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Message from the Chairman

As Chairman of the Asian Council on Health and Education (ACHE), I am pleased to present the thirteenth issue of the Newsletter of ACHE to all our colleagues in the health and education sectors.



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.

Since assuming the Chairmanship in 2017, I have found this Council 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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Part I Health



Amidst Global Growth, Medical Trends Lift Insurance Costs

By Hervé Balzano International Health Leader of Mercer Marsh Benefits

In a world of increasing wealth, a remarkable statistic has surfaced. Almost unnoticed, the majority of humanity passed a tipping point about a year ago (2018), when the Brookings Institution calculated that "just over 50% of the world's population, or some 3.8 billion people, live in households with enough discretionary expenditure to be considered 'middle class' or 'rich.' ... For the first time ever, the poor and vulnerable will no longer be a majority in the world."

health insurance continues to rise.

Yes, several industries are helping organizations optimize employee benefit plan costs to ensure sustainability into the future, but more is called for.

Medical trends continue to outpace inflation by almost three times — the average global medical trend rate for 2018 was 9.7%, with a similar increase expected for 2019 and an even higher rate for 2020.

That's a key finding of Mercer Marsh Benefits' most recent Medical Trends Around the World report, which surveyed 204 insurers across 59 countries (not including the U.S., a unique health care market) earlier this year. It tells us that at a time when the global workforce is demanding a broader set of rewards and more engaging program delivery, employers that don't use active plan management strategies may have to allocate more and more of their remuneration budgets toward benefits.

Constants and Progress

How, then, are health conditions, supplier factors and consumer habits driving cost? Certain conditions are annual constants. The Mercer Marsh Benefits survey shows that cancer and diseases of the circulatory system remain the top two highest cost-based causes of claims, while the top three health risk factors remain metabolic and cardiovascular, dietary, and emotional/ mental risk.

Despite that, and despite the unrelieved rate of medical inflation, the industry is making progress toward better employee health and cost reduction, and organizations can enhance their results.



good news has many ward in Birmingham, England. Medical trends In Europe, an increasing number of insurers implications, not the least of which is that continue to outpace inflation by almost three (15% more than in 2018) are delisting health as more people build wealth through their times, with a similar increase expected for providers as a result. work and their benefit programs, the cost of 2019 and an even higher rate for 2020. Photo: Christopher Furlong/Getty Images

For example, the number of insurers investing in initiatives to enable qualityfocused care — essentially, the right care at the right time in the right place — has more than doubled since 2018. Now, 29% of insurers indicate quality-focused care as a top strategic investment area. That's a natural evolution of insurers' recent investment in data analytics, the top strategic focus for insurers determined to identify A nurse tends to recovering patients in a general abnormalities in costs and medical practices.

> For organizations, enabling more quality-focused care means engaging with

benefit advisers, other employers, insurers and internal resources to make sure plan members have greater knowledge, the latest digital tools to personalize their experience and the incentive to change their buying habits, promoting consumer as well as provider accountability.

Knowing when to choose a walk-in or on-site care clinic over a hospital emergency room or a telephonic or video provider visit can make a major difference.

Indeed, what had been, in past years, a tentative exploration of such virtual care options to contain medical costs and encourage consumer-based behavior is increasingly shifting to execution.

Now, 78% of insurers globally are considering or supporting virtual health consultations, with the highest percentage (88%) in the Middle East and Africa. Employers can embrace this digital disruption to make health care more available and affordable across the spectrum of providers, including mental health care providers and physical therapists.

Meanwhile, lifestyle factors continue to drive increases in medical costs. Insurers report that circulatory, gastrointestinal and respiratory conditions largely related to lifestyle choices - from smoking to obesity- and diabetes-promoting dietary or sedentary habits — remain the top claims by cost and frequency.

Employers face challenges in bending that curve, but can make progress by making health a business imperative. They can support employees with programs that emphasize physical, emotional, financial and even social well-being. A culture of health with demonstrative business support, healthy workplace policies and a range of motivational approaches can play important roles.

Mental Health and Rx Challenges

Significantly, the issue of mental/emotional health continues to grow. While less than 10% of insurers globally reported mental conditions as one of the top three causes of claims cost, there's an increase in insurers in Asia and Latin America reporting it compared to 2018.

