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PEPFAR celebrates decade of preventing AIDS deaths

Having HIV/AIDS in a developing country has evolved from being a death sentence 10 years ago to a chronic, nonfatal condition, thanks in large part to the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The plan is helping countries add more people to antiretroviral therapy regimens each year than the number becoming newly infected—a milestone reached now in 13 countries—thereby moving toward the eventual goal of treating everyone infected and eliminating spread of the virus.

PEPFAR directly supports more than 5.1 million people on antiretroviral drugs and funds HIV testing and counseling for many millions more—46.5 million in 2012. PEPFAR's HIV prevention strategies have also saved more than 1 million babies from contracting the virus from their mothers.

PEPFAR's accomplishments represent the best of the human spirit and the best of American leadership, noted U.S. Secretary of State John Kerry, speaking at an anniversary event. "Because when we all looked lost,

Photo by James Pursey/Elizabeth Glaser Pediatric AIDS Foundation



PEPFAR is celebrating a decade of progress in the global fight against HIV/AIDS.

when this disease appeared to be unstoppable, history will show that humanity and individual humans rose to the challenge," he said. "Action was taken. Innovations were discovered. Hope was kindled, and generations were saved."

NIH grants cut by 5 percent due to sequestration

Sequestration, which has forced across-the-board U.S. federal spending cuts, is a "profoundly devastating blow" for biomedical research, according to NIH Director Dr. Francis S. Collins. Every area of research supported by NIH's 27 Institutes and Centers, including Fogarty, is affected. NIH will fund about 700 fewer grants in fiscal 2013 than in 2012 and will cut existing noncompeting awards by about 5 percent.

That will delay medical breakthroughs, including development of cancer drugs that can target particular tumors, a universal vaccine for every type of influenza and

treatments for chronic diseases such as dementia. The cuts will also undermine the U.S. scientific workforce by closing doors on many job opportunities, according to an NIH fact sheet.

Under sequestration, NIH's overall budget fell by 5 percent or \$1.55 billion. Unless Congress acts, additional reductions will automatically take effect each year through 2021. "We are at the moment where science is moving the fastest it ever has," Collins said. "Yet the support for science, because of the sequester, is under greater threat than it has ever been."



- Leveraging existing programs to provide treatment
- Neglecting maternal depression also harms children
- Advocating mental illness be treated alongside chronic diseases

Chronic disease battle needs global collaboration

Photo by Cathy Kristiansen



From left: Fogarty Director Dr. Roger I. Glass, U.S. Global AIDS Coordinator Ambassador Eric Goosby and other health experts attend a Global Alliance for Chronic Diseases meeting on Capitol Hill in Washington, D.C.

The prevalence of chronic, noncommunicable diseases (NCDs) is rising so rapidly that it threatens to strain health care systems everywhere unless policymakers collaborate to invest strategically in global solutions, according to a panel of global health research representatives speaking recently at the U.S. Capitol.

The pieces are in place for a scale-up of research in NCDs and more rapid implementation of discoveries in the developing world, speakers said at the meeting, organized by NIH and the Global Alliance for Chronic Diseases. The Alliance, an international public-private partnership, facilitates research collaborations striving to treat or prevent NCDs.

Ambassador Eric Goosby, U.S. Global AIDS Coordinator and Office of Global Health Diplomacy director, noted the infrastructure built in developing countries to combat the HIV/AIDS epidemic, malaria and tuberculosis is helping health systems handle NCDs in many ways. With the President's Emergency Plan for AIDS Relief funding, health systems have opened hundreds more clinics and many modern laboratories. And the related Medical Education Partnership Initiative is transforming medical education in Africa, to improve the quality and quantity of health care workers.

"I am hoping the international dialogue respects those lessons, but aggressively builds on those platforms,"

Goosby said. "I think we have the makings for really taking a quantum step to delivering more services to the larger population, helping prevent a lot of NCDs."

Global health was once seen as unidirectional with developed countries supporting the less fortunate, and focused almost entirely on infectious diseases, according to Canadian Institute of Health Research president, Dr. Alain Beaudet. But disease burdens are evolving, as are migration and climate patterns. "We have global health issues within our own country," he said. "Everyone needs to work toward common solutions."

Fogarty Director Dr. Roger I. Glass, who moderated the session, concluded that investing collaboratively in global health research, especially on NCDs, to solve the looming burden on the world's health horizon "is not a luxury but an absolute necessity."

NIH members of the Alliance include Fogarty, the National Heart, Lung and Blood Institute, National Cancer Institute and National Institute of Mental Health.

RESOURCE

GACD website: www.gacd.org

Nations vote unanimously to fight chronic disease

In an unprecedented move against the rising tide of noncommunicable diseases (NCDs), health representatives from almost 200 countries voted unanimously to focus their attention and resources on these diseases and closely monitor their progress.

