CACCI
Health & Education Newsletter

Message from the Chairman

As Chairman of the Asian Council on Health and Education (ACHE), I am pleased to present the latest issue of the Newsletter of ACHE to all our colleagues not only in the health and education sectors, but in other relevant industries as well.

This issue highlights the trends, the latest news and interesting reports on health and education in the Asia-Pacific region. I hope that you will find the articles included in this Newsletter of great value, and look forward to your contribution to the Newsletter in the future.

As many of you may know, this Council has been a valuable platform for information exchange and networking for all representatives from the region's health and education industries. Therefore, all CACCI members are encouraged to take advantage of the Council and the Newsletter as channels to voice their opinions and viewpoints.
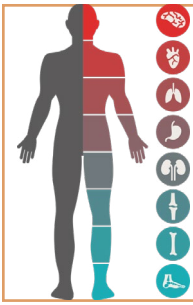
My best wishes,

Arash Anissian, MD
Chairman
Asian Council on Health and Education

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Climate Change Is a Health Crisis.
How Can Health Care and Life Sciences Respond?

By Kavitha Hariharan, Director of Healthy Societies at Marsh McLennan Advantage, and
Rachel Zeldin, Principal of Health & Life Sciences at Oliver Wyman

Editor's note: For more information on the ways in which climate change is increasing health risks and costs for people and businesses worldwide, please visit Marsh McLennan's interactive Climate Health Threat Illustrator.

Climate change will also impact health and life sciences stakeholders via more frequent and severe disruptions, as well as acute climate-related hazards, also accumulating strains on demand, capacity and finances due to chronic hazards and their lasting or lagging effects.

The health and life sciences sector is part of the problem — if the sector were a country, it would be the fifth-largest emitter of greenhouse gases on earth, mainly due to production, transport and disposal of products and services across the health supply chain. The sector is also a crucial part of the solution, with both an obligation and an opportunity to mediate the health impacts of climate change and minimize harms and inequities for patients, staff and societies.

An ambulance stands submerged in flood water after a river burst its banks in South Wales, Britain. More frequent and intense storms can inflict more injuries, but they can also increase mortality by disrupting urgent and essential medical care.
Photo: Geoff Caddick/AFP via Getty Images

Chronic disease prevalence, related vulnerabilities and costs could increase. Longer and more severe fire seasons expose more people to smoke: The 2019 Black Summer bushfires affected 80% of Australia's population; survivors may face increased risks of cancer and of respiratory and heart disease. Health costs accounted for more than half of the total cost of the fires.

Mental ill health may surge. Among Pacific Islanders at risk of forced displacement as sea levels rise, and among Central American migrants fleeing droughts, hunger and poverty, more than half the population exhibits signs of mental ill health — more than double the global period prevalence, serving as a potential glimpse into the future for other places in the world.

Climate-sensitive events and trends harm health directly, but also indirectly by altering interdependent pathways that act as

Climate Is a Threat Multiplier for Health

Mortality risk is rising. Annual heat-related deaths could increase ninefold in the U.S., from about 12,000 now to more than 100,000 by 2100 in a high-emissions scenario. Intensifying storms could also increase the risk of deadly health care disruption, similar to that faced by Puerto Rico in 2017 — when one-third of casualties in the three months after Hurricane Maria may have occurred because medical care was disrupted or delayed.

Injuries could increase. Some 26 million people across the Philippines, Indonesia and Malaysia may be exposed to injuries during storm surges by 2045 in a high-emission scenario, as coral bleaching weakens a natural defense against coastal erosion, storms and floods in low-lying coastal areas.

Infectious diseases may expand or (re)-emerge. Dengue could spread to the Southeastern U.S. by 2050 as mosquito transmission zones expand from the tropics. Arctic heatwaves are thawing permafrost and could revive long-dormant pathogens, such as bacteria and viruses that cause anthrax, smallpox or the 1918 influenza pandemic.
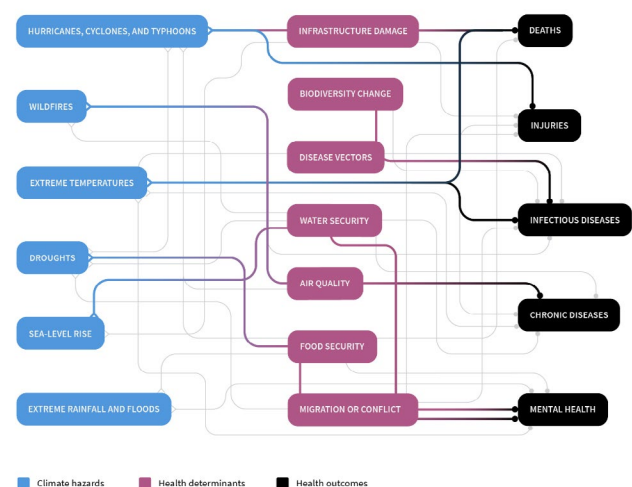
Note: These interconnections are not exhaustive and do not aim to fully represent complex climate or meteorological processes. The examples in this article present only a snapshot of the complex socioeconomic, environmental, and health interactions through which climate change is directly or indirectly affecting health across the world.

Exhibit: Climate Change Affects Health Directly and Indirectly
Through Complex Pathways
Source: Marsh McLennan

environmental, social and economic determinants of health. (see Exhibit). For example, more frequent and intense storms can inflict more injuries (a direct result); but they can also increase mortality by disrupting urgent and essential medical care (an indirect effect).

Climate impacts on health range from mild to severe and from acute to chronic. Wildfires and floods cause initial spikes in physical and mental health needs, followed by lasting ill health that, over time, accounts for the bulk of consequent health care costs and productivity loss. Risks and outcomes once perceived as far off in time or space are unfolding and will intensify in both developed and developing countries.

Health and economic disparities are also exploited and widened by climate change, because the people and places that are worst-hit are least capable of coping. For example, the elderly, the poor and people with pre-existing conditions face greater mortality risk during heatwaves. Rising temperatures and sea levels threaten lives and livelihoods in tropical islands and regions, undermining their capacity to respond to catastrophes for which they are least responsible.

Building Resilience

To date, the health and life sciences sector has been slow to respond — it has historically perceived impacts to be distant or uncertain and has deferred systemic changes. To reduce health risks and costs for the communities they serve, health care providers, payers, life sciences companies, employers and policymakers must ensure continuity of care during crises and prepare for changing needs for health care.

Hospitals and other providers must prepare for spikes in urgent care needs, volatile elective care, capacity disruptions and cost pressures. They should invest in infrastructure that is resistant to extreme weather, create surge capacity for essential resources (including staff) and plan for effective coordination with other stakeholders during crises. Providers can also devise adaptive service and staffing models such as telehealth and enhance community resilience by supporting public health measures to improve well-being and equity.

Health insurers and government payers face unpredictable and unmanageable claims and costs, a widening health protection gap and asset volatility for investments exposed to risks. Payers need to develop products or models that ensure universal access to physical and mental health care as well as determinants of health (such as food, housing, education and financial security).

Life sciences companies have opportunities to counter new health threats and to anticipate growing risks — such as physical disruptions, pricing and patent challenges as health care costs soar, and biodiversity loss that shrinks sources of existing and potential drugs. Pharmaceutical and medical device companies can reconfigure operations and supply chains for greater resilience, align research with changing disease burden and invest in rapid-response capabilities and partnerships (such as to repurpose drugs or discover vaccines). They must also ensure universal access and affordability for essential medicines and supplies.

Employers will experience spikes in care needs and costs that may coincide with health care disruptions, productivity loss and economic strain. Employers can reduce health and safety risks for workers by modifying work sites, schedules, practices, equipment and exposures. As payers, employers should design leave and health benefits to ensure all workers receive necessary care — especially low-paid and migrant workers, who are more vulnerable to climate hazards. They can also bolster workers' resilience by improving work-related determinants of health, such as financial well-being.

Policymakers can minimize health impacts of climate change by strengthening health systems and building national and community resilience — for example, by integrating health impacts into disaster planning and risk reduction. They can implement policies with co-benefits for health and promote universal access to basic services and determinants of health. Policymakers can also spur investment and innovation now to monitor, avert and respond to future crises — for example, disease surveillance to prevent pandemics or vaccine platforms for rapid response.

Reducing Emissions

All stakeholders have room to reduce their carbon footprint. For example, providers and life sciences can switch to renewable energy sources and low-carbon technologies; payers and employers can prefer sustainable providers of products and services as well as channel investments into green assets; the sector can use its trusted voice to educate communities on climate risks and solutions; and policymakers can drive climate mitigation and adaptation efforts for immediate and long-term health benefits.

The health sector must strike a balance between efficiency and resilience by cutting emissions and costs without sacrificing quality or continuity of care. Some changes will increase efficiency and resilience, while other options present trade-offs. One lesson from COVID-19 has been the cost of inaction and the value of preparedness, prompt response, resilience and coordination. Given the threat of climate change to health and the lag between emissions and consequences, urgent action is vital. The right responses today will go a long way toward reducing risks and the need to make even more drastic and expensive changes tomorrow.