Limited access to mental health care is a nagging and pervasive factor, but employers are putting pressure on insurers to remove mental health exclusions, driven by organizations awakening to diversity and inclusion philosophies and recognition of how mental health impacts physical health. The increased recognition of the importance of treating behavioral conditions goes hand in hand with a lowering of stigma and cultural barriers to accessing help for mental health.

Statistics underscore the extent of mental/emotional problems and their hidden costs. Research by Oliver Wyman and the city of Hong Kong reveals that 37% of professional services employees in Hong Kong have experienced poor mental health.

That's in line with findings in the U.K., where a Mercer Marsh Benefits survey of Mental Health at Work shows that one in three people in the workforce has been formally diagnosed with a mental health condition at some point. Oliver Wyman estimates that the tangible cost to professional service employers in Hong Kong could be between \$0.7 and \$1.6 billion per year, which is 40 to 90 times the current spend on employee assistance plans.

Not surprisingly, the 2019 medical trends survey shows that high-cost pharmaceuticals and biologic drugs are the top supplier-driven reason for cost increases globally, most notably in Latin America and Asia. The number two reason is new and expensive medical technology, most pronouncedly in Europe.

The world market is bursting with ultra-expensive specialty drugs for rare diseases and targeted therapies for cancer, which could easily send costs upward of \$1 million per year. Controlling pharmacy spend demands coordinated effort. In Canada, for example, employers are evolving drug plan management strategies that rely on advanced analytical skills, stringent plan design, up-to-the-moment knowledge of Canadian legislation and partnerships with providers that offer a "lowest price in Canada" guarantee.

Unknowns and Solutions

Then there's the great unknown posed by Brexit. The British Medical Association expects that the U.K.'s imminent withdrawal from the European Union will significantly affect the quality of care received by patients due to workforce shortages of EU nationals and reduced funding for health care research, with the cost of medical supplies expected to increase. Greater reliance on private health treatment over the National Health Service would also contribute to rising plan costs.

As for U.S. health trends, they are drawn from Mercer's National Survey of Employer-Sponsored Health Plans. While U.S. health benefit cost growth remained moderate in 2018, at 3.6%, an increase of 4.4% is projected for 2019. The trend is slowly moving upward again, as specialty drugs drive U.S. costs significantly — above the Consumer Price Index and workers' earnings growth.

Ultimately, the strategic future of health care will face not only rising costs but more demanding customers and a changing insurance industry landscape. Disruption and digital transformation are sweeping the insurance and health care systems, from digital startups to big data and supply chain integration. Today's employees expect online engagement and a seamless consumer-grade digital experience for claims submission, dealing with health care providers and accessing medical records.

This rise of digital health fosters innovation and challenges for insurers and the organizations that rely on them. This is an era of high demand for value-added services that help plan members make smarter health care decisions.

Clearly, the future of work demands healthy, focused employees, and as medical trends continue to rise, now is the time for employers to proactively evaluate their strategies through the lenses of cost optimization and employee engagement.

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About Authors



Hervé Balzano International Health Leader of Mercer Marsh Benefits

Hervé Balzano is the international health leader of Mercer Marsh Benefits. He is based in London.

How Digital can Transform Healthcare in Asia for Millions of People

By Edward Booty, CEO, Allied World Healthcare, and Logan Ansell, Senior manager, strategy and partnerships, Allied World Healthcare

More than half of the people on Earth still don't have full coverage of essential health services and almost 100 million people fall into extreme poverty from paying for healthcare. In South-East Asia, while some positive progress has been made in achieving universal health coverage (UHC), it isn't happening fast

enough.

In the region, 62% of deaths are now due to non-communicable diseases (NCDs), which primary care systems are poorly positioned to address. Traditional service delivery and financing models often fail to adequately serve residents of remote communities. Data indicates that rural

populations of South-East Asia still face persistent challenges in accessing essential health services compared with their urban peers. To overcome these challenges and reach universal health coverage in the region, players in the healthcare system must fully embrace digital technologies to move beyond experimentation and small-

scale pilots.

