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Biden team elevates science, global engagement

In his first weeks in office, U.S. President Joe Biden has taken steps to elevate the role of science in government, re-engage with the global community to combat the COVID-19 pandemic and advance global health, and renew the U.S. commitment to the WHO.

The White House has released a 200-page strategy for COVID-19 response and pandemic preparedness, which includes plans to restore U.S. leadership in strengthening global capacity to combat future disease threats. “The United States will promote sustainable global health and global health security, rebuild health security alliances, elevate U.S. efforts to support the Global Health Security Agenda, and revitalize U.S. leadership,” the document states.

On his second day in office, the President signed measures to allow the U.S. to rejoin the WHO and invited the NIH’s Dr. Anthony Fauci to represent the U.S. at the WHO’s virtual board meeting. Fauci told the gathering the U.S. will honor its financial commitments and rebuild U.S. engagement with the organization. “The United States stands ready to work in partnership and solidarity to support the international COVID-19 response, mitigate its impact on the world, strengthen our institutions, advance epidemic preparedness for the future, and improve the health and wellbeing of all people throughout the world,” said Fauci.



U.S. President Joe Biden visited NIH recently, where he was greeted by Dr. Anthony Fauci (center) and Dr. Francis Collins (right). Biden has appointed Fauci his chief medical adviser on COVID-19 and asked Collins to remain as NIH director.

Photo courtesy of the White House

WHO Director-General Dr. Tedros Adhanom Ghebreyesus welcomed the pledge. “WHO is a family of nations,” he said. “And we are all glad that the United States is staying in the family.”

Fauci also reported the U.S. will stop its draw down of staff seconded to the WHO and will resume engagement both directly and through its WHO Collaborating Centers. “The United States sees technical collaboration at all levels as a

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NIH, Fogarty see budget increases for Fiscal Year 2021

U.S. appropriations passed and signed into law in late December provide budget increases for both NIH and Fogarty. NIH received \$42.9 billion, nearly a \$1.5 billion hike from Fiscal Year 2020. Fogarty was allocated a little over \$84 million, about a 4% rise.

The measure also included \$1.25 billion for NIH to

support COVID-19 research and clinical trials related to the long-term effects of the virus. Another \$12.5 million was earmarked for NIH studies on firearm violence prevention. Finally, about \$3.1 billion will support Alzheimer’s disease and related dementias research.

Fiscal Year 2021 began on Oct. 1, 2020.

FOCUS



Scientists discuss importance of research in humanitarian crises

- Case studies describe unique challenges, lessons learned
- Flexibility, communication and strong partnerships are essential
- Outcomes can help guide policy, improve response efforts

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Biden team elevates science, global engagement

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fundamental part of our relationship with WHO, one that we value deeply and will look to strengthen going forward,” he said.

The U.S. also has announced it will join the ongoing international efforts to develop, produce and equitably distribute COVID-19 vaccines, therapeutics and diagnostics—the COVID-19 Vaccines Global Access Facility, known as COVAX, and the Access to COVID-19 Tools (ACT) Accelerator.

In a show of support for Africa, Biden addressed the virtual African Union Summit in February to express a willingness to help defeat COVID-19, advance health security and combat climate change. “The United States stands ready now to be your partner in solidarity, support and mutual respect,” he said. “We believe in the nations of Africa and in the continent-wide spirit of entrepreneurship and innovation.”

The White House also issued an executive order to rescind the so-called Mexico City policy, which withheld U.S. funding from international organizations that provide—or offer information about—abortions.

In personnel matters, the Administration announced that NIH Director Dr. Francis S. Collins—who has served since 2009—has been asked to remain in his position. NIH’s other political appointee, Dr. Ned Sharpless, was also invited to stay on as head of the National Cancer Institute. In addition to continuing in his role leading the National Institute of Allergy and Infectious Diseases, Fauci was named the President’s chief medical adviser on COVID-19.

Biden also re-established the Directorate on Global Health Security and Biodefense at the U.S. National Security Council. In addition, he announced he is resurrecting the President’s Council on Science and Technology and elevating the White House Office of Science and Technology Policy Director to a cabinet-level position.