The officials, attending the annual World Health Assembly, responded to the growing global burden of NCDs, which include cardiovascular disease, diabetes, respiratory problems and cancers. WHO Assistant-Director General for NCDs and Mental Health, Dr. Oleg Chestnov, welcomed the promise of greater action against NCDs. "The adoption of the global action plan moves the process from the political to the practical realm."

The countries agreed to pursue nine goals. These are to cut NCD-related premature mortality by 25 percent and make measurable progress in: reducing intake of alcohol, tobacco

smoke and sodium; counteracting high blood pressure and a lack of physical activity; stopping the rise in obesity and diabetes; offering people drug therapy and counseling to prevent heart attacks and strokes; and increasing access to technologies and drugs needed to treat NCDs.

WHA members have pledged to monitor their progress using a framework of 25 indicators to assess if their national strategies are being implemented sufficiently.

The WHO noted NCDs accounted for 63 percent of the 57 million deaths that occurred globally in 2008. Cardiovascular diseases accounted for nearly half of all NCD deaths, cancers for 21 percent, chronic respiratory diseases for 12 percent and diabetes for 3.5 percent.

RESOURCE

Vote on NCDs: <http://bit.ly/222GVXD>

US, Russia continue to forge research collaborations

By Arthur Allen

Pediatric and rare diseases hold promise for research partnerships and were the topics of discussion during the second meeting of the U.S.-Russia Scientific Forum held at NIH. The two countries share a number of pressing health problems and research interests and could benefit from working together, delegates agreed.

“We have to destroy the walls between us,” said Dr. Leyla Namazova-Baranova, director of the Institute of Preventive Pediatrics and Rehabilitation in Moscow. “Sharing experiences is key.”

Following scientific presentations, participants discussed ways that investigators from the two countries could build research relationships. All agreed that rare diseases are a particularly fruitful area for collaboration because the relatively small numbers of patients make it vital to gather evidence from around the world. “We must work together, or we’ll never be able to come up with therapies and ways to manage these cases,” said Namazova-Baranova.

“Private sources aren’t as interested in funding research into these illnesses because of the lack of a likely commercial payout,” added Dr. Vesna Kutlesic, director of the Office of Global Health at the National Institute of Child Health and Human Development. “This is an area where bilateral government action can bring scientists together to fill a gap.”

Fogarty director Dr. Roger I. Glass and other attendees spoke of creating formal research networks, as well as using opportunities such as the Forum to promote linkages between specific scientists and laboratories. U.S. fellowships for visiting young Russian scholars could help build these ties, participants agreed. It would also be beneficial to hold satellite meetings of U.S. and Russian scientists during international conferences.

“These programs are based on the shared interests of investigators who are so impassioned by the science that they are willing to overcome all hurdles to make the research go forward,” Glass said during the session. “This Forum is really about matchmaking—getting young scientists, both American and Russian, together for research so that five years from now we’ll have really unusual discoveries that couldn’t have been imagined otherwise.”

US - RUSSIA



SCIENTIFIC FORUM

Talks explore shared research interests



Substance abuse, tobacco control, cardiovascular disease prevention and childhood obesity were some of the topics U.S. and Russian health officials discussed during the recent World Health Assembly in Geneva. It was the third meeting of the U.S.-Russia Bilateral Presidential Commission’s Health Working Group, which is exploring potential areas for collaboration. The U.S. delegation was led by HHS Secretary Kathleen Sebelius (right) and included Office of Global Affairs Director Dr. Nils Daulaire, as well as Fogarty Director Dr. Roger I. Glass.

The Russian delegation was hosted by NICHD, Fogarty and the Office of Rare Diseases, part of the National Center for Advancing Translational Sciences. During their stay, the group met with NIH counterparts, visited the pediatrics department at Children’s National Medical Center and attended the annual meeting of the Pediatric Academic Societies.

The U.S.-Russia Scientific Forum was established in 2011 and is a public-private partnership coordinated by the Foundation for the NIH. The Forum, created with support from Eli Lilly and Company, is intended to promote and facilitate broader research collaboration in the biomedical and behavioral sciences between the two countries, with the goal of improving public health. Joint areas of interest include disease control, treatment and prevention, clinical and translational research, regulatory science and the development of new health technologies.

PROFILE

Examining mental health in Indian slums

By Arthur Allen

On a daily basis, millions of its people face police extortion, unpleasantly close neighbors, hungry rats, long lines to buy expensive, sometimes contaminated water, and the threat the government will destroy their homes. Clearly, stress has a whole different meaning in the slums of Mumbai.

