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Rotary International District 3291
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BE THE INSPIRATION
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Help prevent road traffic accidents

Posted on April 17, 2019 in rotaryservice by Dr. John Philip, Chair of the International Fellowship of Rotarian Doctors, and member of the Rotary Club of Newbury, England

It is estimated that 1.2 million people die each year due to road traffic accidents (RTAs). Deaths from RTAs in developing nations will soon exceed the combined deaths of AIDS, malaria and tuberculosis. Beyond the deaths are the badly injured and permanently disabled, which number at least as many as the deaths. Most of the victims are heads of households and this throws the entire family into poverty, often permanently. RTA survivors, their families, friends, and other caregivers often suffer adverse social, physical, and psychological effects. If the current trends continue, the number of people killed and injured on the world's roads will rise by more than 60% by 2020.

It is time for us to act.

The Fellowship of Rotarian Doctors is calling on clubs to join the 5th United Nation's Road Safety Week initiatives between 6-12 May. This year's campaign is targeted at civil society organizations and policy-makers. We urge Rotary members to plan an event with family, friends and colleagues.

Some of the tried and tested measures to reduce RTAs are:

- Avoiding over-speeding and following speed limits
- Avoiding drunken driving
- Using helmets by two-wheeler drivers
- Using seat belts and child restraints in cars
- Improving visibility, appropriate headlights and road lightings

Death and the impact of injuries can be prevented with first aid treatment, if treated immediately. The first hour after the trauma is called the "golden hour." If proper first aid is given, road accident victims have a greater chance of survival and see significantly reduction in the severity of their injuries.

There are ways you can help to reduce RTAs in your community:

- Meet with traffic authorities and discuss the current situation in your community
- Identify priorities with the help of key stake-holders
- Produce informational leaflets to raise awareness and offer advice on how to reduce RTAs
- Erect a road sign
- Work with target groups: schools, colleges, faith communities, employers
- Supply high visibility jackets to youngsters who find themselves having to use roads when lighting is poor
- Advocacy – write to authorities if a particular need is identified – eg: street lights, road signs, helmets, seat belts, accident spots
- Offer first aid training

If we act today, we may save a life or prevent a fatal injury tomorrow.

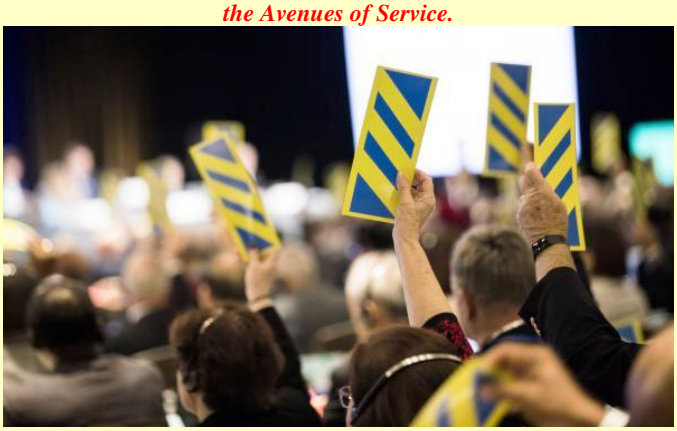
The Fellowship of Rotarian Doctors offers Rotarians, their family members, and program participants and alumni a unique opportunity to bring their vocation into service, change lives and make friends. The group shares a vision for supporting and promoting global health improvements, an enthusiasm for making advancements through volunteering, and a strong commitment to support local and international healthcare initiatives. Join the group or contact John for more information.

Council elevates Rotaract

Representatives from around the world also vote to preserve club flexibility by Arnold R. Grahl Photos by Alyce Henson

The 2019 Council on Legislation may not have made as many dramatic changes as the Council three years ago did, but it made several decisions that will shape the future of Rotary.

Representatives at the 2019 Council on Legislation in Chicago vote on the first proposal of the week: an amendment to the preamble to the Avenues of Service.