Brink

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Health challenges need predictable healthcare investment policies. Japan's example shows why

By Joseph Damond, Deputy Chief Policy Officer & Executive Vice President,
International Affairs, Biotechnology Innovation Organization

Image: Photo by Simone van der Koelen on Unsplash

BUSINESS ENTERPRISE INVESTMENT IN PHARMACEUTICAL R&D
COMPOUND ANNUAL GROWTH RATE FROM 2013 TO MOST RECENT YEAR AVAILABLE

🇰🇷	12%
🇨🇳	11%
🇺🇸	6%
🇯🇵	-1%

Source: OECD, "BERD performed in the pharmaceutical industry (current PPP \$)" OECD.Stat Database, https://stats.oecd.org/ and Economist Intelligence Unit calculations, cited in The Economist Intelligence Unit, Supporting an innovative life sciences ecosystem in Japan, 2020. https://eiuperspectives.economist.com/sites/default/files/supporting_an_innovative_life_sciences_ecosystem_in_japan_en.pdf

Business enterprise investment in pharmaceutical R&D.
Image: EIU

- Japan's government is building partnerships with the biopharma sector on COVID vaccines.
- Though it does not have a home-grown COVID vaccine, Japanese society now benefits from the global industry's ability to successfully turn years of research and investment in platform technologies such as mRNA into life-saving products to fight the pandemic.
- But there is more that Japan could do to work together with the global biotech and life sciences sector to become a world leader – offering lessons for other countries.

Japan has a world-class technological base but without a predictable and welcoming policy environment for the biopharma sector to thrive, it falls short of becoming a biotech and life sciences world leader.

The limitations in competitiveness of its biopharmaceutical sector are highlighted by its lack of a home-grown COVID vaccine, due in large part to a policy environment that is sending the wrong signals to those who would invest in developing innovative medicines in Japan.

For example, Japan has made 56 changes to pharmaceutical pricing rules in recent years, creating significant uncertainty for local and international biotech companies. These changes have become increasingly abrupt and non-transparent, with limited prior notification or opportunities for public comment.

The implementation of multiple, overlapping rules has created a volatile market in which companies are repeatedly blindsided by major revisions in supply terms. This is part of a concerning trend by a number of governments to impose onerous requirements on health suppliers. Other examples include Canada's revisions of its Patented Medicines Prices Review Board guidelines and the Republic of Korea's opaque reimbursement practices.

While the Japanese government faces the challenge of sustaining its healthcare system in the face of both the COVID crisis and an ageing population, it has unusually singled out
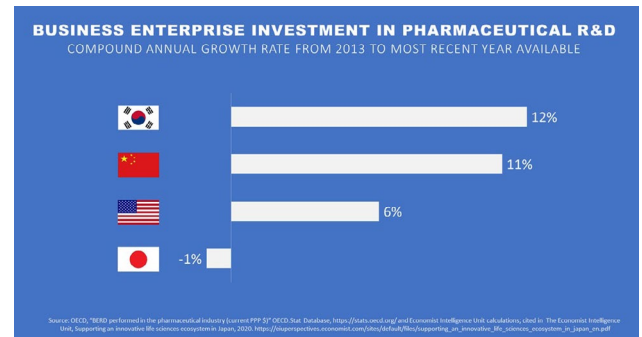
medicines as its primary target for what it sees as healthcare "savings." 75% of cost savings delivered within the social security system are sourced from pharmaceuticals, even though they make up only about 20% of Japanese healthcare spending. Whatever the short-term fiscal benefits of this strategy, it has a chilling effect on Japan's long-term investment climate in the risky and expensive biotechnology and life sciences space.

US-sourced Foreign Direct Investment (FDI) into Japan grew at only 16% between 2010 and 2019, whereas China saw growth of 97% and Singapore 180% over the same period, and Japan has the lowest inbound FDI stocks as a share of GDP in the OECD. Business investment in pharmaceutical R&D has fallen by an annual rate of 1% in Japan since 2013.

Any decision to increase investment in pharmaceutical research, clinical development or commercial capabilities in Japan would be closely scrutinized under current circumstances. The alternative is that Japan could fall further behind its neighbours in the global life sciences race.

Japan's uncertain policy environment also undermines efforts to drive healthcare innovation to serve patients. A little over a decade ago, the government of Japan made great progress in improving the regulatory environment for new medicines. It successfully eliminated the "drug lag" that had prevented Japanese patients from accessing valuable medicines until many years after patients in the US and Europe.

The current volatility in Japan's policy environment puts this progress at risk as new medicines and indications may only become available after being launched in more stable markets. The existing pipeline of new medicines in development is dominated by new technologies: not only advanced biologics, but gene and cell therapies. Japan's current healthcare system struggles to value the benefits of these drugs and get them to Japanese patients after they are approved by its regulatory agency, the PMDA.

Japan's increasing adoption of non-transparent cost-containment measures has other global consequences too. As every government is trying to build back better after COVID while simultaneously preparing for future threats, finding solutions for current and future health challenges will require an ever expanding

portfolio of new medicines and vaccines that will take time and money to discover and develop.

For example, the mRNA platform technology is a result of years of research as well as long-term, highly uncertain investment in the global biopharma ecosystem, which has led to life-saving products to fight today's COVID crisis. But first Japan will need to balance its fiscal pressures more equitably across the healthcare sector, address the real inefficiencies in its healthcare delivery system, and promote its innovative life sciences sector all at the same time. Japan certainly has the means, and it has much of the technology to achieve this.

A good first step would be to bring all stakeholders together to discuss the best ways to achieve better healthcare while supporting a vibrant ecosystem for biotechnology research. This should include valuation and reimbursement processes that provide strong incentives for innovation, especially the most advanced technologies.

Any subsequent processes to implement reforms should be transparent and consultative. As the US and Japan strive to deepen cooperation in research and technology development in biotechnology, as announced in the recent US-Japan Joint Leaders' Statement, our industry will continue to work collaboratively to create the conditions needed to deliver the best possible outcomes for patients and communities in Japan and globally.

BIO is working on a report to propose how Japan could do more to promote public health and become a leader in the innovative global life sciences sector.
World Economic Forum

Public health seeks steady funding, not feast or famine

By Michelle R. Smith, Lauren Weber and Hannah Recht,
Associated Press (AP) and Kaiser Health News (KHN)

The U.S. Congress has poured tens of billions of dollars into state and local public health departments in response to the coronavirus pandemic, paying for masks, contact tracers and education campaigns to persuade people to get vaccinated.

Public health officials, used to juggling bare-bones budgets, worry the money will dry up as the pandemic recedes, continuing a boom-bust funding cycle that has plagued the U.S. public health system for decades. They fear they'll be back to scraping together money from a patchwork of sources to provide basic services to their communities — much like after the Sept. 11 attacks and the SARS and Ebola outbreaks. That could leave the nation where it was before COVID-19: unprepared for a health crisis.

"We need funds that we can depend on year after year," said Dr. Mysheika Roberts, the Columbus, Ohio, health commissioner.

When Roberts started in Columbus in 2006, an emergency preparedness grant paid for more than 20 staffers. By the time coronavirus hit, it paid for about 10. Relief money that came through last year helped the department staff up its COVID-19 response teams. While the funding has helped the city cope with the immediate crisis, Roberts wonders if history will repeat itself.

When the mosquito-borne Zika virus tore through South America in 2016, causing serious birth defects, members of Congress couldn't agree how, and how much, to spend in the U.S. for prevention efforts. The Centers for Disease Control and Prevention took money from its Ebola efforts, and from state and local health department funding, to pay for the initial Zika response. Congress eventually allocated $1.1 billion for Zika, but by then, mosquito season had passed in much of the U.S.

"Something happens, we throw a ton of money at it, and then in a year or two we go back to our shrunken budgets and we can't do the minimum things we have to do day in and day out, let alone be prepared for the next emergency," said Chrissie Juliano, executive director of the Big Cities Health Coalition, which represents leaders of more than two dozen public health departments.

Several lawmakers, led by Democratic U.S. Sen. Patty Murray of Washington, are looking to end the boom-bust cycle with legislation that would provide $4.5 billion annually in core public health funding. Health departments carry out essential government functions — such as managing water safety, issuing death certificates, tracking sexually transmitted diseases and preparing for infectious outbreaks.

Spending for state public health departments dropped by 16% per capita from 2010 to 2019, and spending for local health departments fell by 18%, KHN and The Associated Press found in a July investigation. At least 38,000 public health jobs were lost at the state and local level between the 2008 recession and 2019.

Compounding those losses, the pandemic has prompted an exodus of public health officials because of harassment, political pressure and exhaustion. A yearlong analysis by the AP and KHN found at least 248 leaders of state and local health departments resigned, retired or were fired between April 1, 2020, and March 31, 2021. Nearly 1 in 6 Americans lost a local public health leader during the pandemic. Experts say it's the largest exodus of public health leaders in American history.