Why digital health can expedite UHC progress in South-East Asia

Digital health solutions offer tremendous advantages for resourceconstrained health systems in rural and countries in South-East Asia striving to achieve UHC 2030 and SDG targets. Image: REUTERS/Aniwar Hazarika Digital health allows systems to take

remote areas of low and middle-income 'Traditional service delivery and financing models often fail to adequately serve remote communities'

advantage of existing resources and infrastructure, providing more services directly in communities via telemedicine approaches and task-shifting strategies.

Digital technologies are also well suited for preventative approaches, including wide-scale screening or education campaigns. India's ambitious national goal of screening every citizen under 30 using an mHealth (mobile health) device for risk factors related to leading NCDs is a prime example. Furthermore, by integrating digital health solutions, governments and the private sector have increased access to rich, quality data to accurately inform the allocation of scarce resources - and leapfrog the challenges of many developed health systems.

We recently spent time with our community-based teams in the Philippines and Cambodia, where we're partnering with the government, healthcare providers and the private sector to deliver affordable healthcare in remote communities. These are regions characterized by tremendous challenges in last-mile delivery of essential health services. We know from our research that the barriers are not limited to out-of-pocket payments, but that the cost of travelling long distances to seek care, along with lost wages from missed work, can be equally debilitating.

Our approach involves empowering community members (a team of women in each village who we call access managers) to create individual health profiles of residents using proprietary offline-first apps. These access managers are then able to conduct tailored public health engagement and outreach campaigns, as well as ordering and delivering medicines and health services at affordable prices directly within the communities themselves. This enables local residents to overcome many of the traditional barriers to healthcare access, all while relying on support from a local peer to navigate the system. By merging mHealth solutions with an embedded community presence and last-mile delivery, we are able to create a holistic approach that overcomes some of the common limitations of telemedicine initiatives.

Under this innovative model, we recently engaged and onboarded 42,000 individual residents in two rural and remote municipalities in Western Visayas, Philippines. The resulting community health profile indicated that access to vitamin A supplementation was a serious challenge in these areas. Vitamin A supplementation is an evidence-based practice which reduces mortality and promotes proper development in infants and children. In response, we worked with the local government and NGO partners, to facilitate a programme to address this gap, using our detailed community data to identify the specific households that would benefit. As a result of these efforts, 1,221 infants aged 6-11 months old and 7,714 children aged 12-59 months were provided no-cost access to this vital intervention – 100% coverage.

These recent visits were a time to reflect on strategies to invigorate and enable faster adoption of digital health technologies, to address the persistent subnational health inequities which prevent many citizens from accessing essential services. What's clear is that digital health is critical to hastening UHC progress in low and middle-income countries, but stakeholders need to work together to address some surmountable

challenges.

How to overcome the barriers and achieve UHC faster

1. Driving system change vs fragmented solutions

While it's fantastic to see digital health players address different unmet needs in healthcare systems, such as health worker training and mHealth applications, this can result in fragmented approaches which fail to create the systemic change needed to achieve UHC. Digitally enabled health systems are also dependent on telecom companies and the monopolistic nature of this industry in many markets creates an additional barrier.

Standardization is vital to scale and each sector must learn to adopt a common framework for technology development, allowing transferability across national boundaries. At Allied World Healthcare, we have adopted all global healthcare data standards, but the regulatory environment around areas such as e-prescriptions and telehealth means our solutions have added complexity. A recent review found that more than 150 countries have absolutely zero mHealth regulations, for example. A robust regulatory environment with global standards helps to promote, rather than inhibit innovation, fosters consumer trust and addresses legitimate concerns about data privacy and product safety.

2. Designing health apps for access anywhere

Internet penetration is now at 63% in South-East Asia, with 415 million people having internet access - up from 380 million a year ago. But rural communities are at risk of being left behind as internet access often ranges from poor to non-existent in these areas. Digital literacy amongst those with more healthcare needs, such as older people, is still lacking. In addition, accessing the internet is often expensive for those people living in rural and remote areas who might benefit most from digital health solutions This notion is supported by data from rural India which suggests strong links between mobile phone ownership and health care access. Among the findings, poorer rural households without mobile phones experienced more adverse health events. A more enabling and competitive market among telecom providers in rural areas would help to reduce monopolistic practices, promoting technology diffusion and reducing prices for consumers.