Representatives vote to close a debate on a proposal at the Council

Two representatives share a laugh between votes at the Council

Past RI Presidents K.R. Ravindran and Ian HS Riseley listen to representatives debating a proposal

A representative at the 2019 Council on Legislation uses a device to listen to the interpretation of a debate. The Council is conducted in eight languages

Among the most important, the Council elevated the status of Rotaract clubs. The change broadens the definition of membership in Rotary International to include Rotaract clubs. The change is intended to increase the support that Rotaract clubs receive from RI and to enhance their ability to serve.

"We need to be an inspiration to our young partners, so they will continue doing the great service that they do," said RI President Barry Rassin when he presented the measure. "This sends a strong message that they are truly our partners in service."

In many ways, the Rotaract experience will not change. Rotary clubs will still charter and sponsor Rotaract clubs. Rotaract clubs will still have their own standard constitution and their own unique club experience. Members of a Rotaract club will not be called Rotarians. And Rotaract clubs will not immediately pay dues or receive other benefits, such as the official magazine that Rotary members receive. The Board will determine a dues structure over time.

The measure simply expands the definition of membership in Rotary International to include both Rotary and Rotaract clubs.

Every three years, representatives from Rotary districts around the world meet in Chicago, Illinois, USA, to consider changes to the constitutional documents that govern Rotary International. This year's Council considered more than 100 proposals.

Representatives authorized the Board to pursue changing RI's charitable status to a section 501(c)(3) tax-exempt organization under the U.S. Internal Revenue Code. It is presently a 501(c)(4). A task force has been studying the possible change for 18 months and says it will offer benefits that include tax reductions and vendor discounts that will reduce expenses.

Dues increase

As for dues, the Council approved a modest increase of $1 a year for each of three years, beginning in 2020-21. The previous Council set dues for 2019-20 at $34 per half year.

With the increase, the dues that clubs pay to RI per member will increase to $34.50 per half year in 2020-21, $35 per half year in 2021-22, and $35.50 per half year in 2022-23. The dues will not be raised again until a future Council votes to change it.

The Council also changed the name of the General Surplus Fund to RI Reserve, because that more accurately reflects the purpose of the fund.

In another vote, the Council approved calling the general secretary a chief executive officer (CEO) in circles outside Rotary, to increase his stature in dealings with other intergovernmental organizations.

A seemingly small but intensely debated action will reduce the number of nonvoting members at future Councils, by removing past RI presidents and allowing one RI Director to attend but not vote.

The Council defined itself as much by what it did not do.

This year's representatives resisted pressure to limit some of the flexibility that the 2016 Council granted clubs, rejecting several measures that would have placed restrictions on clubs. One unsuccessful measure would have required clubs to meet at least 40 times each year.

Many clubs have been using the innovative and flexible club formats to attract new members and meet their current members' needs.

Representatives also rejected proposals to make it optional for members to subscribe to an official Rotary magazine and to reduce the size of the Council by half and have it meet every two years.

Democracy in action

Several representatives commented on the democratic nature of the proceedings.

"All of the delegates have been very responsible and respectful, no matter what their opinions," said Adriana De La Fuente, the representative from District 4170 and a member of the Rotary Club of Plateros Centro Historico, Ciudad de México, Mexico. She has attended three previous Councils. "That elevates the trust and respect for our organization."

Glen K. Vanderford of District 6760, a member of the Rotary Club of Jackson-Old Hickory, Tennessee, USA, said he appreciated the opportunity to represent the people of his district and gather with like-minded people to voice opinions.

Why gene-edited mosquitoes might help us beat malaria

Published on April 15, 2019 by Bill Gates, Co-chair, Bill & Melinda Gates Foundation

It's Mosquito Week again on the Gates Notes. This year I'm exploring some of the science behind malaria and other mosquito-borne diseases. You can read below about how gene editing could play a key role in eradicating malaria. I've also written about amazing advances in tracking the disease and how the parasite is a deadly shapeshifter.

Humans have spent thousands of years inventing new ways to kill mosquitoes. The Romans did it by draining swamps. Today you might have a bug zapper in your back yard. In low- and middle-income countries, it's common to see people spraying insecticides or setting up sticky traps baited with sugar.

But evolution is smart. It is one-upping us by creating mosquitoes that are harder to kill. In sub-Saharan Africa and parts of South America and south-east Asia, we are seeing an alarming number of mosquitoes that can withstand insecticides.