So what are the mental health consequences of such an existence? Dr. Ramnath Subbaraman hopes to find the answers during a Fogarty Global Health Program Fellowship, which has helped him penetrate deeply into the life of Kaula Bandar, an illegal slum of 12,000 people living in makeshift hovels on a Mumbai wharf.

The main focus of Subbaraman's project is to determine the mental health impacts of life in a "non-notified slum." About half of India's 93 million slumdwellers live in such communities, which lack official recognition and thus have no access to municipal water supplies or other services.

The research project, which Subbaraman began in 2010, has already shown that the lack of fundamental needs such as water, toilets and shelter in Kaula Bandar appear to lead to worse health outcomes than in comparable "notified" Mumbai slums that have more stable access to necessary services. The project is supported by the Rockefeller Foundation, with research collaborators from the Harvard School of Public Health, New York University and a local NGO, Partners for Urban Knowledge, Action and Research (PUKAR).

Subbaraman first became interested in global health on a year abroad in South Africa during the peak of the HIV epidemic. Then, as a medical student and Fogarty Scholar in 2005, he took care of sick AIDS patients and studied drug toxicities, anemia and other health issues in Chennai, India.

The research techniques he learned during that experience, Subbaraman says, were enormously helpful when he got to Mumbai and plunged into one of the densest slums on earth. He and his colleagues, including about a dozen young "barefoot researchers"



Ramnath Subbaraman, M.D.

Fogarty Fellow: 2011-2012

U.S. organization: Harvard University

Research focus: Health factors in Indian slums

he hired from the community and trained, first performed a comprehensive study of the area's drinking water, which is illegally tapped from fire department pipes and brought in through torn water hoses that traverse waterways contaminated with saline and feces.

While the WHO says every person should get 50 liters of water per day and Americans typically use 300, Kaula Bandar residents frequently have access to fewer than 20 liters per day. After conducting in-depth interviews in Tamil, a local language, Subbaraman and his teams entered homes, measured usage, tested samples and interviewed water sellers. They carried out a water study and also compiled a questionnaire on the chronic stressors of slum life. After being presented with the study data, city officials agreed to bring clean piped water to Kaula Bandar.

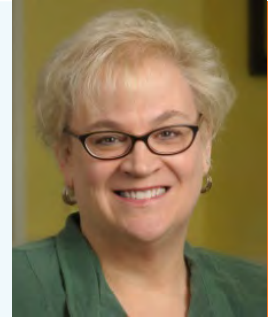
"We strongly felt the need to see local change and not rest on the notion that our research would have theoretical benefit years down the road," notes Subbaraman.

In another example of research quickly making a difference, when a PUKAR survey showed an immunization rate of only 29 percent among the district's children under five years of age, the government provided assistance so PUKAR could train a community education team that increased coverage to more than 80 percent within three years.

"Fogarty contributed in a very significant way to the lives of the people in Kaula Bandar," says Dr. Anita Patil-Desmukh, executive director of PUKAR. "It supported Ramnath's outstanding scholarship, and this allowed him and the team to lobby the Mumbai government to start health camps and bring water into the community." Some of the 18- to 25-year-old Kaula Bandar residents trained by Subbaraman and others through these programs are using their compensation from the research work for school bills, and may themselves pursue careers in public health.

SALLY J. ROCKEY, PH.D.

Dr. Sally J. Rockey is the NIH Deputy Director for Extramural Research, serving as the principal scientific leader and advisor to the NIH director on the agency's extramural research program. Rockey heads the Office of Extramural Research (OER), which focuses on grants, contracts and cooperative agreements, supporting biomedical researchers and organizations beyond the NIH campus. She is active on several federal committees related to science, research administration and electronic government, and collaborates closely with academic and scientific communities. To help grantees better understand NIH, she hosts a blog, Rock Talk.



Why does NIH fund global health research extramurally?

The importance of global health has long been a critical component of NIH activities. We recognize that developed nations are not the only source of biomedical research and innovation. Important science is being conducted in all corners of the world and the understanding we gain from that research is applicable to people in the U.S. and abroad. Much of the international research NIH has supported has focused on infectious diseases. Today, the nature of the global health landscape is changing and we must broaden our vision to include noncommunicable diseases, such as cancer, diabetes and hypertension.

What is the Office of Extramural Research's role?

OER's mission is to provide the corporate framework for NIH research administration, ensuring scientific integrity, public accountability and effective stewardship of the NIH extramural research portfolio. This means that my office oversees much of the NIH infrastructure that enables grants to happen.

We provide leadership, policy development and oversight over the NIH grant-making process. We also offer resources such as a website that help applicants and grantees find, administer and manage NIH grants. OER develops and maintains NIH's electronic Research Administration (eRA) systems that are used by NIH staff and our applicant/grantee community to process grants electronically. We also manage powerful tools, such as RePORT, to give transparency into who and what NIH funds.