Our determination to connect the unconnectable means we have had to embrace offline working for novice tech users. This has led to peer-to-peer syncing of devices, simpler user interfaces and using video instead of text. For any major player in this space, designing solutions for the limitations of the last-mile is of paramount importance. The digital divide must not create new forms of health inequities.

3. Power through data-driven insight into communities' needs

As Steve Jobs once said: "You've got to start with the customer experience and work backwards to the technology." Yet, too often digital health solutions are not fully utilized as there's been insufficient focus on understanding the real needs of communities and healthcare professionals.

When looking at our communitylevel data, a village's health needs can be vastly different from another right next door. For example, our profiling has uncovered instances where Village 1 has an extremely high prevalence of diabetes, which is broadly non-existent in Village 2 next door, where we see that kidney disease is rampant. Analysing relevant data and uncovering the right insights will drive much more targeted and effective health solutions for local communities.

It's time to embrace digital health fully

Governments and other stakeholders in South-East Asia have a tremendous opportunity to embrace digital health and leapfrog the long-standing barriers to UHC that exist in previous service delivery models. Government spending on digital health produces an

outsized return on investment, providing a clear incentive for investment in such solutions. The private sector is already leading the way with scalable, innovative approaches and disruptive technologies that are poised to change the way that healthcare is delivered in the region. What is now required is full support, cooperation and investment from the public sector. This will fully unlock digital health's potential as the driving force behind the region achieving its UHC 2030 goals.

World Economic Forum

Food Fight: New Review of Red Meat's Risks Carves Path of Contention

By Kate Kelland, Reuters



Packed U.S. beef is displayed at a supermarket in the city of Chiba in 2006. | REUTERS

Cutting back on red and processed meat brings few if any health benefits, according to a review of studies involving millions of people, a finding that contradicts dietary advice of leading international agencies and raised immediate objections from many health experts.

Most people can continue to eat red and processed meat at current average intake, typically three or four times a week for adults in North America and Europe, said a study's authors, who also made new recommendations based on the analysis.

"Based on the research, we cannot say with any certainty that eating red or processed meat causes cancer, diabetes or heart disease," said Bradley Johnson, an associate professor at Dalhousie University in Canada who co-led the review published on September 30, 2019 in the Annals of Internal Medicine journal.

However, in what amounts to a scientific food fight, a group of doctors from Harvard, Yale, Stanford and elsewhere, including one of the study authors, requested in a letter to the journal that it "pre-emptively retract publication" of the papers pending further review, and said revised guidelines that could lead to increased consumption of red and processed meats would be irresponsible.

A statement scheduled for publication by the Harvard T.H. Chan School of Public Health, shared with Reuters by Dr. Frank Hu, chair of the Department of Nutrition, said, "from a public health point of view, it is irresponsible and unethical to

issue dietary guidelines that are tantamount to promoting meat consumption, even if there is still some uncertainty about the strength of the evidence."

Dr. David Katz, director of the Yale-Griffin Prevention Research Center at the Yale University School of Medicine, cited "grave concerns about the potential for damage to public understanding, and public health."

The World Health Organization's International Agency for Research on Cancer (IARC) and the World Cancer Research Fund (WCRF) both say red and processed meat may or can cause cancer.

The WCRF advises eating only "moderate amounts" of red meat, such as beef, pork and lamb — with an upper limit of 500 grams (17.6 ounces) cooked weight per week — and "little, if any" processed meat.

A panel of experts writing in The Lancet in January outlined an "ideal diet" for human health and the planet that said global average red meat consumption should be cut by 50 percent and consumption of nuts, fruits, vegetables and legumes should double.

For the latest analysis, researchers from Canada, Spain and Poland conducted a series of reviews of both randomized controlled trials and observational studies looking at the possible health impact of eating red and processed meat.

Among the randomized trials they selected for analysis, which included around 54,000 people, they found no statistically significant link between eating meat and the risk of heart disease, diabetes, or cancer.

Among the observational studies, which covered millions of people, they did find "a very small reduction in risk" in those who ate three fewer servings of red or processed meat a week, but said that this association "was very uncertain."

"Our bottom line recommendation ... is that for the majority of people, but not everyone, continuing their red and processed meat consumption is the best approach," Johnson said.

