Institute for Health Metrics and Evaluation Tracks Global Health

Totem Report March 8, 2017 By John Hamer

Our vision is a sort of geeky, technical vision," said Dr. Chris Murray to start our main program. "We want to get all the evidence in the world about health together, clean it up and make it available to everyone -- individuals, communities, governments, international actors – in order to make people healthier."



Murray, introduced by **David Brenner**, heads the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, which was started with the help of generous grants from the Bill & Melinda Gates Foundation. Murray holds double doctorate degrees in economics and medicine. Melinda Gates has said that IHME is "a big part of what she and Bill want to leave behind."

IHME began 10 years ago with 3 people. "Now we have 320 people, and are growing by 60 people a year," Murray said. Their goal is "first to amass all the data we can find, then analyze the data, and then decide how to communicate and visualize the data."

IHME's four steps: 1) Try to measure health around the world. 2) Track the money being spent and where it goes. 3) Give people scenarios about how health will evolve in the future, in poor and rich countries. 4) Determine what actually works and provides the most benefits.

The "Global Burden of Disease" is Murray's flagship work, which he started 25 years ago. It is a "highly collaborative effort" and now has 2,200 investigators in 130 countries, tracking 310 major diseases. They look at the underlying risks and behaviors that drive health patterns – such

as contaminated water, poor sanitation, smoking, high blood pressure, etc. This is done at the country level and at the subnational level in such countries as China, India, and Brazil. "We analyze all the data every year, and publish in world's leading scientific journals, plus put it online, and in policy reports from governments and other groups." All of IHME's statistics are available online at www.healthdata.org. "It's the high-level story of what's happened to human health in the last 35 years or so."

One key finding is that child death rates have dropped dramatically. "This story is one of extraordinary progress," Murray said. Various efforts such as the Rotary polio and malaria programs have helped greatly, he added, plus those to combat diarrhea and increase vaccinations.

Life expectancy is "going up in every region," he said. "Despite all the risks on the horizon, the fundamental observation is that things have been getting remarkably better in terms of human health. And we know the reasons why. It's no mystery."

One of Murray's slides was a "square pie chart" that showed deaths from non-communicable diseases, infectious diseases, and injuries. The reduction in infectious-disease deaths (HIV/AIDS, pneumonia, malaria) is significant in every country. However, heart disease, cancer, and other non-communicables continue to cause many deaths. "The drivers behind them are environmental, behavioral, and metabolic," he said. "Today, poor diet is #1, high blood pressure is #2, and malnutrition is #3."

Meanwhile, deaths from diabetes, obesity, and drug use are going up worldwide, as are deaths related to air pollution, especially in India and China.

"I'm an optimist, but in the story of progress, there's an undercurrent of real risks that we should care about," he said. "The big problems from 15-20 years ago we've made great progress on, but we still have serious threats."

IHME also does evaluations at the state and local level. An in-depth study of King County will be available later this year. So far the worst area is South Aurora Avenue and the best is South Mercer Island. "The key is to make this information available to lead to decisions that have better outcomes," Murray said.

In the Q&A period, **Todd Summerfelt** asked about how feedback drives IHME's work. Murray said: "We get tons and tons of feedback about the nuances. This is why we're growing. We need a constant dialogue globally. The more you invest in that, the better the whole enterprise becomes."

Steve Crane said there were only 37 cases of polio reported last year, and only 3 so far this year, but wondered if there was a discrepancy between actual vs. reported cases and asked: "How long before it's gone?" Murray said the actual data were "pretty good," adding: "I was a pessimist 3 years ago, but the turnaround has been extraordinary. It looks really hopeful that the last death could be achieved."

Another member asked about the implications for healthcare-policy makers in Washington, D.C. Murray said: "By any measure, our outcomes in this country are not as good as they should be." In some categories, the U.S. ranks between 20th and 50th. "There's no reason we should not be Number One. Why? Understanding why is actually very hard. More effort is required." The

biggest opportunity for closing the gap is in "modifiable risk factors" -- high blood pressure, high blood sugar, lack of physical activity and obesity.

Kathy Williams asked if IHME tracks suicide. Murray said yes. "We are extraordinarily comprehensive in what we track." The highest suicide rate in the world used to be in China, he said, but there has been a 70% drop in young women's suicide rates in China in last 20 years. It's also going down in India, but other countries it's up.

Earlier in the program, **Ben Wicks** noted the health benefits

of people singing together before delivering the invocation.

Trish Bostrom led us in singing "This Land is Your Land," while playing her banjo.

Joe Phillips introduced **John Kelly**, our newest member. (See bio.)

President Cathy announced several upcoming events (see list) and recognized all members who joined Rotary in the month of March. She singled out Jim McCurdy, Fred Weiss, Jimmy Collins, and Laurel James (who has had perfect attendance for 25 years). All "anniversary members" stood to be recognized.

Jim Moore and **Charley Dickey** talked about the value of Seattle Rotary Service Foundation projects worldwide. This year, \$225,000 will go to service committee grants. March 15 is the deadline for "innovative projects" and April 26 for regular service committee grants.

Charley held up a dozen envelopes with appeals for funds from various nonprofits that he's received in the mail at home. But he noted that SRSF screens all the applications and prioritizes

them. **President Cathy** called that a "gentle reminder" for those members who have not yet donated. She also asked those who have donated \$1,000 or more to stand and be recognized.

The Seattle Women's Chorus took the stage to perform in honor of International Women's Day. They were led by Paul Caldwell, who said his first public performance was at a Rotary Club in South Carolina, which also paid for his piano lessons for two years.

Their first song was about refugees after the civil war in Sarajevo: "When I close my eyes I dream of peace," was a repeated lyric.

The second song was a tribute to women mathematicians such as those featured in the film, "Hidden Figures." Excerpt: "Catherine Johnson Counts...Every Woman Counts."









Their final song was "dedicated to the most inspiring woman we know, and we hope you recognize her." Excerpt: "She shows up, she comes through. The most inspiring woman we know is YOU." (NOTE: The Seattle Women's chorus will do a public concert in two weeks: INSERT DATE AND PLACE HERE, IF POSSIBLE.)

To end the program, **President Cathy** introduced **Cindy Runger**, who is representing the SRSF in Seattle's version of "Dancing With the Stars" and asked for Rotarians' votes. "All the money raised goes to eradicating homelessness," she said.

Cathy's "call to action" was to read "Epic Measures," a book about Dr. Chris Murray and the work of the IHME.