What advice do you offer non-U.S. institutions seeking NIH funding?

It is very much the same advice I'd offer all potential applicants—start preparing early. Researchers are often so busy working on the scientific aspects of their applications they focus less attention on preparing to actually submit. It is crucial to understand the NIH grant process.

The registration process includes multiple federal systems and can take up to eight weeks or more to complete. We don't want researchers to build a great application and then be unable to submit because of registration problems. Applicants should target submission a week before the deadline so there is time to work through any problems. Starting early is especially important for non-U.S. institutions that must deal with language and time zone differences when seeking help. They should then check their submission is correct in the eRA Commons system.

What can trip up foreign applicants?

Applicants tend to run into trouble when they don't leave enough time to work through each step of the application process or fail to follow application instructions. Multiple registrations are needed that must be completed to be eligible to apply! Institutions must have a NATO Commercial and Governmental Entity (NCAGE) Code, a Dun and Bradstreet (DUNS) number, a registration at SAM.gov (System for Award Management) that requires annual renewal, registration in grants.gov and, finally, the NIH's eRA Commons.

It is crucial to build in time to fix any identified errors or warnings. Foreign applicants should check the eligibility section of the announcement to make sure their organization qualifies. Also, foreign organizations must use the Research & Related budget form, not the modular budget form. And some forms require a congressional district, but foreign applicants simply write 00-000.

How do you track other global health funders?

In order to better coordinate global health research, we have created a pilot global "observatory" to collect and analyze information about the extent and composition of research and development support for sub-Saharan Africa, awarded by NIH and a handful of other major funders. Called *World RePORT*, it's a work in progress. We're engaged in discussions, coordinated by Fogarty, to explore possible expansion to other areas of the world and to include other biomedical research funders.

RESOURCES

Website: <http://grants.nih.gov/grants/foreign>

Mental health must be integrated into care delivery

By Cathy Kristiansen

There is no health without mental health, a growing body of evidence indicates, yet this aspect of care is largely neglected in the developing world. Many live their daily lives amid grinding poverty, ongoing disease outbreaks, political instability and violence—yet there are few, if any, resources available to help them deal with the mental health issues that arise. Depression, anxiety disorders, substance abuse and other crippling conditions pose an enormous burden.

To address this misery, mental health care should be integrated into existing health systems and development programs, according to a landmark series of papers published recently by *PLOS Medicine*. The five articles are the result of an NIH workshop organized

Mental health treatment is not available in many developing countries but it could be provided if integrated into existing health systems, scientists say.



Photo by Jan Sোধar/PhotoShare

by Fogarty's Center for Global Health Studies and co-sponsored by the National Institute of Mental Health, National Heart, Lung and Blood Institute and National Institute of Child Health and Human Development.

"There has been a perception that mental health disorders are problems of wealthy countries and that with so many other competing health priorities in low- and middle-income countries, how could you possibly think about mental disorders?" said Dr. Pamela Y. Collins, Director of NIMH's Office for Research on Disparities and Global Mental Health. "Mental disorders are responsible for a substantial burden of illness and disability that must be addressed."

If mental, neurological and substance use disorders remain untreated, global health investments will not efficiently raise the overall health of targeted populations. Indeed, these conditions account for almost a quarter of all years lived with a disability, according to the Global Burden of Disease Study 2010. This is a huge loss in terms of individuals' well-being and productivity and extends to affecting their family, community and the economy. Mental disorders are associated with many comorbidities and related deaths, including higher HIV infection rates, cirrhosis or cancer tied to alcohol abuse and deaths from suicide.

The WHO estimates that in some low-resource countries, less than 10 percent of people with mental health problems are treated. Even in countries where mental health services are widely available, such as the U.S., only about half of potential patients seek and receive attention for their disorders.

In 2011, researchers, clinicians and advocates identified 40 Grand Challenges in Global Mental Health. The recent NIH workshop and resulting papers focus on one of those Challenges: "Redesign health systems to integrate MNS (mental, neurological and substance abuse) disorders with other chronic disease care, and create parity between mental and physical illness in investment into research, training, treatment and prevention."

The meeting focused on how mental health services can be integrated into maternal and child health care, HIV treatment and noncommunicable disease programs.

Treatment for mental disorders should be part of primary care and other global health priority programs targeted at specific health conditions, according to the papers' authors, led by NIMH's Collins. "The links between HIV and depression, cardiovascular disease and anxiety disorders,

diabetes and depression—as well as other conditions—suggest that the best outcomes for these disorders require care that attends to all of them.”

