Filling Gaps in US Gun Violence Research

SPH researchers seek to reduce deaths and injuries

When he moved to the U.S. from Iran in 2003, Ali Rowhani-Rahbar was peppered with questions from his new acquaintances about culture shock.

A young medical doctor pursuing his master's in public health, Rowhani-Rahbar would tell them the U.S. was a wonderful place for personal and professional growth, with an exciting multicultural environment and new freedoms. But he was shocked by the extent of gun violence.

"Every day in this country, 90 people die due to firearm injuries and more than 200 people get shot," said Rowhani-Rahbar (PhD Epidemiology 2009), now an assistant professor of Epidemiology at the School of Public Health.

The more he looked at the numbers, the more incredulous he became. Total deaths by guns in the U.S. are about 33,000 a year—rivaling the number of Americans killed by automobiles.

"More Americans have died due to a firearm injury since 1968 than on the battlefields of all the wars in American history," he notes. "The frequency of these shootings has made us a little numb."

These days, Rowhani-Rahbar is one of the small but growing number of researchers examining the nature of gun violence—or, as he prefers to describe it, firearm injuries. (Gun violence connotes mass shootings and gang violence, which are major problems, he says, but doesn't bring to mind suicides, which account for about two-thirds of all gun-related deaths.)

"It was really Sandy Hook that connected me to these research efforts," he says. The massacre at Sandy Hook Elementary School in Newton, CT, in 2012 claimed 27 lives, most of them young children.

After that shooting, Frederick Rivara (MPH 1980), professor of Pediatrics and adjunct professor of Epidemiology, asked Rowhani-Rahbar if he would take part in a research project on gun violence funded by the Seattle City Council. Rivara was a pioneering gun violence researcher, along with SPH alumnus Arthur Kellerman (MPH Health Services 1985), until the mid-1990s, when Congress essentially eliminated federal funding for gun research.

The city, seeking a new kind of partnership, approached the UW’s Harborview Injury and Prevention Research Center, where Rivara and Rowhani-Rahbar are core faculty members.

Using epidemiologic methods, the researchers began to track gun violence as if it were a disease. They looked at hospital and arrest records from across Washington state, identifying nearly 700 trauma patients who had sustained a firearm injury over a two-year period. They found that people who had been shot by a gun and survived were dramatically more likely to be re-injured or killed by a gun—and to commit a future crime.

The study also found that those with a criminal history of arrest were much more likely to commit violent crime than those who were diagnosed with a mental illness.

Now researchers want to know how to protect those who have been shot from harming themselves or others in the future. "The next obvious step would be to do an intervention," Rowhani-Rahbar says.

With a new, $275,000 grant from the City of Seattle, researchers plan to conduct a three-year randomized trial for gunshot victims at Harborview Medical Center. Half of the patients would receive usual care, which includes...
US Gun Violence

—continued from page 1

Social work support and a list of community services.

The other half would get a three-part intervention:

• “Motivational interviewing,” a technique involving
communication and understanding.

• “Extended community outreach,” linking patients
with services such as substance abuse or mental health
treatment, education and employment opportunities, and
housing. A menu of options is tailored to the
person’s needs. For six months, patients will be assigned
a case manager who will stay in frequent contact.

A multidisciplinary team of “stakeholders” — those in charge of
various community services — will meet to
discuss each case to see if they can provide further
support.

“When they get out of the hospital, it might be very
hard for them to navigate life after a traumatic event such as
getting shot,” Rowhani-Rahbar says. “We understand
things like retaliation. It’s a critical transition time.”

Two graduate students in Epidemiology — Viryan Lyons
and Anton Quast — have been researching the kinds of data
sets available about firearm injuries. Another student,
Brianna Mills, took part in the study tracking Washington
state gun victims and is conducting her dissertation on
this topic.

“We need the ability to conduct gun research but
Congress still refuses to fund the CDC’s efforts to conduct
such research,” Fredrick Rivara said.