Experts said the system needs dependable money to keep high-skill professionals, such as epidemiologists, and for technology upgrades that would help track outbreaks and get information to the public.

In Ohio, the computer system used to report COVID-19 cases to the state predates the invention of the iPhone. State officials had said for years they wanted to upgrade it, but they lacked the money and the political will. Ohio is working on a new system, but Roberts worries that, without a dependable budget, the state won't be able to keep that one up to date either.

"You're going to need to upgrade that," Roberts said. "And you're going to need dollars to support that."

In Washington, the public health director for Seattle and King County, Patty Hayes, said she is asked all the time why there isn't a central place to register for a vaccine appointment. The answer comes down to money: Years of underfunding left departments across the state with antiquated computer systems

that were not up to the task when COVID-19 hit.

Hayes recalls a time when her department would conduct mass vaccination drills, but that system was dismantled when the money dried up after the specter of Sept. 11 faded. Roughly six years ago, an analysis found that her department was about $25 million short of what it needed annually for core public health work.

Public health officials in some areas may struggle to make the case for more stable funding because a large swath of the public has questioned — and often been openly hostile toward — the mask mandates and business restrictions that public health officials have imposed through the pandemic.

In Missouri, some county commissioners who were frustrated at public health restrictions withheld money from the departments.

In Knox County, Tennessee, the Board of Health was stripped of its powers in March and was given an advisory role.

"This is going to change the position of public health and what we can and cannot do across the country," said Dr. Martha Buchanan, the head of the county's health department.

A KHN and AP investigation in December found at least 24 states were crafting legislation that would limit or remove public health powers.

Back in Seattle, locally based companies have pitched in money and staff members for vaccine sites. Microsoft is hosting one location, while Starbucks offered customer service expertise to help design them. Hayes is grateful, but she wonders why a critical government function didn't have the resources it needed during a pandemic.

"They'll look back at this response to the pandemic in this country as a great example of a failure of a country to prioritize the health of its citizens, because it didn't commit to public health," she said. "That will be part of the story."

KHN senior correspondent Anna Maria Barry-Jester and Montana correspondent Katheryn Houghton contributed to this report.

Dr. Mysheika W. Roberts

The health commissioner for Columbus Public Health, poses for a portrait in Columbus, Ohio, on Wednesday, April 14, 2021. Public health officials who have juggled bare-bones budgets for years are happy to have the additional money prompted by the COVID-19 pandemic. Yet they worry it will soon dry up as the pandemic recedes, continuing a boom-bust funding cycle that has plagued the U.S. public health system for decades. If budgets are slashed again, they warn, that could leave the nation where it was before covid: unprepared for a health crisis. "We need funds that we can depend on year after year," says Roberts. (AP Photo/ Paul Vernon)

How Asian governments are leading digital health promotion

By Dan Neary, Vice President of Asia Pacific for Facebook

In Asia Pacific, Facebook has partnered with health ministries to support crisis response efforts

We recently celebrated World Health Day on 7 April. It's an opportunity to focus attention on some of the remarkable efforts of governments in our region to communicate with their citizens using platforms like Facebook, Messenger, Instagram, and WhatsApp. Like many other things during the pandemic, public health campaigns had to move online to reach people at scale with crucial updates.

Digital health promotion is by no means new. But for many governments in the Asia Pacific, it was the first time they were using the Facebook family of apps as a marketing channel for public health promotion at scale. With mounting pressure on healthcare systems, they had to react quickly to contain infection rates on the ground while communicating credible information to citizens as fast as possible.

We saw a number of governments in the region rapidly test and learn different approaches to digital health promotion. From launching bots for Messenger to leveraging free advertising credits to drive people to health information from trusted sources — they led the charge on innovative ways of harnessing technology to fight the pandemic.

Responding to a global crisis

Early in the pandemic, messaging emerged as a key public engagement channel. The Singapore government was among the first to develop an official Gov. sg WhatsApp channel which now has

over 1.2 million opt-in users. It continues to provide up-to-date information on the spread of COVID-19 in the country, along with relevant details on infection control measures.

Our teams also worked with the Philippines Department of Health to launch a Messenger bot to share updates on COVID-19. Taiwan's Center for Disease Control, which has been lauded for its pandemic response, also launched a COVID-19 bot on Messenger — both to serve as a local channel and an international channel sharing the latest updates with Taiwanese diaspora around the world.

All of this happened in partnership with health experts, third-party developers, creative agencies, as well as government and public advocacy teams. In fact, even our internal creative teams joined meetings with departments of health to help apply creative best practices to health updates. Some of this early work led out of Asia Pacific and has now turned into a global framework for pandemic response.

Moving forward with the power of innovation

In 2021, providing effective and accurate vaccine communications is top of mind for public health authorities. As we transition into the vaccine confidence and access phase of the pandemic response, governments continue to leverage digital platforms to get the word out about COVID-19 vaccinations.

As vaccine access and eligibility is different across the region, we are also seeing governments develop more customised messaging experiences. Earlier this year (2021), the Ministry of Health in Indonesia reached out to discuss building a WhatsApp chatbot to support their vaccine rollout to health workers. The world's first WhatsApp vaccine chatbot was built in nine days. Health workers were able to use this two-way messaging chatbot to select location, date, time, and get people to register for vaccinations. Within the first five days, 500,000 healthcare workers had accessed the bot.

Similarly, the Indian government built the world's largest WhatsApp chatbot in 2020 with the goal of sharing authentic news, expert information and official updates. They also established MyGov Corona Hub. They are now updating the chatbot to support their massive vaccine rollout program by incorporating vaccine-specific FAQs and will launch more features soon.

As we collaborated on these campaigns, we also saw the value of personalised advertising in public health promotion strategies. Studies have shown that the effectiveness of the advertisements may be greatly improved by targeting messages based on sociodemographic characteristics.

For example, as schools and colleges reopened in Pakistan, its Ministry of Health wanted to inform parents, teachers, and students about the precautionary measures needed to enable a safe environment for studying.

The MoH created a short animated video showcasing steps to stay safe in school. They utilised a combination of placements, including Facebook and Instagram Feed and Stories amongst others, to maximise opportunities for visibility.

The simple animations, catchy jingle, and easy to understand language used in the video helped keep the broad nationwide audience engaged. Key messages about washing hands and steering clear of touching the eyes and mouth were delivered within the first few seconds. Captions made it easy to grasp the

messages even with sound off.

The campaign helped reach over 13 million people and led to increased awareness of health safety measures during COVID-19.

The role of startups in plugging technical gaps

There are many such examples from the region. I'm truly impressed by how Asian governments have adapted their technological capabilities and innovated relatively quickly to reach their citizens at scale. In the process, we have all learned the power of collaboration. I'm inspired by the broad ecosystem that has sprung up to tackle technical gaps and health service needs, especially for underserved communities. Small technology startups and developer businesses have moved fast to meet public needs, iterating as they go, in partnership with public health officials.

I want to share the story of Amio, a free Messenger chatbot created by three Kiwi doctors to address questions and bust myths about COVID-19 for communities in New Zealand and Australia. In the first month, over 250,000 messages were exchanged. Another example is a startup called Reach52, which focused on providing affordable healthcare to underserved communities. They moved quickly to build a COVID-19 Information and Symptom Checker on the Messenger platform to help curb misinformation. In the first week alone, their solution reached over 6,500 people from rural communities across the Philippines and Cambodia.

It is important to reflect on these stories as they help us learn more about the kind of public health messages that work well, where we can improve, and how we can tackle future public health crises together.

E27

Taiwan-US team discovers way to slow coronary artery disease

By Matthew Strong

Taiwanese, U.S. researchers made discovery beneficial to coronary artery disease patients. (Central News Agency photo)

A team of Taiwanese and American scientists has found a way to slow down the buildup of fatty deposits in blood vessels

that often lead to a dangerous reduction of blood flow to the heart, reports said Tuesday (April 6).

Taipei Veterans General Hospital and National Yang Ming Chiao Tung University cooperated on the five-year research project with the University of California San Diego, Central News Agency (CNA) reported.

Coronary artery diseases resulting from fatty deposits or plaque are the second-highest cause of death in Taiwan, accounting for 27.5 percent of all deaths in 2019, behind only cancer at 28.6 percent.

Using gene therapy on mice, the researchers were able to reduce inflammation in coronary arteries, cutting down the buildup of plaque by 50 percent. The technique could eventually lead to the development of new drugs to allow doctors to intervene before coronary artery disease has reached an advanced level.

Reduced blood flow to the heart can lead to heart attacks and sudden cardiac arrest in connection with unhealthy dietary habits, obesity, and aging.

The full report by the researchers was published by the Proceedings of the National Academy of Sciences of the United States of America (PNAS).

Taiwan News

'Healthcare big data helped Korea fight Covid-19 successfully'

By Kim Eun-young

Kim Yong-ik (second from left), president of the National Health Insurance Service (NHIS), and former Minister of Health and Welfare Park Neung-hoo (third from left) participate in a symposium on health and welfare policies in the post-Covid-19 era in Seoul, on March 11, 2021.

