barry Rodwick, *USA*
Michelle Roland, *USA*
Carlos Ruiz-Torres, *USA*
Philip Sanchez, *USA*
Charles Shafer, *USA*
William Shay, *USA*
Denise Signs, *USA*
Carol Maggie Snyder, *USA*
Michael Stary, *USA*
David Stein, *USA*
Corklin Steinhart, *USA*
Greta Stiebel-Chin, *USA*
John Sullivan, *USA*
Susan Szabo, *USA*
Joseph Thurn, *USA*
Frank Tomaka, *USA*
Patrick Tranmer, *USA*
Andrew Urban, *USA*
Jaime Vasquez, *USA*
Vilma Vega, *USA*
Athol Ware, *USA*
Richard Wulfsberg, *USA*
Howard Wunderlich, *USA*
Kevin Young, *USA*
Ryan Zane, *USA*
Talal Zraik, *USA*

Also, the following are new and renewing IAPAC institutional members: AIDS Intervention Project; Heartland CARES, Inc.; Mercer County HIV Consortium; New Orleans AIDS Task Force; San Angelo AIDS Foundation; Southern Tier AIDS Program, Inc.; and the Triangle AIDS Network.

To learn more about professional and institutional memberships, call (312) 795-4935 or send an e-mail to member@iapac.org. For more information regarding Corporate Partner opportunities, call (312) 795-4941 or send an e-mail to partner@iapac.org.

SAY ANYTHING

This historic legislation will enable us to provide critical treatment and care for millions who suffer and greatly expand successful prevention programs to help those at risk.

US President George W. Bush in a May 16, 2003, statement issued immediately following US Senate passage of a bill authorizing a five-year US$15 billion AIDS relief plan through which the Bush Administration hopes to advance prevention and treatment initiatives in 12 sub-Saharan African countries plus the Caribbean countries of Guyana and Haiti. The US House of Representatives passed an identical bill two weeks earlier. The legislation recommends 55 percent of the money for treatment; 20 percent for prevention; 15 percent for palliative care; and 10 percent for AIDS orphans. In addition, the legislation would allow, but not require, the Bush Administration to contribute up to US$1 billion in 2004 to the Global Fund to Fight AIDS, TB and Malaria. Conservative members of the US House of Representatives were able to amend the bill to ensure that 33 percent of all prevention funding will go to abstinence programs, and that Catholic and other religious groups will not be denied funding because they oppose condom distribution. In approving the legislation, the US Congress has allowed Bush the ability to leverage increased contributions from other industrialized nations—which the White House has indicated he intends to do during the upcoming Group of Eight (G8) summit in June 2003.

Recently, we've asked various levels of government to step up prevention of other epidemics in addition to fighting SARS. This includes our prevention and control work in AIDS in China's countryside.

Qi Xiaoqui, Director of the Chinese Ministry of Health's Department of Disease Control, as quoted in a May 15, 2003, Agence France Presse *report entitled, "China to Invest in Rural Health Care, Pay Greater Attention to AIDS." According to the report, China will invest more funding and resources in rural healthcare due to the SARS epidemic and will also pay more attention to other epidemics, such as AIDS. Public health experts have been highly critical of China's muted response to infectious diseases such as HIV, saying that if China had paid as much attention to HIV disease as it is paying to SARS, many lives would have been spared. It was not until 2001 that China admitted its AIDS epidemic, citing conservative estimates of 600,000 people living with HIV/AIDS. Beijing now admits to 1 million cases of HIV/AIDS, although experts estimate the number is in fact closer to 4 to 6 million.*

The long-term cardiovascular effect of combination antiretroviral therapy in HIV-infected patients has not been conclusively demonstrated and therefore concerns about the risk of cardiovascular disease should not lead to the withholding of combination antiretroviral therapy.

Excerpt from a European Medicines Evaluation Agency (EMEA) statement as quoted in a May 6, 2003, Reuters Health report entitled, "Agency: Safety Studies of HIV Drugs Must Continue." According to Reuters Health, the EMEA urged antiretroviral drug manufacturers to continue until at least 2005 several ongoing studies into the long-term cardiovascular safety of antiretroviral therapies. Although the EMEA acknowledged that results so far obtained from two studies "clearly demonstrate that the benefit/risk balance of antiretroviral treatment remains strongly positive," the agency said that extending the studies until at least January 2005 was necessary to obtain a definitive answer.

You can't take their pills for them.

Judith Feinberg (University of Cincinnati) during a May 15, 2003, presentation on adherence to antiretroviral therapy, which was delivered at the IAPAC Sessions 2003. This annual symposium, held in Chicago under the auspices of the International Association of Physicians in AIDS Care (IAPAC), tackles issues ranging from adherence to metabolic complications associated with antiretroviral therapy. Physician delegates indicated that much of their frustration around adherence stems from the fact that so much of whether patients adhere to antiretroviral therapy depends on factors outside their control. According to Feinberg, adherence takes place or fails to take place in the weeks and months between office visits, which happen without enough regularity in an overburdened healthcare system.

We've conquered slavery, colonialism, and apartheid. We must now fight HIV/AIDS with increased political will from our leaders.

Former Zambian President Kenneth Kaunda quoted in a May 19, 2003, Inter Press Service profile of the AIDS awareness work he advances through the Kenneth Kaunda Children of Africa Foundation. Having lost his own son to AIDS in the late 1980s, Kaunda was the first African leader to publicly advocate a campaign to stem HIV infections and care for those already infected. In regular television and radio advertisements, the former Zambia leader is exhorting today's African leaders to redouble their efforts against HIV/AIDS.