In addition to research, Rowhani-Rahbar, Rivara, and
Mary D. Fan, a professor of law who’s pursuing a PhD in
epidemiology, are writing a book tentatively titled, “Guns in
the Family.”

“The book challenges the romanticized ideal of having
guns in the home in defense of family,” Fan says. “It’s about
the safety regulations that communities seeking to reduce
firearms-related injuries and death can adopt without
running afoul of the increasingly muscular Second
Amendment.”

Rivara says research shows that keeping a gun in the
home increases the risk of violent death from homicide
or suicide.

SPH researchers are also focusing on the effectiveness
of interventions designed to provide safer firearms storage.

“For those who do own guns, what can we do to make
sure that we are adhering to the highest level of safety?”
Rowhani-Rahbar asks. “How can we promote safer
storage? We do have evidence that loaded and unlocked
with informed choice. That’s exactly what we’ve done for
car collisions. We’ve made great progress. Same for smoking
and tobacco. These are examples of success and triumph for
public health. Here, we can do the same.”

Making an Impact

Calculating Healthy Years Remaining If You Are Over 65

Want to know how many healthy years you have left if you are 65 or older? SPH researchers have created an online calculator to help you figure it out. Their online Healthy Life Calculator is based on data from the Cardiovascular Health Study at UW, which collected health info from almost 8,000 participants for 20 years beginning in 1990. Said lead researcher Paula Diehr, who ran the study, “we use this data for a lot of things, including
research it. To me, if it could save one
life, that’s a huge accomplishment.”

A new Gun Responsibility and Injury Prevention Research Fund has been established by a generous donor to support Rowhani-Rahbar’s research. “To contribute, contact spahd@uw.edu.”

New Chair Victoria Holt’s Vision for Epidemiology

When Victoria Holt worked as an emergency room
pediatric nurse, she kept seeing the same asthmatic
cildren coming in over and over. “I was curious about
how that could actually be prevented rather than just
treated,” says Holt, who decided to pursue further
training in public health.

She became part of the first class of master’s degree students in the new SPH Maternal and Child Health program and went on to earn a PhD in Epidemiology (1990). She then immediately joined the SPH faculty.

In October, after 30 years with the department, Holt was named chair. She says she seeks to sustain the high quality of teaching and research in a challenging grant environment while pursuing new avenues: expanded undergraduate offerings, more distance learning and online courses, and more course offerings in epidemiology for public health practice.

She also brings experience as a mental health specialist at Harborview Medical Center, which gave her insight into intimate partner violence—which later became a focus of her research at SPH—and the experience of being a first-generation college student, earning a degree in psychology from the UW.

Director Named at Northwest Center for Public Health Practice

Betty Bekemeier, a veteran public health nurse and
long-time researcher, was named director of the North-
west Center for Public Health Practice in November.

She oversees the center’s activities, including research, community engagement, and capacity building in the six-state region of Alaska, Idaho, Montana, Oregon, Washington, and Wyoming.

Bekemeier is an associate professor in the Department of Health Services and has a primary appointment in the School of Nursing’s Department of Psychosocial and Community Health. She earned her PhD in nursing from the UW, and her MSN and MPH at Johns Hopkins University.

“I’m thrilled to be taking on this important leadership opportunity,” Bekemeier says. “It’s a wonderful fit with my experience and commitment to strengthen the capacity and reach of our prevention systems.”

News Briefs

Director Named at Northwest Center for Public Health Practice

Betty Bekemeier, a veteran public health nurse and
long-time researcher, was named director of the North-
west Center for Public Health Practice in November.

She oversees the center’s activities, including research, community engagement, and capacity building in the six-state region of Alaska, Idaho, Montana, Oregon, Washington, and Wyoming.

Bekemeier is an associate professor in the Department of Health Services and has a primary appointment in the School of Nursing’s Department of Psychosocial and Community Health. She earned her PhD in nursing from the UW, and her MSN and MPH at Johns Hopkins University.