Some experts not directly involved with the reviews said the work was a comprehensive, well-conducted analysis of

the available evidence on eating meat and human health.

"This study will, I hope, help to eliminate the incorrect impression ... that some meat products are as carcinogenic as cigarette smoke, and to discourage dramatic media headlines claiming that 'bacon is killing us,' " said Ian Johnson, a nutrition expert at Britain's Quadram Institute of bioscience.

Christine Laine, editor in chief of Annals of Internal Medicine, noted that nutrition studies are challenging as they are usually not randomized controlled trials and often depend on participants' memories.

"There may be lots of reasons to decrease meat in your diet, but if you're decreasing it to improve your health, we don't have a lot of strong evidence to support that," Laine said. "To be honest with our patients and the public, we shouldn't be making recommendations that sound like they're based on solid evidence."

Quadram's Johnson said people who choose to cut down their meat intake might still improve their health by doing so. "There are (also) strong environmental and ethical arguments for reducing meat consumption in the modern world."

Eating more plant-based foods can help to reduce emissions of carbon dioxide, scientists say.

Patients hire telemedicine to provide

medical education about issues they cannot

or do not want to speak to their primary care

physician about. Not a week goes by that I do

not get a consult from someone who wants to

understand more about a diagnosis they have

been given, a medication they have been

prescribed, a condition they fear they have

or something they feel uncomfortable asking

their personal physician about or do not want

discussion with a patient on their new

diagnosis of hypertension and why taking

a blood pressure medicine is a good idea

The opportunity to have a broader

Japan Times

Telemedicine's Intimate Glimpse Into People's Lives

By Grace Terrell, President and CEO of Envision Genomics

I've practiced medicine for thirty years in a tremendous number of settings, but my experience in the past few months as a frontline telemedicine primary care provider has taught me many things about the state of health care that were not obvious to me from the vantage points I've held in the traditional health care ecosystem.

Often, I perceive things about the patient's environment from the video that are not as apparent to me with patients who A doctor gives instructions to a patient virtually their doctor to know about. visit me at my office, where they often are on how to treat a wrist injury. Patients hire putting forth their best efforts. In the more telemedicine because they cannot conveniently intimate setting of their own home, patients

get access to primary care when they need it.

Photo: Shutterstock do not dress up for the visit, and often the entire family seems involved in the consult — babies crying in the background, parents or spouses whispering things for them to remember to tell me. I see patients complaining of a sick headache, laying in their bed in their PJs looking, well, sick.

I am discovering how many advantages that telemedicine can have for people compared to the traditional health care system. Here are a few examples.

Why Do Patients Hire Telemedicine?

Patients hire telemedicine because they cannot conveniently get access to primary care when they need it. Telemedicine solves for all sorts of lack of access. Patients call because they cannot get off work to make an appointment with a primary care physician office Monday through Friday 8 a.m. - 5 p.m. and don't want or can't afford to pay the higher urgent care copays.

They call because they need a refill on a medication or they have an acute problem and their primary care physician is too booked up to see them. They call because they live in a rural area and their primary care physician has moved/retired/left town and the closest alternative is 50 miles away. They call because they never had a primary care physician in the first place. Telemedicine consultations are available 24/7, unconstrained by geography.

Patients Seek Medical Education From Telemedicine Providers



or sensitively talking about their newly diagnosed sexually transmitted disease can serve as an additional resource for patients whose physicians have been too rushed to have these conversations. Additionally, oftentimes in the evenings, patients have questions they forgot to ask their physician about.

Patients Use Telemedicine to Help Them Quit Smoking

One of my favorite type of consults is for smoking cessation. Patients calling for a prescription to help them quit smoking are at that point of motivation when there is a real opportunity to make a difference in their long-term health. These patient-initiated conversations happen when and where the patient wants them to happen and allow rapid access to smoking cessation drugs.

Telemedicine Can Lower Cost of Benefits for Employers Some employers hire telemedicine to reduce the cost of health care benefits. Telemedicine consultations can significantly reduce emergency room visits for nonurgent conditions. One patient told me her employer benefit plan reduces her emergency room copay if she calls the telemedicine company prior to going to the emergency room.