Korea responded to the Covid-19 pandemic successfully because it had sufficient healthcare big data, a government official said. The Ministry of Health and Welfare's simultaneous health and welfare management also made "K-quarantine" efficient, he added.

Kim Yong-ik, president of the National Health Insurance Service (NHIS), said this and other remarks at a symposium on health and welfare policies in the post-Covid-19 era, hosted by the Korea Institute for Health and Social Affairs in Seoul, on March 11, 2021.

Kim picked big data as "the hidden force" behind the efforts to prevent and control the pandemic, among various contributors such as mature civic awareness, the government's professional response, and the nation's universal health insurance program.

"The Covid-19 outbreak occurred when the health insurance coverage was about to expand with the 'Moon Jae-in Care.' So, the health insurance program and the government covered 80 percent and 20 percent of the Covid-19 treatment costs," Kim said. "This allowed all the expenses for Covid-19 control and prevention and treatment to be covered by the government."

He went on to say that there was a significant but invisible contributor to the stable management of the coronavirus pandemic. "The nation could respond to the huge pandemic instantly because the NHIS and the government have already accumulated a massive amount of health data," he said.

Kim also pointed out that the health authorities used health insurance data and administrative data to decide who should get Covid-19 vaccines first, which developing countries find hard to do.

Park Neung-hoo, former health and welfare minister who is now a social welfare professor at Kyonggi University, stressed the importance of balancing health and welfare. Korea's management of health and welfare under one government agency helped K-quarantine succeed, he emphasized.

"Although the beginning of the Covid-19 crisis was a healthcare issue, the pandemic created new concepts such as social distancing. The process of overcoming the crisis made the whole society come up with a holistic response," Park said. "Applying medical expertise to social problems and combining the knowledge with social control became the basis of K-quarantine."

Korea could combine the healthcare system with social control because the government managed health and welfare under one ministry, he went on to say. Officials at the health and welfare ministry came to feel that "it was

really necessary to put health and welfare under one ministry" to overcome an infectious disease pandemic.

Park said the government needs both welfare-centered policies and social control to establish efficient quarantine measures. "Medical knowledge alone is not enough, but if they don't have medical expertise, they can't control the disease properly. Policymakers must keep this in mind," he said.

Also, Korea's IT-based information and communication infrastructure, strong leadership of the central government, people's cooperation, and mature civic consciousness worked together to overcome the pandemic, he added.

Korea Biomedical Review

Interest in medtech set to grow as Singapore healthcare firms digitalise

By Sue-Ann Tan

More doctors and users have signed up to use telehealth platform Doctor Anywhere, which allows users to consult a doctor through video on an app. PHOTO: DOCTOR ANYWHERE

The Covid-19 pandemic has spurred many firms and sectors to transform themselves digitally, and even the healthcare sector with its high degree of human touch is not exempt.

The interest in medical technology, or medtech, has grown markedly over 2020, industry experts said.

This trend is only set to continue, as technology offers more efficient and convenient ways of accessing healthcare.

There were around 300 home-grown medtech companies in 2020, more than double that of 2014, noted Enterprise Singapore (ESG). More than half were start-ups.

ESG deputy chief executive Ted Tan said: "The Covid-19 pandemic has tested the global healthcare system and accelerated the need for the healthcare sector in Singapore to transform to meet the new demands today."

He cited teleconsultations, which are becoming more widespread as patients seek treatment online.

More doctors and users have signed up to use telehealth platform Doctor Anywhere, which allows users to consult a doctor through video on an app, with medication delivered to them within a few hours.

The number of users on the platform has increased by three- to four-fold since the end of January 2020, he added.

Doctor Anywhere raised US$27 million (S$36 million) in a second round of investment funding in 2020 and will expand regionally.

Mr Tan said: "Similarly, traditional bricks-and-mortar healthcare players are beginning to embrace the new era of telemedicine."

More than 50 GP clinics have come on board to partner teleconsultation providers under an initiative in 2020 supported by ESG and other agencies.

Besides apps, healthcare firms are also using digital tools to improve productivity.

Mr Tan noted that some dental companies are adopting digital tools such as intra-oral scanners to provide a more comprehensive diagnosis for patients and a shorter treatment time.

ESG has supported over 60 dental companies in 2020 to adopt such digital solutions.

"Others are capitalising on data and new technologies to capture opportunities, such as in the management of mental health and detection of diseases," Mr Tan added.

Incubator NSG Biolabs has also seen the biotechnology sector in Singapore growing fast with new firms emerging and existing ones expanding.

The co-working lab and office space has 21 firms on its premises here, which is the third site in a global network that includes China and America.

German medtech firm Siemens Healthineers also saw interest in the sector grow during the pandemic, with the need for test kits and telehealth solutions.

Mr Fabrice Leguet, the firm's managing director and president for South-east Asia, said: "Beyond the pandemic, there is a strong role for medical technology to evolve and meet the needs of ageing populations and the rise of non-communicable diseases across the globe.

"Early detection and ongoing monitoring to prevent escalation of medical conditions is crucial to keep healthcare accessible and sustainable in the near future."

The firm provides digital solutions that allows for remote monitoring of patients and servicing of medical systems remotely.

It also has solutions that assist radiologists by using artificial intelligence (AI) to analyse chest images.

Mr Leguet said: "Digitalisation and AI are likely to be key enablers in bringing new innovations and helping healthcare providers enhance the overall patient experience, with better outcomes and an overall reduction in the cost of care.

"We foresee that medical technology would play an increasingly important role in managing the backlog of non-communicable illnesses that have been somewhat neglected due to the epidemic in the near future.

"More will need to be done to accurately and efficiently diagnose and manage chronic illnesses so as to prevent increasing the burden on healthcare systems."

The Straits Times

Benefits Of Healthy Food Habits To Surge Demand In Global Low Calorie Food Market

By Jerri Hollinger

Owing to rising awareness about healthy food, people across the globe are preferring low calorie food in place of traditional diet as the former is more beneficial for the people who are unable to do many physical exercises and have a sedentary lifestyle. Change in lifestyles is also foreseen to contribute significantly to the rising demand in the global low calorie food market within the forecast period.

Rising awareness regarding healthy lifestyles and changing customer behavior are among the vital aspects responsible for the rising demand in the market. Additionally, a dormant way of life because of the hectic work life leading to the health issues such as obesity, diabetes, hypertension, and high cholesterol due to unhealthy eating is also foreseen to contribute to the market growth. Nevertheless, the excessive cost of the low calorie food with an absence of information relating to the benefits of the consumption of the low calorie diet in the developing nations is anticipated to restrain the market development. Moreover, admission of ready-to-eat packed food products and intake of artificial sweeteners can end up being harmful to human wellbeing and this can hold back the business growth in the upcoming years. Besides, the accessibility of the convenience diet, cereal bars, healthy food schedule, and food supplements has supported the development of the low calorie food market.

The global low calorie food market is majorly categorized into application, product type, and region. Based on the product type, the global market is segmented into nutrient-based substitutes, sugar substitutes, and sugar alcohol substitutes. Among these, the sugar substitute category is sub-segmented into saccharin and aspartame. Moreover, the nutrient-based substitutes segment is divided into protein-based, fat-based, and carbohydrate-based. And the sugar alcohol substitute is sub-segmented into erythritol and sorbitol. In terms of application, the global low calorie food market is categorized into dietary beverages, dairy items, bakery items, and snacks.

Geographically, North America is estimated to lead the global low calorie food market in the forthcoming years. This is credited to the wide adoption of low calorie food and rising awareness regarding fitness & health among people including millennials, youngsters, and kids especially in the nations like Canada and the US. In addition, Asia Pacific is also foreseen to register major growth opportunities in the forecast period owing to the increased consumption of low calorie drinks and food products, especially in the nations such as China and India.

The leading players operating in the global low calorie food market are Archer Daniels Midland Company, Danisco A/S, Nestle S.A., Beneo GmbH, Abbott Laboratories, Dr. Pepper Snapple Group Inc., The Coca Cola Company, PepsiCo Inc., Ajinomoto Co. Inc., McNeil Nutritionals LLC, Zydus Wellness Limited, Groupe Danone, Bernard Food Industries Inc., Cargill Incorporated, Galam Ltd., Ingredion Inc., etc

The Brooklyn Creamery has launched a range of ice cream termed as "guilt-free" which contains 50% lesser calories, 60% lesser fat, and 35% extra protein than the usual ice-creams. The range also comprises vegan ice creams.

The Food Beverage News

Immune-boosting foods to keep you healthy during winter

By Viwe Ndongeni-Ntlebi

The Covid-19 pandemic has amplified the focus on immune-boosting foods, resulting in consumers making healthier lifestyle and food choices. With winter around the corner, now is the time to consider whether your daily food intake is providing the full health benefits you require.

The immune system consists of organs, cells, tissues, and proteins. Together, these carry out bodily processes that fight off pathogens, which are the viruses, bacteria, and foreign bodies that cause infection or disease.