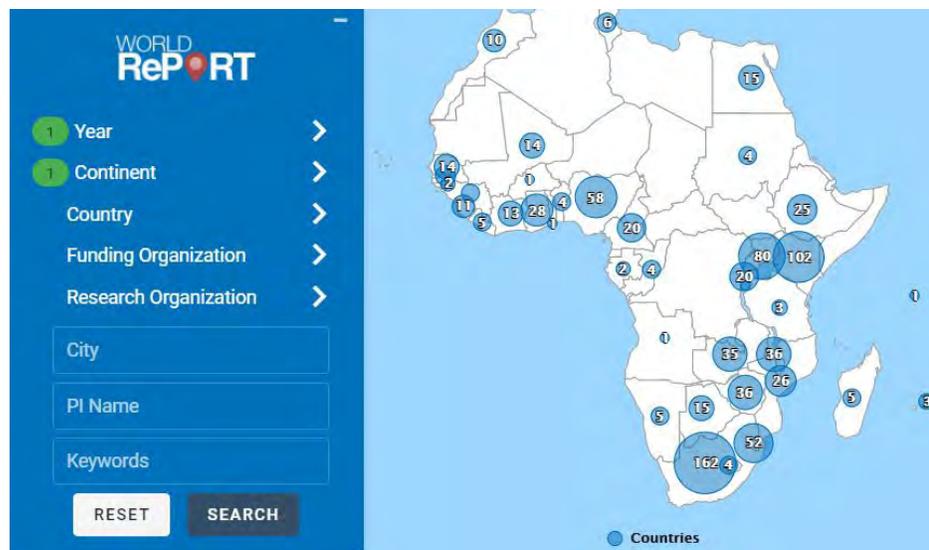
Finally, Biden issued a plan to review existing government scientific integrity policies to determine if they adequately prevent “improper political interference” in the conduct of research and data collection, and stop suppression or distortion of findings. The President stated his Administration will make evidence-based decisions guided by the best available science and data. “Scientific findings should never be distorted or influenced by political considerations.”

New funding data available in World Report mapping tool

2019 research funding information from a number of international organizations is now available online in World Report, an open-access, interactive mapping database.

The database now includes over 500,000 records that depict funding data from 2012 through 2019. Users can search projects by using keywords and filter them by location, funding organization, research body, principal investigator or any combination. Data, now including abstracts and visualizations, can also be exported.

World Report provides a public means to track international research activities and partnered investments, increase awareness of funding opportunities, and share results with the broader research and funding community. Its goal is to improve understanding of the research landscape, identify gaps in funding and areas where there might be a duplication of effort, and enable funders to more effectively synergize investments.



World Report is hosted by the NIH and managed by a steering committee of 13 participant organizations.

RESOURCES

<https://worldreport.nih.gov>

Pandemic prevention more effective than response

By Susan Scutti

Unless urgent action is taken to change the global approach to infectious diseases, pandemics will emerge more often, spread more rapidly, do more damage to the economy and kill more people than COVID-19, according to a recent report issued by a group of the world's leading experts on biodiversity and pandemics. The cost of COVID-19 in the U.S. alone may reach as high as \$16 trillion by the end of 2021, the study estimated. By comparison the price tag for reducing risks to prevent pandemics would be about 100 times less.

The report is the result of a workshop chaired by longtime Fogarty grantee Dr. Peter Daszak that was convened by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. The independent body was established by a U.N. resolution in 2012 and is comprised of 130 member countries. In addition, Daszak was a member of the WHO delegation that investigated the coronavirus outbreak in Wuhan, China.

There are as many as 1.7 million undiscovered viruses lurking in animals with up to 827,000 of them estimated to be infectious in humans, the report stated. Human activities that disrupt nature—increasing contact among wildlife, farm animals, pathogens and people—can lead to the moment when an infectious germ jumps from animal to human. Such “spillover” events, made more likely by deforestation, mining activities, land use change and wildlife trade, increase the risk of pandemics.

“We did an analysis of emerging diseases that showed the events that lead to pandemics are increasing in frequency,” said Daszak, who is also president of the nonprofit EcoHealth Alliance. “When is it going to stop? We can't sustain this level of pandemic impact. If this happened every 10 years, it would be disastrous.”

The report highlights the relationship between financial systems and pandemic risk. “Rapid economic development in low- and middle-income countries often has pretty devastating impacts on the environment and that often leads to health issues, whether that's pollution, mercury leakage into the rivers or infectious diseases,” said Daszak. “The drivers of that rapid economic growth are customers in richer countries, so it is our globalized consumption

patterns that drive economic growth and also drive the risk of pandemics.”

Daszak has led studies of zoonotic diseases with NIH funding for several decades. He received his first-ever federal grant from Fogarty's Ecology and Evolution of Infectious

Diseases (EEID) program, which supports studies of emerging global threats. With it, he explored the origins of Nipah and Hendra viruses in Malaysia and Australia. Though some thought Nipah emerged due to climate change or maybe deforestation, “the real reason turned out to be the dynamics of pig farm production,” explained Daszak. Farms had grown large so farmers segmented pig production, which allowed the virus to continually cycle through the swine population and this caused an outbreak. Daszak says the EEID initiative, which is also supported by the National Science Foundation, is “visionary, ground-breaking and high-reward.”

His Fogarty grants have given him access to places where there is high risk of disease outbreaks, he said. “It's a win-win. You're

not just doing science but also advancing international relations. It's helping people in developing countries by building their scientific capacity and teaching them new techniques but it's also protecting our own health by stopping the spread of disease.”