This is especially problematic for the fight against mosquito-borne diseases like malaria. To eradicate these diseases, we need new tools to complement the ones we already have.

Our foundation is backing a lot of different advances. One that I'm especially excited about is a set of techniques for genetically modifying mosquitoes that could dramatically reduce the number of disease-carrying insects in certain areas.

What is cool about these genetic techniques is how precise they can be. Precision matters because out of more than 3,000 species of mosquitoes, only five are responsible for causing most cases of malaria. Of those, only females spread the disease, because they're the only ones that bite humans. (They do it when they need extra protein for reproduction. Experts call it "taking a blood meal.") The males just drink nectar.

"Instead of killing a bunch of mosquitoes indiscriminately, we could eliminate only the dangerous ones."

The promise of gene editing is that, instead of killing a bunch of mosquitoes indiscriminately, we could eliminate only the dangerous ones in a particular area. That would buy us time to cure all the people there of malaria. Then we could let the mosquito population return without the parasite.

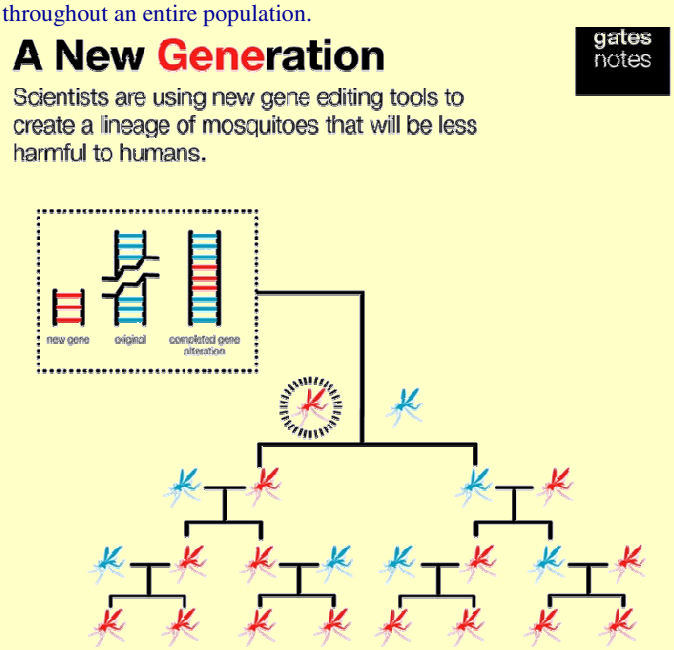
One exciting gene-editing technique is called gene drive. The term covers several different approaches, but the basic idea is to use the CRISPR method to rewrite the usual rules of inheritance. Normally, for any given gene, there's a 50 percent chance that a parent with that gene will pass it on to a child. (It is competing with one from the other parent, and only one of the two can win.) With gene drive, the odds go up to 100 percent. You give a few mosquitoes an edited gene that inserts or drives itself into all their offspring. When those mosquitoes mate with wild mosquitoes, all their children will have the edited gene, and over time it will make its way through the entire population. Imagine if blue-eyed mosquitoes had only blue-eyed children, no matter what color their partners' eyes were. Eventually, every mosquito in that population would have blue eyes.

There's no reason to think gene drive is even feasible in humans, let alone advisable. There are also serious questions surrounding the use of this technology on insects, which I will get to in a moment. But first I want to give you two examples of how it works.

One is the colorfully named X-shredder. As you might remember from biology class, the sex of a mosquito is determined partly by the sex chromosomes it inherits from its parents. Females got one X chromosome from each parent; males got an X from their mother and a Y from their father.

In 2014, scientists at Imperial College London and the Fred Hutchinson center here in Seattle were able to edit a protein in male mosquitoes so that it shreds the X chromosomes in their sperm. As a result, the males pass along mostly Y chromosomes, so most of their offspring will be males. Thanks to gene drive, those offspring will also have the edited protein, so most of their children will be males.

This chart shows you how gene drive eventually spreads a gene throughout an entire population.



Source: Hammond & Galizi (2018). Gene drives to fight malaria: Current state and future directions

Within a few generations, the male/female ratio gets out of whack, and eventually the species dies off in that area.