According to registered dietitian Megan Pentz-Kluyts, our current interest in health and wellness can lead to a greater understanding of the functional impact of healthier foods.

"At the core of science-based nutrition advice is to enjoy eating a variety of foods, every day. It's this variety that exposes us to benefits from a wide range of foods. Fruit and vegetables are key food groups and should be well-represented in what we eat daily. We can add other foods and beverages that also play a role in the healthy functioning of the body and contribute to strengthening our immune function," she says.

Pentz-Kluyts highlights some of the health benefits offered by healthy foods with simple ways to incorporate them into your family's daily eating regime:

Rooibos tea

You can start the day with a good cup of caffeine-free rooibos tea. This delicious, proudly South African tea is abundant in polyphenols, which are antioxidants that are anti-inflammatory and antiviral.

Pentz-Kluyts says: "Rooibos tea can help to fight colds and infections and support the immune system. Rooibos also contains aspalathin, an antidiabetic miracle worker that together with the correct food choices, can help balance glucose levels and improve insulin resistance."

Garlic

Garlic can combat sickness, including the common cold and garlic is a broad-spectrum antimicrobial agent and immune booster. Because heat deactivates a key active ingredient, add it to foods just before serving.

One clove (3g) of raw garlic contains: manganese, 2% of the daily value (DV); vitamin B6, 2% of the DV; vitamin C, 1% of the DV; selenium, 1% of the DV; fibre, 0.06g; and decent amounts of calcium, copper, potassium, phosphorus, iron and vitamin B1.

Honey

Used in baking, as an alternative to sugar for sweetening hot drinks and smoothies, or just enjoyed as a healthier spread, raw honey is an age-old remedy and is still commonly used to promote digestive health.

"Our digestive system is an integral part of our immune functioning," Pentz-Kluyts says. "'Honey is known for its prebiotic qualities, which means it nourishes the good bacteria in our gut."

Mushrooms

Many families are including more plant-based meals in their eating regimes, and mushrooms have an important role to play in this dietary change. Mushrooms are a low-calorie, low-

Proudly South African tea is abundant in polyphenols, which are antioxidants that are anti-inflammatory and antiviral Picture: Supplied

cholesterol, and low-sodium food with a lot of potential as a meat alternative and as a versatile star ingredient in many different kinds of dishes.

"Mushrooms contain powerful polysaccharides called beta-glucans," says Pentz-Kluyts.

"Preliminary evidence suggests that mushrooms may support healthy immune and inflammatory responses through interaction with the gut microbiota, enhancing development of adaptive immunity, and improved immune cell functionality."

Yogurt

Look for yogurts that have "live and active cultures" printed on the label, like Greek yogurt. These cultures may stimulate your immune system to help fight diseases.

Try to get plain yogurts rather than the kinds that are pre-flavoured and loaded with sugar. You can sweeten plain yogurt yourself with healthy fruits and a drizzle of honey instead.

It's important to know that no one food or food group can prevent sickness, but we can reduce our vulnerabilities to infections through following the South African food-based dietary guidelines and eating a variety of foods.

With the winter months fast-approaching, our increased focus on family health and wellness is taking us on a journey to learn more about a wide range of functional foods that can help increase immunity.

Independent Online

Boosting mental health workforce is key with budget funding just the start

By Rachel Clun and Nick Bonyhady

Australia's top mental health experts say much more needs to be done to meet the needs of millions of Australians living with complex mental illness and boosting the mental health workforce is key.

The federal government announced a $2.3 billion investment in mental health in Tuesday's budget, including funding for aftercare services for those who have attempted suicide and money for almost 60 mental health centres for young people, children and adults.

The investment included $278.6 million to strengthen and expand headspace centres for teenagers and young adults, $487.2 million to build more adult HeadtoHelp centres across the country, and $100.8 million to create 15 new centres for children aged up to 12.

Professor Ian Hickie, co-director of health at Sydney University's Brain and Mind Centre, said the centres were a great way to ensure people with more significant mental health problems

did not have to wait weeks to see an expert for an assessment, but the problem was what happened next.

"The big question is, where do they go? They call them treatment centres: what's the treatment? What treatments are actually going to be provided?" he said.

Professor Hickie, who helped create the original headspace model, said those centres had a very small number of skilled mental health workers who largely provided assessments and referrals, but at the moment there was nowhere to refer patients.

"Probably 75 to 80 per cent of these people will require ongoing care," he said, adding the states don't have the workforce or capacity to look after these patients.

Psychiatrist Professor Pat McGorry, who also helped create headspace and now heads youth mental health organisation Orygen, agreed there were not enough skilled mental health workers.

Professor Ian Hickie said the states don't have the workforce or capacity to look after patients requiring ongoing care.
CREDIT: STEVEN SIEWERT

"There's no point in having a beautiful building if there's no skilled people that work in it," he said.

Australian Clinical Psychology Association President Professor Caroline Hunt said the centres would provide important bulk-billed mental health services for many, but they risked a lack of substance without an expert workforce including psychiatrists and clinical psychologists.

"We are very concerned Australians with moderate to severe mental health issues will find themselves being treated by unsupported early-career psychologists and other mental health staff with no input or support from expert, professional peers," she said.

The experts welcomed support for aftercare, with the government committing to funding three months of care for people who have attempted suicide.

"That's an incredibly important initiative," Professor McGorry said.

He said more work was being done with the states and territories throughout the year to work out a national agreement on mental health, and the $2.3 billion was just the beginning for increased mental health funding.

"I'd expect to see the real billions actually flowing in November around MYEFO," he said.

The Australian Council of Trade Unions welcomed the government's extra investment in mental health services but said industrial relations minister Michaelia Cash had a golden opportunity to help people avoid mental illness to begin with.

On May 20, Senator Cash will cast what could be a deciding vote among states, territories and the Commonwealth on whether employers should have a duty to prevent mental health hazards in the same way they do physical safety risks.

"The government has thrown billions at mental health services but is failing to prevent mental illness or sexual harassment occurring in workplaces," ACTU assistant secretary Liam O'Brien said.

A report by the left-wing Australia Institute commissioned by the ACTU into the issue found the economy bore at least $15.8 billion in costs each year from mental ill-health related to the workplace.

The Productivity Commission report on mental health, released in November 2020, estimated 2.8 million working Australians had a mental illness. The commission estimated days off for psychological distress and "presenteeism" cost up to $17 billion a year.

The Sydney Morning Herald

How One University Is Attracting Women to Computer Science

*By Carol Frieze, Director of Women@SCS and SCS4ALL in Carnegie Mellon's School of Computer Science;
Jeria Quesenberry, Associate Teaching Professor of Information Systems in the Dietrich College of
Humanities and Social Sciences at Carnegie Mellon University*

The percentage of women enrolling and graduating in CS at CMU has exceeded national averages for many years. Photo: Unsplash
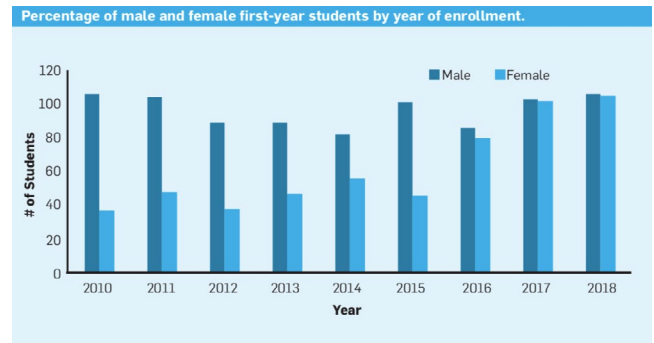
Percentage of Male and Female First-Year Students by Year of Enrollment in Computer Science at Carnegie Mellon University Source: How Computer Science at CMU¬ Is Attracting and Retaining Women

On February 11, we celebrate International Day of Women and Girls in Science. This article, published in 2020, by Carol Frieze and Jeria L. Quesenberry, explores how Carnegie Mellon University is taking a cultural approach rather than a gender-difference approach to address the underrepresentation of women in computer science.

The persistent underrepresentation of women in computing has gained the attention of employers, educators and researchers for many years.

But despite the International Day of Women and Girls in Science, and in spite of numerous studies, reports and recommendations, we have seen little change in the representation of women in computer science (CS). Consider that only 17.9% of bachelor's degrees in computer science were awarded to women in 2016, according to the annual Taulbee Survey.

At Carnegie Mellon University (CMU), we do not believe the situation is intractable.

It's Not Rocket Science

By paying close attention to culture and environment and by taking a cultural approach rather than a gender-difference approach, our efforts continue to pay off. The percentage of women enrolling and graduating in CS at CMU has exceeded national averages for many years.

The school gained attention when the percentage of women enrolled in the CS major reached 48%, 49%, and nearly 50% of all students in 2016, 2017 and 2018, respectively.

But CMU is not alone — other institutions have also had success in addressing the gender gap. Harvey Mudd College, for example, went from 10% women in CS in 2006, the year Maria Klawe took over as college president, to 40% women in CS by 2012.