Today, with support from the NIH's National Institute of Allergy and Infectious Diseases, Daszak is launching a research hub to connect U.S. emerging disease researchers with peers in Thailand, Singapore and Malaysia. These three “economic powerhouses” have an “incredible diversity of wildlife,” said Daszak. “With every species of wildlife there's a group of pathogens not yet discovered—we can discover them by getting infected or we can go out and try to find them.”

Daszak believes scientists and policymakers need to stop expecting “to design our way out of every threat we detect” and begin to prevent problems through better public health measures and by taking a multidisciplinary One Health approach. “We need to better understand why diseases trickle over from animals to humans and cause outbreaks, and what behaviors need to change so we can reduce the need to scramble to produce new vaccines every 10 years.”

Photo courtesy of the EcoHealth Alliance



NIH grantee Dr. Peter Daszak advocates for a One Health approach to prevent rather than respond to pandemics.

RESOURCES

<http://bit.ly/PandemicPrevention>

PROFILE

Fogarty Fellow studies the impact of stress in South Africa

By Susan Scutti

During the first six weeks of South Africa's pandemic lockdown, Fogarty Fellow Dr. Andrew Kim and his research team surveyed 220 Soweto adults about the mental health impacts of COVID-19. Respondents who perceived themselves at high risk of contracting the new coronavirus experienced more severe symptoms of depression, while one in four reported increased anxiety, fear of infection or "thinking too much," the researchers found.

The biological anthropologist had never conceived of such a study back in August 2019 when he moved to Johannesburg and began the groundwork for his core Fogarty project, an examination of intergenerational effects of apartheid-based prenatal stress on birth outcomes, neuroendocrine function, and mental illness risk across subsequent generations. His research is based on a 30-year longitudinal birth cohort study conducted in 1990 in Soweto at the time of the dissolution of the apartheid regime, explained Kim. The original researchers examined the effects of apartheid on 3,000 pregnant women with funding from the South African Medical Research Council. The mothers and their children now span three generations. "I am doing a follow-up on 250 mother-child pairs of the second and third generations," said Kim.

Until mid-March 2020, his follow-up study was "running strong" but then the pandemic forced a stop to the work. Disappointment soon gave way to inspiration. "I realized this is an important opportunity to assess how people are affected by something as drastic as a lockdown and global pandemic," said Kim. He hypothesized that the adversity of a pandemic would compound ongoing histories of HIV, unemployment, poverty and racism. "Growing research suggests that past experiences of stress and trauma—especially during early periods of development—predispose you to worse reactions to stress in the future as well as greater risk for mental and physical illnesses," he said. "I wrote a quick ethics revision and shifted my Fogarty project to a telephone interview basis, where we called people asking their experiences in the lockdown."

Kim's desire to continue working in South Africa despite the pandemic was also fueled by an "ethical obligation" to support his research assistants, whom he'd already



Andrew Kim, Ph.D.

Fogarty Fellow:	2019-2020
US Institution:	Northwestern University (HBNU consortium)
Foreign Institution:	University of the Witwatersrand
Research area:	Apartheid-based prenatal stress

trained in survey data collection, interview technique, biomarker sample collection, and project administration. During lockdown, he provided psychoeducation for his team to help them cope.

While gearing up the COVID-19 project, Kim was able to analyze existing data to see how prenatal stress from apartheid affected health outcomes intergenerationally. He discovered younger women who experienced greater levels of stress and trauma during apartheid while pregnant had children with greater levels of psychiatric morbidity at 17 years old, said Kim. "Younger maternal age and greater levels of social adversity were perpetuating a stronger association between prenatal stress and late adolescent or earlier adulthood psychiatric risk."

His Fogarty fellowship gave him new insights and helped him grow scientifically. "Doing long-term immersive research is very important when you don't know the context in which you're working and is very much a part of anthropology," said Kim. He believes his connection with other Fogarty fellows has also helped him advance scientifically through special monthly development webinars and other sessions on relevant research topics. His gratitude to Fogarty includes providing him with a greater sense of confidence and the ability to visualize a long-term career that includes global health research.

His advice for others is uncomplicated. "If you really are interested in doing this capacity building work, you have to be both patient and tenacious and know your place. You need to realize the best ways for you to assist in a context where you are a guest."

RESOURCES

<http://bit.ly/andrew-kim>

ADOLFO RUBINSTEIN, MD, PHD

Dr. Adolfo Rubinstein served as Argentina's Minister of Health for two years ending in 2019 and subsequently was the founding director of his country's Center for Implementation and Innovation in Health Policies. Rubinstein is also a professor of public health and family medicine at the University of Buenos Aires and a visiting professor at Harvard. A recipient of numerous Fogarty and NIH grants, Rubinstein has published more than 120 papers. His research focuses on the epidemiology and implementation of preventive interventions to control noncommunicable diseases (NCDs) and the evaluation of health programs and policies.



Please tell us about your varied career.