“I’m thrilled to be taking on this important leadership opportunity,” Bekemeier says. “It’s a wonderful fit with my experience and commitment to strengthen the capacity and reach of our prevention systems.”
Awards & Scholarships

SPH ARCS Fellows
The Achievement Rewards for College Scientists (ARCS) program was launched half a century ago to help the country's brightest students pursue careers in science and engineering. Fellowships are worth $17,500 over three years. Ten SPH students from Biostatistics (Bio), Epidemiology (Epi), and Environmental & Occupational Health Sciences (EOHS) are current ARCS Scholars.

First-year fellows: Tyler Bonnett, Bio; Rachel Shaffer, EOHS
Second-year fellows: Miriam Calkins, EOHS; Natalie Gasca, Bio; Kelsey Grinde, Bio; Toegaelausi Workahalmanu, Epi/GO-MAP
Third-year fellows: Sylvia Badon, Epi; Jacqueline Garrick, EOHS; Anna Plantinga, Bio; Connie Tzou, EOHS

ARCS Fellow Miriam Calkins: Researching Heat-Related Hazards
The climate is changing and so is the workforce. PhD student Miriam Calkins, in the Department of Environmental and Occupational Health Sciences, seeks to better understand the connections between the two. “We know that extreme heat is anticipated to increase in duration and frequency,” says Calkins (MS 2012, Exposure Sciences). “Extreme heat can affect not only health and chronic diseases, it can also increase death and rates of injury.”

Meanwhile, the economy is seeing more temporary workers and contractors. Calkins plans to spend the summer researching heat-related hazards faced by rooftop construction workers who have no access to shade and limited access to water. Being an ARCS fellow has been a huge financial benefit, she says. “It’s very difficult to meet the standard of living in Washington with my salary,” Calkins says. “It’s very difficult to meet the standard of living in Washington with my salary.”

Cassi Flint cried tears of excitement when she learned she had received a Double Eagle Endowed II Scholarship. “All the stress of scrambling to make rent each month while devoting proper time and energy to my coursework melted away in that moment,” said Cassi, a senior majoring in Public Health. “I am grateful beyond words for this award.”

The scholarship came at a critical time for her. Cassi started an internship in December with Seattle-based PATH (working with its Global Communications and Engagement team) and is beginning her public health capstone project. “Thanks to the financial cushion this scholarship provides,” she says, “I can now fully invest myself in these projects, which in turn will allow me to learn more from the experiences.” Cassi has also covered public health for the UWI’s student paper, The Daily. She hopes to combine her passion for writing and women’s health issues by working in health communications.

Eduardo Flores, a senior in Public Health, immigrated to the U.S. as a small child. He hopes to give back to his community by helping immigrant populations access basic health resources. “This scholarship is a blessing,” he says. “It will help me prepare, gather the needed supplies, and focus on what I need to do.”

Eduardo is thinking about minoring in diversity, which would take an extra quarter. After graduation, he hopes to find an internship that leads to a job. He’s also considering earning a master’s degree in public health “that will propel me closer to my dreams.”

Double Eagle Endowed II Scholarship*
The SPH Double Eagle Endowed II Scholarships support undergraduate students in public health who are committed to ensuring healthier communities in our region and abroad. Each student receives funding that can be used for tuition, travel, books, and other educational needs.

SPH Diversity Committee Wins 2016 MLK Award
For efforts around faculty hiring and retention, training for program directors, and workshops on undoing racism, the SPH Diversity Committee has been awarded the 2016 Martin Luther King, Jr Community Service Award by UW Health Sciences. Co-Chairs India Ornelas and Laura Martinez accepted the award on behalf of the committee at an MLK celebration January 15.

The awards to each Health Sciences school honor Dr. King’s commitment to addressing community needs, development of programs to improve the human condition, and significant efforts to protect and empower all individuals. The Diversity Committee’s top priorities are recruiting and retaining diverse faculty, staff, and students; creating an inclusive climate at the School; and strengthening diversity within the curricula. Its efforts help ensure that we are training the diverse workforce needed to address urgent public health issues, especially for communities of color.