The electronic health record I use for telemedicine videos and phone calls is the most-user friendly one I've ever used and is particularly helpful, as it allows patients to type their chief complaint in their own words prior to the visit. Family

history, medications, prior consults and allergies are all part of the electronic record. And evidence-based clinical guidelines are easily accessible in real time for the most common conditions.

Patient education material is electronically provided for many conditions, along with the ability to provide specific instructions for the patient, a work excuse if needed, and referrals for mental health and specialists, if appropriate.

Telemedicine Offers an Honest Glimpse Into Social Barriers

My experience with telemedicine has provided me with direct experience to the social determinants of health. The amount of morbid obesity in the patient-reported height and weight data seems much higher than what I experience in my private practice. And the lack of access to dental health is much greater than I ever imagined. Nearly every day, I have consults from patients with toothaches, cracked teeth or gum swelling who have not seen a dentist in years due to lack of ability to pay for a visit or due to no appointment availability for weeks out.

Many patients tell me directly they are calling because they need a refill on a chronic medication and cannot afford the copay required for an office visit. My experience is consistent with findings Oliver Wyman published earlier this year:

- At least 1 in 3 Americans didn't see the dentist last year.
- An estimated 42% of Americans don't have dental insurance.
- Health plan members diagnosed with dental and gum conditions are 25% more likely to suffer from heart disease, twice as likely to visit the emergency room or hospital, and spend on average two times more annually on overall health care costs.

The imperative for health plans to integrate dental services into their benefits structure in newly designed models of care is corroborated by my telemedicine experience, which offers glimpses to a more effective digitally accessible service delivery.

Avoiding the Vending-Machine Mentality

The concern some critics have regarding telemedicine as inappropriately over-prescribing antibiotics is valid in some cases. There is enormous pressure from patients to get an antibiotics

prescription from a telemedicine consult for what are more likely than not viral upper respiratory infections. The evaluation and assessment process remains a crucial component of the experience.

There is often a vending-machine mentality that has to be called out and corrected. They are not calling telemedicine consults to "order a medicine," but to get a consult with a physician for a medical concern.

The telemedicine company has monthly patient satisfaction survey feedback and quality reports. My telemedicine antibiotic prescribing rate for all upper respiratory infections is around 15%, far lower than what is known to be primary care office-based prescribing rates in national studies.

As the telemedicine industry continues to mature, there will be opportunity to provide increasingly sophisticated solutions to the health care delivery system, including improvement in patient education, chronic disease management and augmentation of primary care services as the shortage of traditional primary care continues to grow.

Evidence-based protocols may allow extension of some services to include advanced practice providers into telemedicine practices. Nonfacility-based mental health services can provide solutions for that shortage. For patients with rare diseases, local expertise is often not available.

Telemedicine, if properly designed, can provide worldclass expertise irrespective of geography.

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About Authors Grace Terrell



President and CEO of Envision Genomics

Dr. Grace Terrell is the president and CEO of Envision Genomics, chair-elect of American Medical Group Association and vice-chair of the Department of Health & Human Services' Physician-

focused Payment Model Technical Advisory Committee (PTAC)

School Lunches Keep Japan's Kids Topping Nutrition Lists



School lunches in Japan are mandatory - no packed lunches allowed - and while they are not free for most, they are heavily subsidised. (Photo: AFP/Kazuhiro Nogi)

Agence France-Presse (AFP)

Japan manages a rare feat for a developed country when it comes to feeding

its children - high scores for nutrition but very low obesity rates. One major key? School lunches.

A landmark report by the UN's children agency UNICEF released Tuesday (October 15) shows Japan topping the charts for childhood health indicators, with low rates of infant mortality and few underweight children.

But it also manages the lowest incidence of childhood obesity among the 41 developed countries in the Organisation for Economic Cooperation and Development and European Union.

Experts say there are various

factors at work, including a healthconscious society and regularly mandated check-ups for children, but a nationwide school lunch programme also plays a key role.

"School lunches with menus that are created by nutritionists are provided to all primary schools and the majority of junior high schools throughout Japan," Mitsuhiko Hara, a paediatrician and professor at Tokyo Kasei Gakuin University, told AFP.