My journey through medicine has been a long one! I was trained as a general internist first and then moved to primary care and retrained to be a family doctor. I created a very large academic division of family medicine at one of the largest teaching hospitals in Argentina and was the chairman there for 20 years. Along with teaching, I was like the “founding father” of the Institute for Clinical Effectiveness and Health Policy, which is devoted to research and capacity building mainly in the areas of NCD research and epidemiology.

During my term as health minister, we developed programs focused on chronic diseases—not only research and training, but also implementation. For instance, we devoted a lot of our research budget to chronic disease implementation research projects. We also supported the Global Alliance for Chronic Diseases and, under this umbrella, we conducted research while forging programs at a national level to counter hypertension, diabetes and cardiovascular disease.

What was the goal of your Fogarty NCD grant?

The chronic disease burden—cardiovascular disease, cancer, diabetes, pulmonary disease and mental health problems—is trending up in Argentina as it is in the rest of the world, with NCDs accounting for more than 70% of the total disease burden. Yet we lack the professional capabilities, mainly in terms of research, to deal with this. The priority of my project was to train new researchers and young investigators and get them involved in NCD research, particularly cardiovascular problems. The most significant results are the continuing careers of the young investigators we trained—three PhDs and six master's degree students. At the same time, hundreds of people received short-term education through the faculty development program. These trainees did not come solely from Argentina, but also Uruguay, Brazil, Peru, Chile, Paraguay, Bolivia and other countries

in the region. Overall, the experience was marvelous. We learned not only a lot of *things* but also a lot of *perspectives* on how to address noncommunicable disease research and teaching.

Fogarty plays such an important role for developing countries. My institution has also sponsored a lot of U.S. Fogarty fellows who came to receive training and experience in a developing country. In turn, they elevated our research standards and helped us to advance.

What research are you doing now?

Currently, I focus more on delivery science as I'm trying to bridge the gap between implementation *research* and implementation in the *real world*. I examine the streams of policy changes and the politics behind them. The center that I created in 2000 is mainly devoted to translating science into practice, which, of course, must be founded on evidence-based research. Essentially, what I'm trying to do is to interact with different stakeholders and to understand how politicians, particularly, think and how I might influence them to advance evidence-based policies. How do we inspire them to prioritize policies that reduce the NCD burden? For example, I believe front-of-package labeling for processed foods would have a direct impact on individual and population health. While minister, I worked on adopting this policy and I continue to work on this.

What should the Fogarty community consider?

I often find investigators are very far from policy. If you want your research to have impact, you have to think how policymakers think, you have to learn why they do what they do. By listening more, we will begin to have more innovative, out-of-the-box thinking in global health. One of the most important things is to bridge the worlds of research and policymaking. We have to try to bring both worlds closer together. Young investigators in global health need to understand both arenas. If you want your research to result in changes, you have to think how policymakers think.

RESOURCES

<http://bit.ly/adolfo-rubinstein>

Scientists describe challenges and lessons learned when conducting research in humanitarian crises

Hundreds of millions of people around the world are affected by humanitarian crises such as armed conflict, forced displacement, natural disasters and major disease outbreaks. Globally, one in six children lives in or near a conflict zone and nearly 80 million people have been forcibly displaced from their homes, according to the U.N. The frequency, intensity and complexity of these crises has steadily increased over the past several decades. Just in the past few years—as parts of the world faced hurricanes, wildfires and floods—armed conflicts continued unabated and millions of refugees remain unable to return home. On top of all of this, the world is now dealing with the deadly COVID-19 pandemic.

These crises take a staggering toll on human health, directly and indirectly, and especially in low-resource settings. Yet there is a dearth of high-quality, reliable evidence to inform the governments, non-governmental organizations (NGOs) and humanitarian groups responding to them. To bring together the diverse actors in this field, Fogarty launched an effort in 2018 called Advancing Health Research in Humanitarian Crises, managed by its Center for Global Health Studies. A meeting was convened and a steering committee was formed, representing academic institutions, humanitarian NGOs and several other NIH institutes. The overarching goals are to catalyze timely, high-

Fogarty and its partners are working to catalyze timely, high-quality health research in humanitarian crises and encourage evidence-based decision making in response efforts.

quality, ethical and actionable research in humanitarian crises; and encourage uptake of evidence into the policy and practice of organizations that respond to these crises.

The partners agreed there are examples of high-quality, ethical and actionable studies and there is much that can be learned from this small but growing body of humanitarian health research. A call for proposals describing such examples was issued and a number were selected to be developed into case studies, which are being published as an open-access collection by the journals *Conflict and Health* and *BMC Public Health*. The projects cover several different types of humanitarian crises across diverse geographic locations, populations, diseases and health risk factors, including maternal and child health, nutrition, mental health, infectious diseases and gender-based violence.

Unlike traditional research papers, the case analyses in the collection go beyond *what* research was conducted and explain *why* the research was important and *how* it was conducted in these extremely challenging settings, the authors noted. The papers emphasize the importance of health research in the humanitarian context, provide critical analyses of the unique challenges for scientific work in these settings and share the strategies used to address them. The authors also identify scientific areas of high public health significance that can best be addressed through research in humanitarian settings.