These institutions and the many others that are investing in change to improve gender balance are proof that — as CMU CS professor Lenore Blum says — "it's not rocket science!"

It's the Culture — Not the Curriculum — That Matters

Since 2002, we have conducted ongoing case studies to understand the CMU story. In a nutshell, for women to be successful in CS, we needed to change the culture and environment and develop and sustain programs that work to level the playing field, without making women feel like a separate species.

We did not need to change the curriculum to be "pink" in any way. Indeed, beliefs in a gender divide may actually be deterring women from seeing themselves in male-dominated fields.

We hope the CMU story can help challenge the gender divide in CS, show that women can master this field successfully and inspire others to think more broadly about intellectual and academic expectations. This success occurred without compromises to academic integrity, without changing the curriculum to suit women nor by accommodating what are perceived to be "women's learning styles" and attitudes to CS.

Cultural Change Is Key — And It Can Change at the Micro Level

In 1999, CMU dropped the programming/CS background requirement from the admissions criteria and added leadership potential while keeping high SAT scores, particularly in math and science.

Dropping this requirement was prompted by a valuable finding from the 1995–1999 research studies. Various entry levels into the first-year courses were created for students with little to no background.

These changes brought in many more women and more students — both male and female — with a broader range of characteristics and interests. We started to see a more balanced student body, balanced in terms of gender, of student characteristics, and balanced in terms of level-playing-field opportunities for women through Women@SCS.

In this more balanced environment, we found most students (men and women) have a deep interest in computer science and want to do something useful with their skills in order to contribute to the social good.

Institutional Support Is Critical

We believe sustained student leadership with women at the helm has been critical for building a more inclusive community at CMU and for enhancing the academic and social life of the entire community. At the same time, cultural change requires serious institutional support and cannot be left to chance, especially in a stubbornly male-dominated field like CS.

At CMU, we have found that institutional investment that provides funding, guidance and endorsement for programs developed through Women@SCS has paid off. The organization has become a valuable resource for everyone, while strengthening the image of women in CS and challenging the stereotypes about who fits the field.

Cultural Factors Are More Important than Gender Differences

Gender-difference approaches often argue that there are strong gender differences in the way girls and boys, or men and women, relate to the field; gender differences that work in favor of men and against women.

To solve this problem and increase women's participation in CS, it is suggested that we need to pay more attention to women's interests and attitudes and change CS accordingly. But approaches that recommend accommodating differences — without recognizing that such differences can change according to the culture and environment — risk perpetuating the gender divide.

This has not been our approach.

But the gender-difference mindset — epitomized by the bestseller *Men Are From Mars, Women Are From Venus* — has a stronghold on public thinking in the U.S. and many parts of the Western world.

The belief that men are innately better at coding than women is a case in point. This mindset, fed by stereotypes, is relentlessly perpetuated. In turn, stereotypes feed our unconscious biases, which, if left unchecked, can often lead to negative consequences for women in computing and, ultimately, for the field itself.

Cultural Interventions Are Necessary

A cultural approach examines a range of factors beyond gender as determinants of women's participation in CS, including (but not limited to) the parts played by the K–12 curriculum, stereotype threat, opportunities for engagement in CS, opportunities for leadership, confidence levels, gender ratios, implicit bias, myths and stereotypes.

Our latest intervention — BiasBusters@CMU — developed in collaboration with CMU's College of Engineering and Google, works with the entire campus on the difficult issue of mitigating implicit bias.

Interventions from Women@SCS have increased the visibility of women, placing them in leadership positions and providing opportunities for them to demonstrate their abilities and to challenge stereotypes, all with the critical support of our deans, faculty and staff.

For example, recognizing an often-familiar situation in which students can go through their entire school life without having a female instructor, Women@SCS developed a faculty-student lunch series, providing female students an opportunity to meet role models and have personal interactions in an informal setting.

Conclusion

We have found that cultural change, not curriculum change (often recommended by gender-difference approaches), is the key to sustaining a community of women in CS. Indeed, we advise caution when making changes based on appealing to stereotypes — this may perpetuate the gender divide.

Institutional support is also critical for real change and ultimate success — this includes funding, guidance and philosophical advocacy for leveling the playing field. CMU has not been afraid to give women a voice, to listen to women and let women take the lead, enabling them to play a valuable role in changing the culture.

We suggest monitoring student attitudes toward and experiences in the CS major. Are men and women getting similar opportunities for such things as leadership, visibility, networking, mentoring and advocacy? Are women involved and given a central voice in shaping the culture?

Do not underestimate the value of student organizations and of social events where information is exchanged, friendships and communities are formed, and where everyone gets a chance to be included in the latest student discussions.

The persistent gender gap in CS is well-documented, but there is less sharing of the success stories. By telling the CMU story, we hope to illustrate a successful approach, one that can help the field of computing become more inclusive.

This piece first appeared in the Association for Computing Machinery.

Brink

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Taiwan University Steps Up 'Doctor-Engineer' Talent Cultivation

By Huang Tzu-ti

National Yang Ming Chiao Tung University boasts medicine, biotech, electrical engineering strengths

National Yang Ming Chiao Tung University (NYCU) will introduce workers from the tech sector in 2021 as mentors to help align the university's curricula with industry requirements.

The mentors will be contributing their expertise to NYCU's "doctor-engineer course." The course, launched in 2020, allows students from the School of Medicine to take up both medical and engineering studies and be equipped with professional skills from both fields.

The approach exemplifies one of the core objectives of the newly-merged university, which is to incorporate the strengths of Yang Ming and Chiao Tung universities. Future doctors from NYCU will be able to access various technologies for their practice, including AI, big data analysis, smart healthcare, and sub-health management, Central News Agency (CNA) quoted Albert Yang, director of NYCU Center for Smart Healthcare, as saying.

Arrangements will be made for the students to attend tech events in the private sector, work as interns, and visit medical institutes. Once they complete the course, students will receive an academic certificate certifying their expertise in engineering and IT.

The Ministry of Education greenlighted the merger of National Yang-Ming University and National Chiao-Tung University in June 2020, for better coordination of resources and diversified academic disciplines and to create a competitive edge. The merger is lauded as a move to boost its prowess in biotech development.

Taiwan News

Plan to revive international education focuses on student satisfaction

By Anna Patty

A federal government strategy to revive international education will focus on student satisfaction through surveys which experts warn may not improve quality and may risk lowering standards.

The government has released a discussion paper on the strategy which includes "consideration and engagement of the student perspectives" as an indicator to measure the success of its international education program.

Border closures have impeded recruitment efforts by Australian universities reliant on overseas students. Education Minister Alan Tudge released a consultation paper for a 10-year strategy earlier this month on how the sector can rebound from the pandemic.

Dr Gwilym Croucher, a senior lecturer in higher education policy and management at the University of Melbourne, said there was a limit to what student satisfaction surveys could achieve.

"It can be a clunky way to assess how students have experienced their course and the value it has provided to them," he said.

Higher education researcher Peter Hurley from Victoria University's Mitchell Institute agreed the scope of surveys were limited. "Student satisfaction is different to measuring the quality of learning, but having said that I think it is an important thing to do for international students," he said.

A new federal government strategy will focus on international student satisfaction. CREDIT: STEVEN SIEWERT

Andrew Norton, Professor in the Practice of Higher Education Policy at the Australian National University, said seeking feedback was reasonable depending on the questions.

"If there is a very clear level of dissatisfaction, that probably is a problem even though you could raise question marks about whether any individual student has made a fair assessment of their own personal experience," he said.

All universities and higher education providers take part in the annual Quality Indicators for Learning and Teaching surveys which report on student experiences. The latest snapshot provided earlier this year showed the results for international students were lower (63 per cent) than those for domestic students (70 per cent) when it came to the assessment of the quality of their educational experience.

Tertiary education consultant Claire Field said international student satisfaction was typically a few points below the level for domestic students.

"Keeping a clear focus on student satisfaction through this new strategy would be a very good thing, however government and the regulators will need to make sure academic standards are not compromised," she said.

"Too much emphasis on the KPIs [key performance indicator] could result in perverse incentives for institutions to pass more students to keep them happy, even where their work may not be up to the required standard.

"In the past, we've seen reports from academics feeling pressured to pass students. It would be a real shame if those pressures were exacerbated by a new international education strategy which tries to make sure students have a positive learning experience in Australia."

The Tertiary Education Quality and Standards Agency, the sector's regulator, has also started requiring universities to measure and track satisfaction for different cohorts.

A spokeswoman for the federal Department of Education said a high-quality student experience was "important for Australia's international competitiveness as an international education partner and for the reputation of our educational institutions".

"We are confident that universities do not and would not lower academic standards in order to influence student experience. This would of course be detrimental to local and international students and damage the strong reputation of Australia's universities," the spokeswoman said.

David Riordan, a former head of international education at the NSW Department of Education and a former member of the federal government council for international education, said the new focus on student satisfaction was "a great step forward".