"Females with edited doublesex genes develop a mix of male and female organs, including male genitalia."

Another example involves the doublesex gene, which in mosquitoes works along with the sex chromosome to determine whether an insect turns out male or female. Last year, researchers at Imperial College London found that females with edited doublesex genes develop a mix of male and female organs, including male genitalia and a proboscis that is too flimsy to break human skin. They can't reproduce, so the population shrinks; and they can't take a blood meal, so they won't spread the parasite.

The doublesex edit doesn't affect males, although thanks to gene drive, they will pass it to their offspring, which is how it keeps spreading through the population.

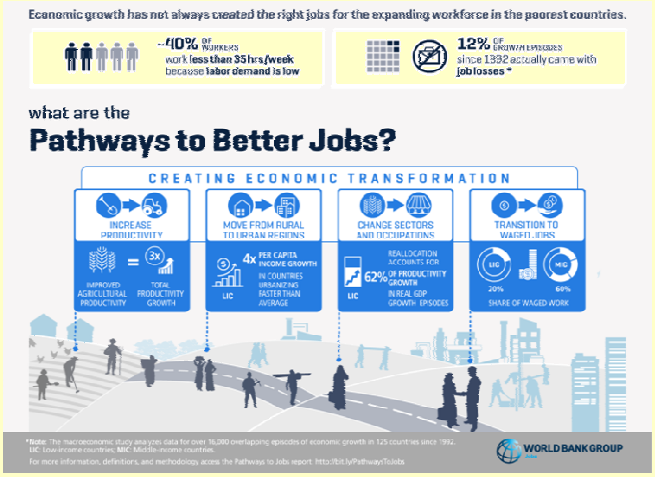
We know gene-drive technology works in the lab. When the Imperial College researchers put 150 males carrying a copy of the doublesex edit in a small cage with 450 wild-type mosquitoes, the population died off within a few months (about 10 generations). The sex bias edit produced similar results.

The next step is to run tests in larger cages and, eventually, get permission from governments to do them outdoors. We need to understand things like: What's the impact on the food chain if a certain species of mosquito starts dying off? How many altered insects would we need to introduce? How long do we need the mosquitoes to be gone? Last year, the government of Burkina-Faso agreed to allow the release of sterile, non-gene-drive mosquitoes in the wild so researchers could begin to study some of these questions.

As I mentioned, social and regulatory issues also come into play. For example, because mosquitoes don't exactly respect national boundaries, neighboring countries will probably need to agree on the rules surrounding the use of gene-editing technology. Policymakers and scientists have been debating these questions in forums like the World Health Organization and the African Union's development agency, and they are moving toward a consensus.

I think we can have the regulatory approvals in place by 2024 and the first gene-drive mosquitoes ready for use by 2026. Although this technique will never replace the other tools we have for fighting malaria, I'm optimistic that it could become one more important weapon in eradicating the disease.

5 facts about jobs and economic transformation in IDA countries
By Dino Leonardo Merotto on April 4, 2019



Economies grow when more people find work, when they get better at what they do, and when they move from low-productivity work to better, more productive jobs. Photo: World Bank

What are the pathways people follow to better jobs? Economies grow when more people find work, when they get better at what they do, and when they move from low-productivity work to better, higher-productivity jobs.

Our newest report ***`Pathways to better jobs in IDA countries'*** takes a closer look at how people benefit through jobs in the process of development. It identifies how the available jobs change with economic transformation and shows how the structure of labor markets differs between low, lower-middle, and middle-income countries. It points to key challenges in ensuring that workers can transition between sectors, between locations, and between self- and waged employment.

The study uncovers many findings, some familiar, some new. These will be featured in more detail in future blogs. Meanwhile, here are five important facts drawn from this extensive research, which combines data from over 16,000 episodes of real GDP growth, labor supply information for over 140 countries, and firm-level analysis from Jobs Diagnostics.

1. Economic growth doesn't always bring enough good jobs.

Our analysis of growth episodes shows that growth in real GDP is no guarantee of an increase in employment in all cases. The relationship between real GDP and employment growth is positive across growth episodes on average, but the spread of employment with GDP growth is wide. Analysis of per capita growth episodes globally suggests that changes in the working-age population, labor force participation, and employment rate explain only about 20% of GDP per capita growth: 80% is explained by growth in labor productivity.