Each case analysis follows a standardized format enabling both researchers and humanitarian actors to review lessons learned from research conducted in the field. Ultimately, the collection makes the case for why humanitarian research is integral to progress in global health and deserves greater attention from the global health research community.

The studies summarized here took place prior to the COVID-19 pandemic. Nevertheless, the experiences described are relevant as the humanitarian crises currently facing the world become more common, complex and interrelated. Additional case studies are being reviewed and a complete collection is expected to be published in spring 2021.

Resources: <http://bit.ly/research-humanitarian-crises>



Conducting research in a war zone

In South Sudan, the 2016 civil war led to mass displacement that severely limited access to health care, with pregnant women and newborns among the most vulnerable. Translation of newborn guidelines into public health practice, particularly during periods of ongoing violence, are not well studied during humanitarian emergencies. A research team assessed the delivery of newborn interventions in displaced person camps to understand implementation outcomes. Attacks against humanitarian aid workers required research partners to modify study plans on an ongoing basis to ensure staff and patient safety. South Sudan faced devastating cholera and measles outbreaks that shifted programmatic priorities. Costs associated with personnel travel and equipment transport kept rising due to hyperinflation. A number of strategies used to address these challenges are applicable to other humanitarian settings. These include: collaborating with non-research partners to identify operational solutions; maintaining a locally-based study team; being flexible with budgets and timelines; using mobile data collection to conduct timely data entry and remote quality checks; and deploying a cascade approach for training field staff. Engagement of national and local stakeholders can ensure health services and data collection continue and findings translate to public health action, even in contexts facing severe and unpredictable insecurity, the researchers suggested.

Providing palliative care to refugees

Another research team studied how ethically and contextually appropriate palliative care might be provided during humanitarian crises by examining refugee settings in Jordan and Rwanda. An unintended outcome of the research was lessons learned about the ethical dimensions of transnational research partnerships. Common experiences across study settings revealed the importance of building relations that are sensitive to multiple vulnerabilities and unequal power among both research partners and research participants. Also imperative is the need to create spaces that facilitate sharing of knowledge and experiences. The authors said their analysis sheds light on the importance of understanding cultural norms in all research roles, building relationships with decision makers, and developing teams that include investigators from within humanitarian crisis settings to ensure that mutually beneficial study outcomes are ethical, as well as culturally and contextually relevant.

Studying sexual and reproductive health

Since 2017, Rohingya people have been sheltering in the refugee camps of Cox's Bazar, Bangladesh due to armed conflict in the Rakhine state of Myanmar. With half the population made up of adolescent girls and women, sexual and reproductive health (SRH) services are vital. A research



This collection of case studies illustrates the unique challenges involved in conducting research in humanitarian crises and strategies used to address them.

team examined the population's SRH needs and barriers to care by conducting a cross-sectional survey, in-depth interviews and group discussions. They also assessed health facility readiness and supply-side difficulties. The investigators encountered three key challenges including sensitivity regarding the study topic, identification of appropriate sampling strategies and community trust issues. To overcome them, researchers actively engaged community members and gatekeepers to access respondents, identified sensitive issues through the survey and interviews, and contextually modified the sampling strategy. Another key insight reported was that including researchers from the host country may create distrust among refugee populations, which could make them reluctant to cooperate with the research team.

Natural disasters exacerbate challenges

There are a number of lessons learned from obstacles faced while undertaking field studies after natural disasters such as earthquakes and tsunamis, one research team reported. Particular issues of post-disaster settings include challenges with uncharted ethical and cultural considerations; and non-standardized methods of record keeping, data sharing and dissemination. Relying on local partners and making quick decisions to tackle issues is imperative for navigating both foreseen and unforeseen complications, they said. While pre-emptive action to address these concerns is the most efficient means to expedite research protocols, adaptability and contingency planning are key components of practical research implementation in dynamic situations. Research is not always a priority in humanitarian settings, so innovative methods are necessary to conduct meaningful and situationally appropriate research in these venues. The team suggested that hurdles to conducting research can be overcome by understanding available resources, local culture, and political considerations; and working efficiently and decisively.

Examining the lived experience of hurricanes

Two devastating hurricanes in 2017 destroyed much of Puerto Rico's residential and environmental infrastructure, displacing thousands of people and resulting in an unprecedented migration to the mainland U.S. Researchers studied the impact on survivors, both in Puerto Rico and in central Florida, a major resettlement hub. The scientists faced challenges such as the emotional distress of participants and team members, difficulty accessing affected populations and precarious environmental factors. One tool used was the Critical Medical Ecological model, which considers how a number of sociocultural, biologic, health care and natural factors impact communities, households and individuals. The researchers also collected cathartic narrative accounts of the lived experience of hurricane survivors. All participants received a pamphlet that included the contact information for mental health services. The researchers said the project demonstrates the value of pre-existing partnerships, critical consciousness in the field team and medical ecological modeling as an organizing tool to help understand the community and individual impact of environmental disasters.