Grand Challenges in Mental Health article series

- 1 Integration in research, policy and practice
- 2 Integrating maternal mental health into maternal and child health programs
- 3 Integrating mental health care into the non-communicable disease agenda
- 4 Improving HIV treatment outcomes by integrating interventions for comorbid mental illness
- 5 Integrating mental health services into priority health care platforms

The papers are available at <http://bit.ly/GRANDmh>

Importance of research

Research is essential to preparing the groundwork for integration of care, given that each country’s sociocultural, political and health system environment is unique and poses different challenges and opportunities. Studies must be conducted to identify which interventions to adopt, how to tailor them and how to measure if they are effective and efficient. However, existing research capacity in developing countries is very limited, with less than one person per million researching mental health, according to a 2010 survey.

“The most common reasons for failure to integrate mental health care into primary or other priority health care programs are lack of adequate assessment and overly ambitious target setting,” according to Dr. Vikram Patel, of the London School of Hygiene & Tropical Medicine, and his colleagues, who authored one of the Grand Challenges papers. To successfully integrate mental health into existing infrastructure will require “ongoing, iterative adaptation, hypothesis testing, performance data monitoring and improvement.”

Research is required to plan screening, develop treatments for use by nonspecialists, address stigma, and create regional centers for mental health studies, education, training and practice that incorporate the needs of local people.

“It is imperative to invest in research and implementation programs so that these approaches are refined and scaled

up, leading to improved outcomes,” said Dr. Atif Rahman, of the University of Liverpool, and his colleagues in their paper.

Integrating care for maternal depression

Depression is the most common mental health issue globally among women of childbearing age. In addition to the economic and human costs, “children of depressed mothers are at risk for health, developmental and behavioral problems,” the authors observe. These children are less likely to receive adequate levels of nutrition, immunization and breast-feeding, and are more at risk for diarrheal diseases, cognitive and social problems, and mortality.

Depression carries a heavy toll for those untreated—sometimes death but more often a higher risk for physical illness, loss of ability to work and withdrawal from family and community.

Photo by Syed Ziaul Habis Reebon/PhotoStore



The NIH recently convened experts to study how mental health care could be incorporated into existing HIV and chronic disease treatment clinics, researchers say.

It will be very challenging for many countries to integrate mental disorders into maternal and child health (MCH) platforms, the authors noted. Many health systems are weak, with funding and staff resources scarce. Importantly, negative attitudes toward mental illnesses prevail not only in communities but also among health professionals, creating a serious hurdle to reaching and treating patients. These obstacles can and must be overcome, urged the Grand Challenges experts.

“By narrowly fixating on mortality and morbidity targets, and relegating psychosocial well-being to be a peripheral goal, the MCH community is missing an important opportunity and, in the process, depriving millions of mothers and children of their basic right to health,” Rahman’s team said. “This situation needs to be remedied immediately and urgently.”

MYTHS about maternal depression

Maternal depression is rare.

In fact, it occurs in all cultures, at a rate of 10-15 percent in high-income countries and an estimated 18-25 percent in low- and middle-income countries. It is more frequent in women experiencing poverty, persistent poor health, partner violence and a lack of emotional and practical support, among other factors.

Maternal depression is not relevant to global maternal and child health programs.

The infants of women suffering from depression have poor outcomes, such as lower cognitive development and more antisocial behavior, hyperactivity and emotional problems.

Only specialists can treat maternal depression.

Depression can often be resolved by simple psychotherapies, without specialist intervention and antidepressant medication. Evidence is building that nurses, health visitors, midwives and other nonspecialists can be trained to give basic treatment for conditions such as depression.

It is not possible to integrate mental health care into maternal and child health programs.

Mental health disorders influence many aspects of physical health. Rather than diluting the impact of specific interventions, for instance to reduce HIV rates and maternal deaths, simultaneously treating mental health disorders can magnify the progress made in those other health areas.

Source: *Grand Challenges: integrating maternal mental health into maternal and child health programs*, PLOS Medicine, May 2013. <http://bit.ly/GrandCHmaternal>

Researchers can help integrate mental health with chronic disease care

As developing countries confront the rapidly expanding burden of death and disability from chronic, noncommunicable diseases (NCDs), decision makers should build mental health care into delivery solutions. “Without integration of mental health care into the NCD agenda, current NCD initiatives will be less effective and more costly,” the Grand Challenges authors predict.

Nearly 80 percent of NCD deaths occur in developing countries, with the four most prevalent causes being cardiovascular and chronic respiratory conditions, diabetes and specific cancers. As the global population grows and ages, more people will suffer the burden of both mental disorders and one or more NCDs, making treatment integration essential. For instance, patients taking antipsychotic drugs face a higher risk of related weight gain that can precipitate NCDs, such as diabetes and cardiovascular disease, and people abusing alcohol face a higher incidence of eight types of cancer. On the other hand, patients living with HIV as a lifelong, chronic disease experience more depression and suicide than the general population.