The lunches are mandatory - no packed lunches allowed - and while they are not free for most, they are heavily



Japan tops UNICEF's charts for childhood health indicators, with low rates of infant mortality and few underweight children. (Photo: AFP/Martin Bureau)



Japan has one of the world's lowest rates of infant mortality, and the rate of children aged five to 19 who are overweight or obese is far lower than most other developed countries. (Photo: AFP)



School children walk home along a road in the Ogikubo district of Tokyo, on October 7, 2019. (Photo: AFP/Odd Andersen)

subsidised.

Each meal is designed to have around 600-700 calories balanced between carbohydrates, meat or fish and vegetables. One sample meal served to children in Japan's Gunma gives a flavour: Rice with grilled fish and a spinach and sprout dish, served with miso soup with pork, alongside milk and dry prunes.

"School lunch is designed to provide nutrition that tends to be lacking in meals at home," education ministry official Mayumi Ueda told AFP.

"I think it contributes to the nutritional balance necessary for children."

EATING, AND LEARNING

Unlike the cafeteria system operated in some Western countries, Japanese school lunches are usually served in the classroom.

Pupils frequently dish out the food to each other and clean up the room afterwards.

There is no choice of meal, and no concessions offered for vegetarians, or anyone with religious restrictions, with members of either group being few and far between in largely homogenous Japan.

The lunches are conceived not only to feed children, but to teach them.

"There's also a daily broadcast at school to explain the nutritional elements contained in the school lunch of the day, and this is a good way to educate kids," Hara said.

At primary schools, students use magnets with pictures of food and place them into different categories on a whiteboard, learning to tell their proteins from their carbs.

"School lunch is positioned as part of education under the law," Ueda said.

"It's not just about eating food, but children learn to serve, and clean up on their own."

The Japanese government studies nutrition and eating habits in Japan annually, and uses the results to shape what goes into the school meals, she added.

School lunches in Japan date back to as early as 1889, when rice balls and grilled fish were provided for children living in poverty in northern Yamagata prefecture.

But the programme was expanded nationwide after World War II ended to address childhood hunger amid serious food shortages.

MEDICAL CHECKS

And there are other factors at work, Hara acknowledged.

"Because many Japanese are health-conscious, they try to eat a variety of food, which is good," he said.

"And we're taught to eat seasonal food, which also contributes to good health. Japan is one of the rare countries that pay so much attention to food that is associated with specific seasons," he added.

The results are clear in the statistics: Japan has one of the world's lowest rates of infant mortality, and the rate of children aged five to 19 who are overweight or obese is 14.4 per cent, far lower than most other developed countries.

The US tops the UNICEF ranking, at 41.9 per cent, with Italy at 36.9 per cent and France at 30.1 per cent.

Hara said another factor in Japan is regularly mandated childcare health checks. Parents of infants receive reminders from the local government, and children are given health checks at school, including measuring height and weight.

Still, even Japan has not escaped entirely the growing trend towards overweight children and childhood obesity, which in Japan, like elsewhere, tends to affect those from less wealthy families.

"Children in poverty are more likely to be overweight because families try to cut costs," Hara said.

"As a result, they eat less protein but consume more carbs and sugar, which leads to obesity."

School lunches are all the more important to children in such situations, he said.

"A lot of nutrition is supplemented by school lunches ... so it also serves as a meal that saves children in poverty."

Channel News Asia

CREST Digital Healthcare Cluster Kicks Off with 3 Initiatives

Collaborative Research in Engineering, Science & Technology (CREST) on October 14, 2019, officially announced three key Digital Healthcare Cluster initiatives, the triple helix, signifying a milestone in digital healthcare in Malaysia.

The first initiative leverages on 5G technology. Through 5G Digital Healthcare, CREST will be working with the Ministry of Health, Digi Telecommunications and Cyberview Sdn Bhd, supported by the Malaysian Communications and Multimedia Commission (MCMC) in implementing relevant use cases in



(L to R): Azman Mahmud, CEO of Malaysian Investment Development Authority, Dr Abu Bakar Suleiman, MOH Advisory Council, Albern Murty, CEO of Digi, Al-Ishsal Ishak, chairman of MCMC, Dr Noor Hisham Abdullah, DG of Health, Dr Dzulkefly Ahmad, Minister of Health, Dr Chen Chaw Min, Secretary General MOH, Dr Ogan Gurel, CREST Healthcare Advisory Panel, Jaffri Ibrahim, CEO of CREST and Najib Ibrahim, MD of Cyberview.