Studying mental health in tsunami aftermath

The Indian Ocean tsunami in 2004 caused a major loss of life and subsequent emotional trauma for survivors. Psychosocial needs in the aftermath of this disaster were extensive, yet the cohesion and effectiveness of the response were limited due to lack of preparedness and relevant policies. One organization that responded to the crisis saw the need to study the difficulties, successes and limitations of psychosocial interventions. Since temples, mosques and churches were places that people accessed to find healing and peace, the team reported that adding mental health resources in those settings reduced stigma surrounding care and increased available services. Capacity was also bolstered by training community level workers on psychosocial intervention methods, which also provides long-term

Conducting research in conflict zones poses unique challenges.

resources. Care offered to survivors included one-on-one interactions, medications from nearby hospitals and group activities. These sessions ranged from dance and music programs to role-plays, which worked well with children in particular. Video consultations with psychiatrists were also offered. Research results have informed state and national disaster response plans.

Conducting research amid armed conflict

The provision of health and nutrition interventions for women and children in conflict zones was the topic of study for research teams in Afghanistan, Mali, Pakistan and Somalia. Security was a fundamental obstacle in all study contexts, with restricted geographical access and concerns for personal safety affecting sampling and data collection plans, and requiring reliance on digital communications, remote study management and off-site team meetings wherever possible. The researchers drew several conclusions from their work. Strong local partners are essential to the success of any project, contributing not only technical and methodological capacity but also the insight needed to truly understand and interpret local dynamics. Maintaining realistic expectations of data that are typically available in conflict settings is also essential, while pushing for more resources and further methodological innovation to improve data collection. Finally, successful health research in the complex, dynamic and unpredictable contexts of conflict settings requires flexibility and adaptability of researchers, as well as sponsors and donors.

Building trust in times of unrest

Ethiopia has high numbers of people displaced by conflict, which makes both routine and humanitarian research very difficult. A team studying childhood nutrition discovered communities were suspicious of outsiders. Some reactions were so hostile that researchers were fearful about returning to some households. As a result, the team designed strategies to respond, including establishing community advisory boards using village elders and local youth. Data collection team members received training in principles of ethics, consent and crisis management, and were provided on-going support. As the researchers built trust with the community, they were regularly asked to provide relief and aid, which resulted in ethical dilemmas. Sometimes severely malnourished children were identified during data collection. The research team decided to provide medical assistance where appropriate, and transportation to and from nearby health facilities where necessary. While this can provide misconceptions if the communities believe they must participate in order to receive the other benefits, researchers decided that the children's health outweighed these concerns. Lessons learned from these studies are already being used to inform other research projects.





unique ethical issues posed by this type of research, the authors acknowledge, making it important to recognize the power differential that exists between scientists and vulnerable populations. Also, there is the potential for risk of suicide, physical or sexual abuse, or other harm. Researchers should anticipate and plan how to respond to these risks before their studies begin, the authors suggested. Flexibility, strong communications channels and robust partnerships are also vital to the process.

Lessons learned from research in South Sudan

Scientists evaluating health interventions among South Sudanese refugees sheltering in Ethiopia confronted a number of barriers.

They faced ongoing local political and tribal conflicts, extreme weather conditions, difficulty implementing a new digital data monitoring system, the need for staff capacity building and low-literacy research subjects. Investigators noted the need for flexibility to ensure staff and participant safety, and outreach activities to find subjects who may have relocated due to safety concerns. To overcome the lack of data expertise and slow internet, data uploads were conducted at night or at partner organizations with stronger internet connections. Remote training sessions were conducted and weekly calls held to monitor progress and troubleshoot any issues. Local staff provided input to help ensure study measures and interview questions were understandable among participants, with pictorial representations developed for low-literacy respondents.

Measuring profound stress among youth

One research team measured the effectiveness of a structured psychosocial intervention designed to alleviate stress and build resilience among Syrian refugees and Jordanian host-community youth. The scientists overcame significant obstacles to implement the study. It was difficult to establish a fair and transparent randomization process for research subjects and challenging to collect biological samples and test cognitive skills in difficult field conditions. Also, the team had to reconcile different demands and timeframes for dissemination of results in peer-reviewed academic journals vs. influential policy reports. They discovered it was important to develop a strong sense of local ownership through engagement with communities, and to rely on local partners to recruit and track participants. Researchers discovered young people were keen to participate in the study, viewing it as cutting-edge science and a means to tell their stories. They also appreciated toiletries offered as compensation for their time, in addition to professional hair styling as part of the sample collection to measure stress by testing cortisol levels.

Conducting research in unstable settings is challenging but vital to ensure refugee health interventions are evidence-based.