SPH Graduation Speaker
Dr. William Foege will begin 2016

PH Diversity Committee
WINS 2016 MLK AWARD

For efforts around faculty hiring and retention, training for program directors, and workshops on undoing racism, the SPH Diversity Committee has been awarded the 2016 Martin Luther King, Jr Community Service Award by UW Health Sciences. Co-Chairs India Ornelas and Laura Martinez accepted the award on behalf of the committee at an MLK celebration January 15.

The awards to each Health Sciences school honor Dr. King’s commitment to addressing community needs, development of programs to improve the human condition, and significant efforts to protect and empower all individuals. The Diversity Committee’s top priorities are recruiting and retaining diverse faculty, staff, and students; creating an inclusive climate at the School; and strengthening diversity within the curricula. Its efforts help ensure that we are training the diverse workforce needed to address urgent public health issues, especially for communities of color.

SPH Graduation Speaker

Dr. William Foege will begin 2016

PH Graduation Speaker

UW SCHool oF  PUBliC  HEAltH      SPH.WAShiNGtoN .EDU

SPH Diversity Committee
WINS 2016 MLK AWARD

For efforts around faculty hiring and retention, training for program directors, and workshops on undoing racism, the SPH Diversity Committee has been awarded the 2016 Martin Luther King, Jr Community Service Award by UW Health Sciences. Co-Chairs India Ornelas and Laura Martinez accepted the award on behalf of the committee at an MLK celebration January 15.

The awards to each Health Sciences school honor Dr. King’s commitment to addressing community needs, development of programs to improve the human condition, and significant efforts to protect and empower all individuals. The Diversity Committee’s top priorities are recruiting and retaining diverse faculty, staff, and students; creating an inclusive climate at the School; and strengthening diversity within the curricula. Its efforts help ensure that we are training the diverse workforce needed to address urgent public health issues, especially for communities of color.

SPH Graduation Speaker

Dr. William Foege will begin 2016

PH Graduation Speaker

UW SCHool oF  PUBliC  HEAltH      SPH.WAShiNGtoN .EDU
An Endowment Honoring A Distinguished Health Care Leader

Led by Jeff Lehman (MHA 1974), president of Dohiju Consulting Group in Seattle, a committee of alumni from the Master of Public Health Administration (MHA) program is raising endowment funds in honor of health care leader and UW Health Services Emeritus Professor William “Bill” Dowling. This endowment, with the initial leadership gift from Lehman, will provide support for faculty in the MHA program.

Dowling served as chair of the Department of Health Services from 1994–2008 and is former director of the MHA Program. From 1981 to 1994, he was vice president for Planning and Development at Providence Health System. “Bill has been a mentor to me since the day I met him and was instrumental in establishing one of the premier health care management programs in the country,” Lehman says.

Although retired, Dowling continues to teach and contribute his time to the MHA program. He is a driving force in the health care industry, passionately interested in the changing world of health care and systems. The endowment fund in his name will create a lasting legacy for future generations of students.

If you are interested in contributing to this endowment in honor of Bill Dowling, please contact Libby Singer at eringer@uw.edu or 206-221-6343.

Public Health Education: Paying It Forward Through Planned Giving

As champions of health for all people in all communities, we know what it means to “pay it forward.” School of Public Health education and training have opened paths to transforming communities. SPH students could not have succeeded without the support of our donors. Consider providing that same opportunity for a current or future student in need. You can support future generations of public health leaders, thinkers, and doers by structuring a planned gift, such as a charitable bequest, gift annuity, remainder trust, or gift of life insurance. Now is the perfect time to transform lives and communities through education. For more information about donating to SPH, please contact Megan Ingram at mkingram@uw.edu or 206-616-7197.

Alumni

Rogelio Riojas Is SPH 2016 Distinguished Alumnus

Work in a community health clinic during his junior year at UW convinced Rogelio Riojas that he could create more impact as a public health professional than as a lawyer. Instead of entering law school, he completed the Master in Health Administration program in 1977 and a year later founded Sea Mar Community Health Centers to serve diverse communities, especially Latinos.