2. Underemployment, not unemployment, is the main challenge.

In many LICs, the problem is not the quantity of jobs but their quality. Most people in LICs work because they cannot afford not to. Employment rates are high. But people in LICs work irregular hours in low-quality, low-productivity jobs. Many are underemployed. On average, in low- and middle-income countries 40% of employed workers work fewer than 35 hours per week. Around 33% of employed people work over 45 hours a week indicating that their hourly productivity is low. So they need to work long hours to survive. Low-income countries with rapidly growing youthful populations need better jobs, not simply more of the same types of jobs. That requires growth with economic transformation into higher productivity work.

3. Structural transformation drives productivity growth.

The main source of better jobs in LICs is the movement of underemployed agricultural labor into services and industry. Our growth analysis suggests that almost 80% of labor productivity growth in low-income countries comes from the reallocation of labor from lower-productivity agriculture into relatively higher-productivity services and industry. However, overall labor productivity growth within sectors tends to be low because the underdeveloped `modern' sector of the economy is often unable to absorb the workers released from agriculture into higher-productivity, capital rich, waged jobs.

4. Structural transformation starts with productivity gains in agriculture and is linked to urbanization.

Raising agricultural productivity in LICs and LMICs is critical to catalyze growth and economic transformation. When agricultural productivity is growing, under-employed labor moves out of agriculture and GDP grows faster. The opposite is also true. When agricultural productivity is falling, labor is moving into agriculture: family members stay on the farm, which reduces agricultural productivity and lowers economic growth.

Urbanization, in secondary cities, happens with transformation in low and lower middle-income countries. The migration of surplus labor from farms to towns and cities raises agricultural productivity and provides a pool of labor in urban centers. In low-income countries, it seems to happen first in the towns within reach of rural people, or on the periphery of the capital: the growth in the share of the urban population in secondary towns and cities is double that of the primary city. In low-income countries that are urbanizing faster than average, labor reallocation from agriculture adds four times as much to per capita income growth as it does in countries with slower than average urbanization.

5. Wage work matters.

A big increase in the share of wage jobs (both formal and informal) seems to coincide with the transformation from low income to middle income status. The richer a country is, the higher the share of waged employment in total employment. For countries with annual per capita income below $600, this share is only about 20%, but it reaches 63% of employment in middle-income countries. The shares of agricultural workers, unpaid family workers, and self-employed workers decline in richer countries. This suggests that the creation of waged employment may be an important aspect of the economic transformation that countries make as they progress toward higher per capita income. This is one of our most significant findings, supporting the conclusion of the 2013 World Development Report that there are important developmental gains from waged jobs (even when they are informal), because they are better than the own-account jobs they tend to replace. We are now investigating this aspect in countries where there is sufficiently long time-series data, and sufficient economic progress from lower middle-income status.

These five facts suggest that pathways to better jobs are linked to economic transformations that reduce economic inactivity and underemployment and reallocate labor from less productive unpaid or self-employed to more productive waged jobs. Low-income countries are too often characterized by the lag in those transformations and a lag between the transformation in GDP and transformations in jobs, and the price is paid by households and workers who remain trapped in low-productivity activities with meager livelihoods.

We believe that the World Bank's twin goals ending extreme poverty and boosting shared prosperity will be achieved faster when the low-income countries design effective interventions to support faster transformations toward higher-productivity jobs and improved livelihoods. These countries need well financed jobs and growth strategies, and jobs focused investments and lending operations that bring smoother pathways to better jobs within reach of poor people.

Birthdays of Rotary members in April, 2019

Uttam Ganguli, past Governor on April 2, 2019
Debashis Mitra, past Governor on April 21, 2019
Vijay S Bhandari, past Governor on April 27, 2019

April is Maternal and Child Health Month

U N W I N D

A politician is a fellow who will lay down your life for his country. ~Texas Guinan. 19th century American businessman

T A I L P I E C E

A woman marries a man expecting he will change, but he doesn't.
A man marries a woman expecting that she won't change, but she does.