Studying the health of Ebola survivors

In late 2015, the Sierra Leone government established a program to improve the well-being of the country's 3,466 registered Ebola virus disease survivors. A mixed-methods study sought to determine survivors' access to health services offered, their health and disability status, and psychosocial and mental health issues faced. Qualitative data from survivors and stakeholders at multiple levels complemented and contextualized the survey results to shed light on the unique health and associated socioeconomic complexities that survivors face, which could be applied to other crisis settings. The study faced several challenges, including working in a low-resource setting marked by constantly changing priorities and activities of donors and implementers. The research aimed to measure sensitive topics, such as mental health and disability, with standardized tools that required careful contextualization for accurate reporting of findings. Flexibility is paramount when conducting high-quality research for representative and useful results, the authors noted. Timely research and ongoing sharing of the findings with stakeholders is critical to ensure that they benefit study subjects.

Determining the long-term impact of war

Globally, one in four children lives in a country affected by armed conflict or disaster, often accompanied by exposure to a range of adversities including violent trauma and loss. A study in Sierra Leone is examining the long-term effects of children's experiences in the country's eleven-year (1991–2002) civil war on their adult mental health and functioning, in addition to exploring the potential mechanisms by which intergenerational transmission of emotional and behavioral disruptions due to war trauma may operate. The research project utilizes mixed methodologies that incorporate qualitative and quantitative data to unpack risk and protective factors involved in social reintegration, psychosocial adjustment, parenting and interpersonal relationships. There are

OPINION

By Dr. Roger I. Glass, Director, Fogarty International Center

Hoping for a healthier and more equitable future



As I take stock at the beginning of a new year and a new U.S. administration, I am hopeful that we are on our way toward reducing COVID-19's terrible toll and entering a period of healing and reconciliation.

We have all been touched by the pandemic and grieve for those we have lost, and those who continue to suffer. But I believe we are resilient and that there is some cause for optimism. In record time, we have seen the development of vaccines, diagnostics and treatments that are much needed if we are to bring this awful pandemic under control. It is difficult to comprehend the horrendous death toll—well over 2 million lives lost and rising. But the investments made to develop vaccines and affordable, speedy diagnostics are beginning to pay off, thanks to the hard work and dedication of NIH and extramural scientists.

In early January, it was shocking to watch the violent attack on our nation's Capitol, the heart of our democracy. But I was heartened to witness the peaceful transfer of power two weeks later and the return to what I hope will be a government where science is valued and supported, and data and evidence play a role in decision making. It is also encouraging to see the U.S. is reclaiming its role in the global community, rejoining the Paris climate accord, honoring commitments and working in partnership with the WHO, and expressing renewed interest in collaborating with African nations to advance discoveries and improve health for all. I was delighted that the contributions of NIH are valued by the new Administration and that Dr. Francis S. Collins will remain NIH director and Dr. Tony Fauci has been invited to advise on COVID-19. I'm grateful for their continued strong leadership and deep support for global health research and training.

The coronavirus pandemic has laid bare the inequities in our health systems—both at home and abroad. There is much hard work ahead for all of us. It is imperative that we dig deeper into the fundamental causes of disparities to understand contributing factors and identify possible effective interventions. At Fogarty, we are examining how we can improve diversity among our staff and in the global health research workforce.



The vaccines against COVID-19 provide hope the pandemic can be tamed.

We continue to consider how we can support efforts to decolonize and democratize global health research and have begun informal consultations with members of our community to determine what Fogarty can do to be part of the solution. It is a complex problem but I am encouraged by the enthusiastic response from our constituents and the creative ideas that have been suggested already. I welcome your thoughts and will depend on your support as we move forward with this endeavor.

I'm also excited that the NIH Common Fund initiative to build data science in Africa has received such a robust response and look forward to awards being issued later this year. There is tremendous potential for this program that was developed to meet the need for data analysis expertise in Africa, which was requested by African scientists and will be African-led.

I remain inspired by the Fogarty staff and my NIH colleagues as we continue to navigate this largely virtual world. I look forward to the day we can again travel the globe, strengthening our existing connections and forming new partnerships. In the meantime, NIH offers us all a beacon of hope.

RESOURCES

<http://bit.ly/roger-glass-health-equity>



Zimbabwean scientist Hakim has died

University of Zimbabwe professor and Fogarty grantee Dr. James Hakim has died from COVID-19. Hakim was principal investigator of his country's Medical Education Partnership Initiative (MEPI) award and chaired the MEPI PI Council for several years. He was also a member of the UNAIDS expert committee on HIV/AIDS.



Fogarty grantee Katzenstein is lost to COVID

Stanford University professor emeritus Dr. David Katzenstein died after contracting COVID-19 while on a visit to Zimbabwe. His long connection with the country began in 1986, when he was a lecturer at the University of Zimbabwe. He was PI on numerous NIH grants for HIV/AIDS research and training, including several from Fogarty.