“Mental, neurological and substance use disorders frequently occur throughout the course of many NCDs and infectious diseases, increasing morbidity and mortality,” noted Dr. Victoria K. Ngo, of RAND Corporation in Santa Monica, and her colleagues. “The bottom line is that the pathways leading to comorbidity of mental disorders and physical NCDs are complex and bidirectional, and care for persons with those conditions needs to be coordinated.”

Although some research exists showing successful integration of care for mental health and NCDs, it was mostly conducted in high-income countries and the findings are not necessarily applicable to low-resource settings. A few studies in Chile, India, Uganda, Vietnam, South Africa and Pakistan have pointed to successful treatment of mental disorders in primary care settings, but the research did not examine combined mental and NCD care.

More in-country funding for research will help identify the best strategies for integrating chronic illness services with care for a broad range of mental health conditions. For instance, data are needed on the link between alcohol use disorders and severe mental illness in different cultural settings. Researchers can determine which interventions are most effective and how they can be scaled up.

The Grand Challenges paper on NCDs proposed a collaborative model of care be adopted, which would involve restructuring the roles of health care providers according

to a team-based approach. Through task shifting, primary care providers and community health workers could assume some duties previously assigned to specialists, such as identifying patients who need basic mental health care, educating them about their illness, pointing out risk factors and instructing them on how to self-manage. They could also offer basic treatment, such as psychosocial therapies, as well as conduct long-term monitoring. In more complicated cases, the providers might refer patients to a specialist.

More research is needed to guide policymakers who control health spending, the authors conclude. “We must invest in designing health care systems that recognize and address the comorbidity between mental disorders and chronic physical illnesses before we are crippled by the rise in NCDs and mental health conditions.”

Tackling mental disorders along with HIV

Several factors link HIV and mental disorders. Patients with HIV are twice as likely to suffer from clinical depression as uninfected people and are more likely to misuse drugs and alcohol and pursue risky behavior. Additionally, the virus undermines immune system strength and increases the likelihood of comorbidities that can impair brain function, such as tuberculosis, malaria and lymphoma. And HIV patients might face a higher risk of developing cognitive impairment over time, even if they judiciously follow antiretroviral therapy.

Ideally, both children and adults with HIV would receive treatment as early as possible after diagnosis, without waiting for elevations in viral load, to reduce the development of related cognitive problems. In many countries, this would require improvements in surveillance, diagnostic services and antiretroviral drug availability.

Context is important when integrating HIV and mental health services, including the level of available resources, the acceptability of the interventions and patients’ everyday life stressors. Integrating mental health treatment into HIV primary care would provide more opportunity for early detection and effective interventions. “The evidence for the need is clear, and the evidence base for interventions suggests that it is feasible in low-resourced settings,” Dr. Sylvia Kaaya, of Muhimbili University of Health and Allied Sciences, and her colleagues wrote in their paper.

Conclusion

The group concluded that there are numerous approaches to integrating mental health care within existing health services, but it is essential in all cases that policy decisions involve representatives from many different national sectors aside from only health. Ensuring research findings reach

Photo by Bonnex Julius/Photoshare



People suffering from chronic illnesses often also have one or more mental health conditions, so it would be more efficient to leverage existing health systems to provide treatment for both, researchers say.

decision-makers, practitioners, managers and advocates will benefit efforts to bring innovations into practice. Policies must use evidence-based interventions that can be sustained and incorporate cultural perspectives, environmental influences and lifelong treatment programs. They should, where possible, work toward prevention.

The papers relay that ensuring mental health is part of care services in all countries will not only benefit patients with mental disorders and improve outcomes for their other illnesses such as HIV or diabetes, but will strengthen health systems through increased innovations, training, research capacity and improved infrastructure. In fact, if mental health care remains outside health systems targeting maternal, HIV and NCD care, those initiatives will be less effective and more costly.

“Health care systems in low- and middle-income countries are developing and changing rapidly, creating an opportunity to shape these systems as well as to learn how best to embed mental health services in a variety of different health system environments and sociocultural contexts,” the authors noted. “It is now imperative that the mental health and NCD agendas are coordinated to leverage current political and funding commitments.”

RESOURCES

Papers: <http://bit.ly/GrandChMH>

Website: <http://grandchallengesgmh.nimh.nih.gov>

Celebrating a decade of PEPFAR's accomplishments



At the end of the last century, we were at the height of the HIV/AIDS epidemic. The deadly virus was spreading rapidly and killing scores of people in every corner of the world. Sub-Saharan Africa was struck particularly hard, with countless children orphaned and nearly an entire generation decimated. Something had to be done.