Those centers have now expanded to 11 Washington counties and provide quality, comprehensive health, human, and housing services, including not only affordable health care but also employment training, scholarships, senior assistance, youth internship programs, and more. He currently serves as their president and CEO.

In recognition of his demonstrated record of distinguished service and achievement in public health, Mr. Riojas has been named the SPH 2016 Distinguished Alumnus, the highest award given by the School. He is a leader in the field of public health, a dedicated community advocate, and an inspiring example of the impact of SPH alumni.

“The award is a big honor, especially since it is given for my work in communities that need help. I am very proud to receive it,” said Mr. Riojas.

Alumni Updates

Laura Bautista, BS 2015, Public Health Major, is a family resource coordinator at Moses Lake Community Health Center, which provides care to migrants and workers.

Archana Shrestha, PhD 2015, Epidemiology, is a postdoctoral fellow at the Harvard T. H. Chan School of Public Health. She is working on a workforce-based diabetes and cardiovascular disease prevention program in India.

Kyle Durrant, BA 2014, Public Health Major, is now a project associate at NYU Langone Medical Center in New York City.

Mehbey Endshaw, MPH 2012, Global Health, received the Global Cancer Fellowship under the ASPH/CDC Public Health Fellowship Program. She will be based in Atlanta.

Sara Ivey, BS 2010, Public Health Major, graduates this year from Portland State University with dual master’s degrees in Public Health and Urban and Regional Planning.

Andrew Levack, MPH 2005, Global Health and Health Services, is senior program officer at the St. David’s Foundation, addressing the social determinants of health in Austin and Central Texas.

Nicole Willis, MPH 2004, Health Services (COPHP), has been accepted into the national Informatics Training in Place Program (ITIPP) fellowship. She will work on informatics strategies at the Whacone County (WA) Health Department, where she is an epidemiologist.

Theresa Lango Stack, MS 1997, Environmental and Occupational Health Sciences, is an assistant professor with MTech of the University of Montana in the department of Safety, Health and Industrial Hygiene. She just published the book, Occupational Ergonomics: A Practical Approach.

Reginald Finger, MPH 1983, Epidemiology, teaches epidemiology and biostatistics in Indiana Wesleyan University’s MPH program.

Joseph Scherger, MPH 1978, Health Services, is vice president of Primary Care at Eisenhower Medical Center at Annenberg Center for Health Sciences in California.
Norman E. Breslow, Key Figure in Public Health

The public health community at the University of Washington and around the world was saddened by the loss of Norman E. Breslow on Dec. 9, 2015. Dr. Breslow, 74, died in Seattle after a long illness.

During his nearly 50-year career at the UW as a scholar, mentor, and scientist, he helped build the modern field of biostatistics, which is the basic science of learning from biomedical data. He played a significant role in enhancing the quality and rigor of biomedical research and public health. For 40 years, he provided leadership in childhood oncology as well, especially with the National Wilms Tumor Study.

Said current UW Biostatistics Chair Patrick Heagerty, “For all of us in Seattle, Norm was a giant, and one who defined the ideals that characterize a scholar and mentor.”

For many academic leaders, Dr. Breslow defined the ideal biostatistician by living a deep commitment to advancing the field, nurturing the careers of trainees and colleagues around the world, and advancing science to improve public health. From 1983–1993, he chaired the Department of Biostatistics.

Dr. Breslow loved hiking and mountain climbing. At Reed College, he switched his major from forestry to math when he realized he could spend more time outdoors by studying math under a tree than in a lab.

He earned his PhD in statistics at Stanford University. A dedicated Francophile, he spent part of each year at his second home in France and evenings in Seattle watching the nightly French news.

Late last year, Dr. Breslow and his wife Gayle generously established an endowed professorship in the Department of Biostatistics. The family requests that any memorial contributions go to the Norman Breslow Endowed Professorship in Biostatistics at the University of Washington. Please contact Megan Ingram at mkingram@uw.edu or 206-616-7197 if you wish to learn more.

Nonprofit U.S. Postage PAID Permit No. 62 Seattle, WA