Walensky appointed to lead US CDC

President Joe Biden has named Dr. Rochelle Walensky to direct the U.S. CDC. Walensky was previously chief of infectious diseases at Massachusetts General Hospital and a professor at Harvard Medical School. She received her M.D. from Johns Hopkins University and her MPH from Harvard. The appointment does not require Senate confirmation.



Cameron will direct global health at NSC

Dr. Elizabeth Cameron is returning to the U.S. National Security Council as senior director for global health security and bio-defense, the Biden Administration has announced. She held the same position in the Obama Administration and helped launch its Global Health Security Agenda. Cameron holds a Ph.D. in biology from Johns Hopkins University.



Karim, Fauci receive honors for defending science

Drs. Salim S. Abdool Karim and Anthony Fauci have been awarded the 2020 John Maddox Prize for standing up for science during the coronavirus pandemic. Abdool Karim, a longtime Fogarty grantee, is an infectious diseases epidemiologist in South Africa. The prize is presented by the charity Sense about Science and the journal *Nature*.



Fauci, director of NIH's National Institute of Allergy and Infectious Diseases, serves on the U.S. coronavirus task force and was appointed President Biden's chief medical adviser on COVID-19. He has also won the \$1 million Dan David Prize for defending science, advocating for coronavirus vaccines and for his leadership of HIV/AIDS research.

WHO issues genomic sequencing guide

The growing global investment in applying genomic sequencing to rapidly diagnose, monitor and track the evolution of SARS-CoV-2 has spurred the WHO to release guidance on how to maximize these efforts. The publication includes practical considerations for implementing genomic sequencing programs and an overview of public health objectives.

Website: <http://bit.ly/WHOgenomic>

Refugees' survey shows COVID impact

The COVID-19 pandemic has had a highly negative impact on the living and working conditions of refugees and migrants, according to a WHO study. Of the more than 30,000 refugees and migrants around the world who were surveyed, more than half reported greater levels of depression, fear, anxiety and loneliness.

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

Measles cases, deaths continue global rise

In 2019, global measles cases increased to over 860,000 and deaths rose to more than 207,000, according to a report jointly issued by the U.S. CDC and the WHO. Measles deaths have steadily increased by 50% since achieving a record low in 2016. Insufficient vaccination of the world's children is to blame, the study said.

Full report: <http://bit.ly/GlobalMeasles2019>

Toolkit launched to combat TB

WHO and TDR have developed an interactive web-based toolkit that supports national tuberculosis programs and other partners to conduct implementation research designed to evaluate digital technologies for TB care. The resource guides users through the steps to conceptualize, budget and prepare for an IR study.

Website: http://bit.ly/WHO_TBtoolkit

WHO reveals leading causes of death

Noncommunicable diseases now make up seven of the world's top 10 causes of death, according to the WHO's Global Health Estimates report, which provides data from 2000 to 2019. Heart disease remains the number one killer, while diabetes and dementia have now entered the top 10.

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

Funding Opportunity Announcement	Deadline	Details
International Research Scientist Development Award K01 Independent Clinical Trial Required K01 Independent Clinical Trial Not Allowed	Mar 9, 2021	http://bit.ly/IRSDAK01
Japan Society for the Promotion of Science (JSPS) Fellowships for U.S. Postdoctoral Scientists in Japan	Mar 31, 2021	http://bit.ly/JSPSforUS
International Bioethics Training R25 Clinical Trial Not Allowed D43 Clinical Trial Optional	Jun 4, 2021	http://bit.ly/BioethicsTraining
Global Infectious Disease (GID) Research Training Program D43 Clinical Trials Optional	Aug 3, 2021	http://bit.ly/IDtraining
Fogarty HIV Research Training for LMIC Institutions D43 Clinical Trial Optional D71 Clinical Trial Not Allowed G11 Clinical Trial Not Allowed	Aug 20, 2021	http://bit.ly/NIHGlobalHIV

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

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Image courtesy of the WHO

WHO offers tobacco users 100 reasons to quit



The WHO has launched a year-long “Commit to Quit” campaign to encourage the 780 million people worldwide who say they would like to stop using tobacco. The effort is intended to help create healthier environments that are conducive to quitting tobacco by advocating for strong tobacco cessation policies, increasing access to cessation services, raising awareness of tobacco industry tactics and empowering tobacco users to make successful quit attempts through “quit & win” initiatives.

Quitting tobacco is challenging, especially with the added social and economic stresses that have come as a result of the pandemic, the WHO noted. “Smoking kills 8 million people a year, but if users need more motivation to kick the habit, the pandemic provides the right incentive,” said WHO Director-General, Dr. Tedros Adhanom Ghebreyesus.

WHO released a scientific brief recently showing that smokers are at higher risk of developing severe disease and death from COVID-19. Tobacco is also a major risk factor for noncommunicable diseases like cardiovascular disease, cancer, respiratory disease and diabetes.

RESOURCE
More information: <http://bit.ly/WHOquit>