The U.S. responded with a new kind of global health program—the President's Emergency Plan for AIDS Relief or PEPFAR—launched by President George Bush in 2003. This year we celebrate a decade of PEPFAR's remarkable achievements in helping protect people against this deadly virus. The program has been active in 80 countries, saving at least 1 million babies from being inadvertently infected by their HIV-positive mothers and today providing antiretroviral drugs to more than 5 million patients who could not otherwise afford them.

NIH-funded research has provided essential guidance to PEPFAR as it planned treatment and prevention programs. For instance, a study in Haiti demonstrated that patients in resource-limited settings could comply well with complicated antiretroviral drug regimens. Research in Uganda confirmed that circumcised males were less likely to acquire HIV than those who were uncircumcised. And a multi-country study showed if patients began taking antiretroviral drugs as soon as possible after diagnosis, they were less likely to spread the disease to their sexual partners.

Many of the in-country scientists who were instrumental in these landmark studies were trained through Fogarty programs. We believe that by building local expertise we are creating the capacity necessary to improve health over the long term.

As PEPFAR began to transition from an emergency response program to a more sustainable model, its leadership focused on enabling countries to take ownership for their own HIV/AIDS programs. To support this shift, PEPFAR launched the Medical Education Partnership Initiative (MEPI) in 2010. Its objective is to increase the quality, quantity and retention of health care workers in 12 sub-Saharan countries. NIH contributes funds and Fogarty

coadministers the program together with the Health Resources and Services Administration.

We at Fogarty are proud to be playing this supporting role in MEPI. It's gratifying to witness the transformation of medical education in Africa. Curricula are being strengthened, incorporating electronic components such as procedure demonstration videos that enable distance learning. Institutions are upgrading their Internet connectivity, increasing access to current journal articles and building e-libraries of learning tools. They're developing programs to increase expertise in neglected areas such as emergency medicine, surgery, cancer and heart disease. Skills labs are being assembled to offer students the opportunity to practice surgeries and other procedures on lifelike models. Institutions are ramping up faculty recruitment and dramatically increasing enrollment. Finally, resources and lessons learned are being shared among the MEPI network members.

Some funds support research projects, not only to expand training and accumulate country-relevant data, but importantly as an enticement for faculty to remain in their institutions and help sustain medical capacity. Staff retention is a major issue in Africa, with higher salaries elsewhere causing a brain drain. Another problem is staffing clinics in rural areas, where most of Africa's population lives, so MEPI grantees are nurturing rural training facilities and recruiting students from local communities who are more likely to remain in place after completing their studies.

Since MEPI grants are made directly to African institutions, local leaders can decide how best to apply funding to meet their country's particular needs, and this is adding to their sense of ownership. MEPI institutions are working closely with their government ministries to ensure goals are aligned with country priorities and to foster support.

PEPFAR and MEPI together have helped enhance care delivery and research capacity in many creative ways. The future looks much brighter than it did a decade ago, when HIV/AIDS cast its ominous cloud, and we are optimistic that an AIDS-free generation is truly possible.

RESOURCE

Website: <http://mepinetwork.org>



Mexico chooses Ruiz-Palacios to lead health institute

NIH grantee Dr. Guillermo M. Ruiz-Palacios has been named director of Mexico's National Institute of Public Health. He was most recently a professor of internal medicine and chair of the infectious diseases department at National Institute of Medical Science and Nutrition Salvador Zubirán and an investigator for Cincinnati Children's Hospital Medical Center.



Farrar is to become Wellcome Trust director

The Wellcome Trust has announced Dr. Jeremy Farrar, U.K. clinical scientist and professor at Oxford and Princeton Universities, will become its director in October. Since 1996, Farrar has worked for Wellcome in Vietnam, where he has also mentored a number of Fogarty Scholars studying infectious diseases.



NIH's Fauci is honored with Robert Koch award

Dr. Anthony S. Fauci, director of NIH's National Institute of Allergy and Infectious Diseases, will receive the Robert Koch Gold Medal for his life's work in the field of immune regulation in AIDS. The Robert Koch Foundation will present the award in November.



Fogarty-supported Natsheh becomes research fellow

The International Brain Research Organization has selected Dr. Joman Y. Natsheh, a graduate of the Palestinian Neuroscience Initiative funded by Fogarty and the National Institute of Mental Health, to be a research fellow. The award encourages educational exchanges between trainees at Rutgers University, Newark, and Al-Quds University in the West Bank.



Fogarty mentor in Cameroon, Ndumbe, dies

Fogarty mentor Dr. Peter M. Ndumbe has died. He was in-country leader for Fogarty's AIDS International Training and Research Program in Cameroon. He directed Yaoundé University's Centre for the Study and Control of Communicable Diseases and was dean at University of Buea's Faculty of Health Sciences.