"If students return to their countries and have a poor experience then it is going to have an impact on the future of international education," he said. "I would be very sorry to hear that quality and standards were being compromised in the interests of keeping students happy and passing."

The Sydney Morning Herald

Public-Private Sectors in Japan to Team Up to Support Education after Juvenile Detention

The Ministry of Justice building. (Mainichi/Kazuo Motohashi)

To prevent recidivism, the Ministry of Justice, in cooperation with the private sector, is launching efforts to provide academic support to youths who have been released from juvenile detention centers in Japan.

Data shows that just over 60% of those who are placed in juvenile detention centers were not enrolled in school and have not received high school diplomas. The ministry hopes that through the use of private-sector know-how, it can support the continuation of learning among such youths, helping them graduate from high school and obtain jobs. The program will start as early as this summer.

The Justice Ministry says it envisages that the program will be operated by "professionals in learning support." It is believed that the education sector, including cram schools, is interested in running the program.

The operators will interview the youths while they are still in detention, and create a post-release support plan based on the individuals' enthusiasm for learning and the direction toward which they hope to head. Many of the youths live under the supervision of probation staff after they are released. Program

operators will exchange information with these probations offices and work out a learning environment for the youths. For about a year after the youths leave the detention centers, the operators will provide them with opportunities for learning, and will be available to consult with for advice. Operators are also apparently considering using learning support apps to assist the youth in their studies.

The plan is for the Justice Ministry to pay commission to the operators based on whether the youths achieve a certain level of their target goals. In some regions, private volunteers offer learning support to youths who have been released from juvenile detention centers, but this is the first time that such an arrangement will be made by the public sector.

According to the Justice Ministry, among youths who entered juvenile detention centers in 2019, 40% had dropped out of high school, and a little over 20% had graduated from junior high school -- which is a serious situation. Obtaining jobs and other basic life foundations are crucial in order to reenter society following release from detention, but many companies make at least a high school education or the equivalent criteria that their potential employees must fulfill.

Examining the percentage of youths whose probation term ended in 2019, but were once again placed under protective custody or faced criminal charges, 41.5% were unemployed, while just 11.8% were students. It appears that a place of learning serves as a kind of a "home base" for these youths.

To expand the range of occupations that these youths can choose for themselves, the Justice Ministry has decided to start a model project this fiscal year in collaboration with correspondence course high schools at seven juvenile detention centers in Japan. The program would provide learning opportunities by using the internet and other methods, and support youths toward their aim of graduating from high school. Some correctional education classes provided at juvenile detention centers can also be recognized as credits toward high school graduation if correspondence schools judge that the classes meet their criteria.

Normally, youths spend about six months or around a year in juvenile detention centers, which makes it a challenge to secure a learning environment for them after they are released from detention. The Justice Ministry is hoping to link the two efforts together depending on the case, in order to successfully provide continued educational support.

"For youths who have been released from detention centers to find their own place and role in society, education is extremely important," an official at the Justice ministry said. "In addition to guidance on preventing recidivism, we would like to tackle the challenge from the side of educational support."

(Japanese original by Masakatsu Yamamoto, Tokyo City News Department)

The Mainichi

King Sejong Institute offers new Korean learning program using K-pop, K-dramas

A state-run Korean language education center said on May 4 it has launched a new Korean learning program using popular K-pop and K-drama content.

The new series, titled "K-wave Korean," carries 52 five-minute video clips in English and provides subtitles in four other languages -- Chinese, Vietnamese, Indonesian and Russian -- according to the King Sejong Institute Foundation.

Twenty-seven videos help viewers learn daily Korean expressions, grammar and culture with scenes from popular Korean dramas, such as "Guardian: The Lonely and Great God" (2016) and "The Heirs" (2013).

The other 25 used K-pop group's songs, such as Oh My Girl's "Remember Me" and Lovelyz's "Ah-Choo," for Korean lessons.

This composite photo, provided by the King Sejong Institute Foundation, shows scenes of its new Korean language education material, titled "K-wave Korea," which uses K-pop and K-drama content. (PHOTO NOT FOR SALE) (Yonhap)

The foundation said it has also developed other teaching materials for instructors to use in class, such as Korean textbooks and a teacher's guidebook.

The content is available on the foundation's website (www.iksi.or.kr), its official YouTube channel (youtube.com/user/LearnTeachKorean) and Nuri-Sejonghakdang website (nuri.iksi.or.kr).

"We created easy and fun e-learning materials suited to the younger generation more familiar with the mobile environment," the foundation's chairwoman Kang Hyoun-hwa said, adding it will continue to cultivate various Korean learning content.

Yonhap News Agency

Cambodia, Singapore team up
for online education conference

By Voun Dara

The Cambodian Ministry of Education and Singapore's National Institute of Education co-organised an online training course on 21st century school leadership and education management for school administrators, inspectors and national trainers beginning on May 4 with sessions running through September 30.

The workshop was held under the theme "21st Century School Management Tasks" and "21st Century School Management Guidelines" for 128 school administrators, inspectors and national trainers.

Education minister Hang Chuon Naron said during the opening ceremony via video conference on May 4 that the workshop was designed to develop the capacity of these target groups to lead schools, compile documents for further training for other school administrations and ensure sustainability within the framework of the education ministry.

"School effectiveness depends on leadership with responsibility, autonomy, evaluation and student's parents and community involvement, management and leadership of the school management, continuous human resources development, teaching materials, infrastructure and financial resources," he said.

Education minister Hang Chuon Naron said during the opening ceremony of an online training course on 21st century school leadership and education management via video conference on May 4. MeEYS

Naron thanked Singapore's National Institute of Education and the Temasek Foundation for their cooperation in training school management, inspectors and national trainers despite the Covid-19 crisis.

Education ministry spokesman Ros Soveacha said his ministry generally welcomes positive cooperation from ministries, institutions and all stakeholders in promoting digital education in line with the Education Strategic Plan 2019-2023 in response to Cambodia's digital economy.

He said that in the next phase of 2019-2023 and towards 2030, the education ministry is committed to achieving the fourth sustainable development goal on education based on the principles of quality, equity, inclusiveness and lifelong learning.

"On this basis, the education ministry has set two policies – the first is to ensure quality education with an equity, inclusiveness, and promotion of lifelong learning opportunities for all, and second is to ensure the effectiveness of leadership and management of educational officials at all levels."

The Phnom Penh Post

PCCI rallies private sector to
help plug gaps in education system

By Roy Stephen C. Canivel

Philippine Chamber of Commerce and Industry

Alarmed by the dismal ranking of the Philippines in global education surveys, the country's largest business group decided to convene its own education task force, which will come up with policy recommendations to address the gaps in the country's educational system that widened because of the pandemic.

"The COVID-19 pandemic has exposed the challenges, gaps, and deficiencies of our educational system. Now is the best time that we sit down and

seriously discuss these gaps and provide solutions that would make the system at par with other countries," said Benedicto Yujuico, president of the Philippine Chamber of Commerce and Industry (PCCI), which noted that the Philippines ranked 61st in education among 63 countries based on the latest World Competitiveness Survey.

PCCI also took note of a survey conducted by the Program for International Students Assessment that showed that the Philippines ranked last in Mathematics and second to the last in Science against 79 other countries. Plus, the Philippines is only allocating 3.4 percent of its gross domestic product for education, far below the United Nations standard of at least 6

percent.

Policy paper

To help bring up the country's rankings, PCCI gathered a task force composed of 12 experts representing institutions engaged in basic education, technical and vocational courses, higher education, and teachers' training.

These experts belong to various organizations, including PCCI's Human Resources Development Cluster, the Association of Local Colleges and Universities, the Coordinating Council of Private Educational Associations and the San Beda Alabang-College of Law.

The group will come up with a policy paper, which will describe the

state of education in the country and raise recommendations on four major areas of development, PCCI said, namely: Philippine qualification and learning outcomes; curriculum and instructions; competencies of teachers and educational leaders; and institutional and policy reforms.

Alberto Fenix Jr., chair of PCCI's Human Resources Development Cluster, said it was important to have a multistakeholder perspective in developing policy recommendations.

"PCCI understands that the current situation has been very challenging to the country's educational system, learning institutions, teachers, learners and even their families," Fenix said.

"Therefore, we in the PCCI have sought the formulation of the ETF in order to help the country move forward by identifying gaps in the system that was made prevalent by the pandemic," he added. INQ

Philippine Daily Inquirer

ENZ seeks proposals for global centres

By Callan Quinn

ENZ is seeking proposals from institutions overseas. Photo: Unsplash

Education New Zealand has said it is inviting organisations to host international education centres which will deliver education programs for students planning to progress to further study with the country's providers.

As part of, ENZ's New Zealand Global Education Pathways initiative, the centres will also act as "pathways for greater education, cultural and diplomatic engagement between New Zealand and partner countries" and receive support from domestic universities, as well as ENZ design and marketing packages.

They will also be able to host events, promotions and student mobility activities.