Fogarty grantee Vermund is recognized

The American Pediatric Society has selected longtime Fogarty grantee and former board member Dr. Sten H. Vermund to receive its 2013 Norman J. Siegel New Member Outstanding Science Award for his contributions to children's health. Vermund directs the Vanderbilt Institute for Global Health.



Fogarty grantee Gertler receives Mexican medal

Dr. Paul Gertler, a former Fogarty grantee focused on poverty and how financial incentives can improve health, has received the Juan Jose Bobadilla Medal for Global Health. Gertler is the first economist to win the award, which Mexico's National Institutes of Health typically gives to medical professionals or epidemiologists.

Tool links research sites, sponsors

A new online application to encourage research collaborations has been developed by the London School of Hygiene & Tropical Medicine. The SiteFinder tool aims to help investigators promote themselves to potential collaborators and sponsors, while also enabling research groups planning studies to publicize their plans.

Website: <http://sitefinder.tghn.org>

Preparing to tackle cancer globally

A new annual publication addresses various aspects of cancer control in low-resource countries, including policymaking, advocacy, risk factors, epidemiology, early detection, treatment and palliative care.

Full report: <http://bit.ly/12fH3Xv>

Rising temperatures pose dangers

Developing countries will face significant health risks if temperatures rise by 4° Celsius within this century, according to a new World Bank report. A warmer world would keep millions trapped in poverty and expose them to unprecedented heat waves, severe drought and major floods.

Website: <http://bit.ly/17XSXhb>

Report targets child marriage

Child marriage perpetuates poverty and is linked to poor health, curtailed education, violence and instability, according to a report from the U.S. Council on Foreign Relations. The study, "Ending Child Marriage: How Elevating the Status of Girls Advances U.S. Foreign Policy Objectives," says about 16 million girls give birth each year.

Full report: <http://bit.ly/childcfr>

USAID launches water strategy

The U.S. has developed a plan to alleviate the world's shortage of adequate water and sanitation. "The USAID Water and Development Strategy" intends to improve health and strengthen global food security.

Full report: <http://1.usa.gov/183i2r6>

Foundation for NIH reports on activities

"Collaboration for Innovation" is the title of the Foundation for NIH's 2012 report, which details its most innovative and successful initiatives, spanning areas from global health to personalized medicine, education and training. The FNIH, raises funds and creates public-private partnerships to support the NIH mission.

Full report: <http://bit.ly/22Da5kU>

Funding Opportunities

| Funding Opportunity Announcement | Details | Deadline |
|--|---|--------------|
| Fulbright-Fogarty Awards in Public Health | http://bit.ly/UVxy49 | Oct 15, 2013 |
| International Research Scientist Development Award (K01) | http://1.usa.gov/V9wRRF | May 4, 2014 |
| Global Health Research and Research Training eCapacity Initiative (R25) | http://1.usa.gov/190BF4c | May 15, 2014 |
| International Research Ethics Education and Curriculum Development Award (R25) | http://1.usa.gov/15jRbAB | May 22, 2014 |

For more information, visit www.fic.nih.gov/funding

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Research must validate cleaner cookstoves

A baby snuggled against his mother's back while she cooks the family dinner over an open fire may be destined for an early death. The WHO estimates nearly 2 million people die prematurely each year from health problems such as lung cancer, pneumonia and obstructed airways because of toxic smoke from indoor cooking and heating fires, which almost half the world uses.

Photo by Leeltha Manjiv/PhotoSpace



Research is essential to inform clean cookstoves programs, according to a recent study.

Global health policymakers are increasingly aware of the need to reduce indoor air pollution and many programs have been launched to design and introduce new cookstoves, fuel and ventilation systems. But there are many research questions that should be studied before programs are implemented. This was the topic of a workshop to discuss the health risks of indoor air pollution and identify the research gaps, summarized in a recent *PLOS Medicine* article.

"The imminent scale-up of stove and fuel improvement programs offers a great opportunity for health researchers to work with program implementers. Failure to do so risks introducing new cooking technologies to millions of homes without understanding whether the intended health benefits are realized—or worse, whether there are unintended adverse consequences," noted first author Dr. William J. Martin, of NIH's National Institute of Child Health and Human Development, and his colleagues.

The paper laid out the key priority areas where research is needed to implement clean cooking solutions. Scientists should examine how indoor air pollution is linked to health outcomes such as child survival and development, the impact of exposure during pregnancy, respiratory disease, eye disorders, cancer and other conditions. They should also consider crosscutting issues including exposure and biomarker assessments, women's empowerment, behavioral approaches and program evaluation.

"Quickly demonstrating the beneficial health impacts of clean stoves in multiple settings could ensure the successful scale-up and funding of this critical health program," the authors concluded.

RESOURCE Paper: <http://bit.ly/55PLP6K>