"In developing New Zealand Education Centres we are extending our support for international students offshore, and providing flexibility in how and where they experience a high-quality New Zealand education," said ENZ chief executive Grant McPherson.

"The establishment of New Zealand Education Centres will support both the government's International Education Recovery Plan and the goals of the New Zealand International Education Strategy aiming for a more globally connected New

Zealand."

In 2020, the government announced it would spend NZ$51.6 million to stabilise its international education sector as part of a long-term strategic recovery plan.

For further information on the process, organisations can contact ENZ, which added that proposals are due by May 25, with centres expected to be established and open for initial student intakes by 2022.

New Zealand's borders are currently closed to all but citizens and those granted exemptions due to special circumstances, with just two groups of students being able to enter the country since restrictions were put into place.

In March 2021, a processing freeze for student visas was also put into place.

The Pie News

ADB Calls for Far-Reaching Reforms to Build Resilient Education Systems Amid COVID-19

By Callan Quinn

Governments and stakeholders in Asia and the Pacific should initiate far-reaching reforms to strengthen the resilience of education and training systems as they deal with the coronavirus disease (COVID-19) pandemic, according to a new guidance note from the Asian Development Bank (ADB).

"With the right resources, strengthened capacity, and deliberate actions, the region can put its education systems on a new and positive path as we settle into a new normal post-COVID-19," said ADB Sustainable Development and Climate Change Department Chief Sector Officer Robert Guild. "Powered by knowledge, skills and human capital, the recovery in education will also help to support the recovery in other sectors."

COVID-19 and Education in Asia and the Pacific calls for developing countries to identify critical policy reforms, such as revamping teacher professional development, and concrete actions to improve the quality, relevance, and inclusion of education systems over the long-term. Framed as the three Rs—Response, Recovery, and Rejuvenation—the note outlines specific responses from the kindergarten level to higher education (K-12), and for technical and vocational education and training.

Education and training systems have experienced unprecedented disruptions due to COVID-19 with an estimated 1.7 billion students affected by school closures worldwide. Technology has enabled distance and personalized learning and will continue to be instrumental to education post-COVID-19. While education technology tools can be a game changer, the note stresses that ensuring students achieve high-quality learning must remain the central objective.

To address inequalities in digital access, the note advocates expanding access to affordable and reliable internet connectivity for households and education and training institutions, including
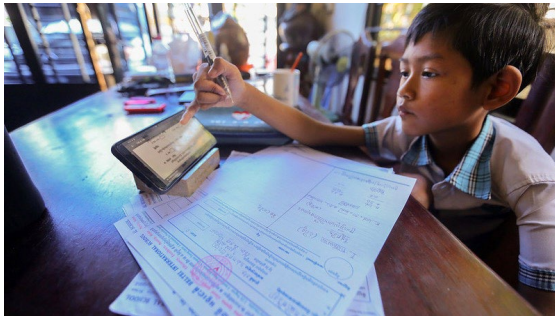
A student studying through distance learning in Phnom Penh, Cambodia. An estimated 1.7 billion students have been affected by COVID-19-related school closures worldwide.

"Developing countries were already grappling with a learning crisis given that students were not learning enough," said ADB Education Sector Group Chief Brajesh Panth. "The pandemic has exacerbated inequities and widened learning gaps. To turn the crisis into an opportunity, we must find new ways of supporting managers, teachers, and parents. We must improve planning, coordination, and partnerships—ensuring quality and resilient education systems and learning for all."

As governments grapple with the costs of health and economic recovery, it is vital to protect education budgets. Investing in reskilling and upskilling of workers who lost jobs during the pandemic will play a critical role in accelerating the economic recovery by getting people back in labor markets.

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region.

News Release of Asian Development Bank (ADB)

through partnerships with telecommunications providers. Big data can improve teachers' ability to assess students and introduce greater transparency and accountability by linking education delivery with learning data.

An innovative girls' scholarship program in Bangladesh provides school re-opening lessons

By Sungsup Ra, Yasuyuki Sawada, Ryotaro Hayashi

Bangladesh not only kept girls in school but improved their lives on multiple levels with a simple, low-cost stipend program. It offers valuable insights for school systems around the world struggling with the pandemic.

In 1994, Bangladesh pioneered large-scale female-targeted conditional cash transfers, which was replicated in Pakistan and some sub-Saharan African countries, such as Rwanda and Ghana. The program achieved success well beyond its aims through modest financial support for education.

Bangladesh has been successful in keeping girls in school and improving their lives. Photo: ADB

The program introduced a uniform stipend and tuition subsidy program for each girl attending a secondary school in rural areas if certain conditions were met: attend 75% of school days; attain some level of measured academic proficiency (45% in class-level test scores); and remain unmarried until completion of secondary school.

The development benefits of the stipend program outweighed its cost by more than double. Over the years, it contributed on multiple fronts to women's welfare—schooling attainment, employment, selection of spouse and reproductive behavior.

The gender disparity in school enrollment at the secondary level not only declined but also reversed over time after introduction of the program. Rigorous data analysis shows that the program raised women's grade completion by 3.2 years, the secondary completion rate by as much as 5 percentage points, and delayed marriage by 3.2 years.

After leaving school, stipend recipients were more likely to be self-employed or employed in the nonfarm sector than women who did not receive a stipend. Moreover, contraceptive prevalence rate was 24 percentage points higher and total fertility 0.76-point lower.

The husbands of the stipend recipients were found to be more educated and employed more in the nonfarm sector than those of the comparator women without the stipend. Furthermore, the stipend program created a shift in the social norms—it raised the preference for daughters among the program participants (by 0.22 point), accompanied by a drop in the preference for sons.

What's more, the benefits of the stipend program were not limited to recipients alone. Brothers of stipend recipients seem also to have improved educational attainment, implying a positive spillover effect.

Development practitioners and policymakers in other developing countries can draw valuable lessons from the success of the female secondary school stipend program, which was supported by Asian Development Bank (ADB) and other development partners.

Since cost is often the main barrier to girls' schooling, countries can incorporate the design of the program into their incentive structures for improving girls' education. Moreover, as countries contemplate alternate approaches for attaining the Sustainable Development Goals, they can learn from the insights of the program for Goal 4 (quality education) and Goal 5 (gender

equality).

If an enrollment-enhancing stipend program alone can achieve so much, it is possible that interventions that address quality will have broader impacts. With this realization, the government transitioned from the Female Secondary School Stipend Program to a few new programs, which included goals such as improving education quality, equitable access, teacher capacity, access to information and communication technology, school infrastructure, institutional capacity and transparency.

These results are particularly relevant now. UNESCO estimates that more than half of the world's students are struggling to learn due to full or partial school closures. Eleven million girls might not return to school in 2020 and 2021, and school closures increase risks for girls on multiple levels. As happened in other pandemics, a sharp fall in household income may force girls to drop out schools for domestic work. Bangladesh's stipend program highlights the importance of keeping adolescent girls in school.

As an integral part of its school re-opening and recovery strategy, the government could prioritize incentive measures such as stipend programs to ensure bringing girls back to school.

As countries around the world struggle to bring students back into schools, the success of Bangladesh keeping girls enrolled can provide useful insights to educators and policymakers.

Asian Development Blog

About CACCI

The Confederation of Asia-Pacific Chambers of Commerce and Industry (CACCI) is a regional grouping of apex national chambers of commerce and industry, business associations and business enterprises in Asia and the Western Pacific.

It is a non-governmental organization serving as a forum for promoting the vital role of businessmen in the region, increasing regional business interaction, and enhancing regional economic growth. Since its establishment in 1966, CACCI has grown into a network of national chamber of commerce with a total now of 27 primary Members from 25 Asian countries and independent economies. It cuts across national boundaries to link businessmen and promote economic growth throughout the Asia-Pacific region. CACCI is a non-governmental organization (NGO) granted consultative status, Roster category, under the United Nations.

It is a member of the Conference on NGOs (CoNGO), an association of NGOs with UN consultative status.

Among the benefits of membership in CACCI are the following:

1. Policy Advocacy - CACCI aims to play a strong policy advocacy role in order to establish a business environment conducive to creating better opportunities for CACCI members.

2. Wide scope for networking - Participation in the various projects of CACCI will provide members the opportunity to expand their reach in Asia-Pacific by establishing contacts with the business communities of the region.

3. Participation in CACCI Annual Conferences and Training Programs - Members are invited to participate in the annual Conferences and various training programs which CACCI regularly conducts either on its own or in cooperation with other international organizations and member chambers.

4. Interaction in Products and Service Councils - Membership in CACCI allows participation in the activities of the various Product and Service Councils (PSCs) of the organization. PSCs are business groupings organized along product or service lines with a primary objective of promoting business cooperation, personal contacts, and technology transfer.

5. Access to CACCI publications - CACCI publishes the CACCI Profile, its monthly newsletter, and the CACCI Journal of Commerce and Industry, a bi-annual publication which features papers, speeches, and other articles pertaining to issues affecting the regional economy.

For more information, please visit www.cacci.biz