Digital Healthcare.

5G use cases such as remote health monitoring and Emergency Medical Services will cater to tele-consultation, assessment, diagnosis and intervention based on real-time data. 5G will also drive the personalization of healthcare, empowering patients with the ability to manage their health and medical conditions better.

Dr Dzulkefly Ahmad, Minister of Health said: "Lowering healthcare cost and providing effective care for the masses are key concerns in the healthcare system. With the introduction of 5G, it is expected to bring new efficiencies, particularly in creating self-management capabilities and facilitating access to healthcare to minimize costs."

Dzulkefly pointed out that sensor-based applications will fuel the growth of Massive-Machine Type Communication (MMTC) which in turn will spur the need for Ultra Reliability and Low Latency Communications (URLLC) in combination with high availability, reliability and security for Tactile Internet and Emergency Medical Services. "The healthcare industry is on the brink of massive change," he predicts.

The second initiative is on National Cardiovascular Data Analytics. It is estimated that 73% of total deaths in Malaysia are contributed by cardiovascular disease with 35% of deaths occurring in individuals aged less than 60 years old.

For this project, Stethee, an Artificial Intelligence-enabled stethoscope will be used to capture Malaysian heart sounds at 50 Ministry of Health Primary Health Clinics nationwide.

With the establishment of Research & Development & Commercialisation (R&D&C) database for industry and academia, Artificial Intelligence (AI) algorithms will be developed from normal and abnormal heart sounds for prediction, detection and monitoring of heart diseases.

Diabetic Retinopathy (DR) is the most common cause of visual loss among adults of working age with Diabetes Mellitus (DM) being the most feared microvascular complication that sets in. Retinal screening is the important tool to detect early changes of DR as almost all patients with type 1 DM and more than 60% patients with type 2 DM have some degree of retinopathy after 20 years of the disease.

For the third initiative, CREST is working with the



Malaysian Minister of Health Dr Dzulkefty Ahmad listening to a Connected Ambulance briefing.

Ministry of Health and expertise from Microsoft Malaysia to develop an AI system for Malaysia Retinal Reading Centre (MyRRC) to diagnose DR. MyRRC will become the centre to read / grade eye retinal images from public and private healthcare providers.

Speaking at the event, Jaffri Ibrahim, CREST chief executive officer said, "CREST continues to work with the public and private sectors to undertake research pertinent to healthcare solutions. The Federal Government principally the MOH has been an active partner to CREST in spearheading affordable and accessible healthcare innovation for the rakyat. CREST is also excited to partner with Digi and Cyberview for the 5G OpenLab at RekaScape, a 5Gpowered collaborative space in Cyberjaya where businesses, academics and developers can go to test new 5G Digital Healthcare use cases."

Albern Murty, Digi's chief executive officer said that the 5G OpenLab builds on the spirit of collaboration to develop 5G for Malaysia. "5G will unlock many new capabilities and opportunities for innovation. With the Lab, we want to put 5G in the hands of as many local innovators to drive the development of a wide range of use cases including digital healthcare solutions. In this partnership with CREST and Cyberview, we look forward to explore 5G's potential in remote health monitoring, emergency medical services and connected ambulances, to name a few."

Najib Ibrahim the managing director of Cyberview says that smart healthcare is a vertical that the Tech Hub Enabler is looking at as one of the future key offerings of the smart city. "The testing of digital healthcare use cases by CREST, at the 5G OpenLab therefore, is the right move towards unlocking the fullest potential that technology plays in creating purposeful innovation, particularly in a complex area such as healthcare."

The three key Digital Healthcare Cluster initiatives will be guided by the CREST Healthcare Advisory Panel members namely Dr Noor Hisham Abdullah, Director General of Health Malaysia and Dr Ogan Gurel, an invited Professor at Daegu Gyeongbuk Institute of Science & Technology, South Korea. Both members will lend their expertise by advising and reviewing the projects to ensure excellence in R&D&C, as well as international best practices. The panel members will also act as advocates for the cluster initiatives and identify opportunities for more effective research and innovation linkages.

Digital News Asia

Japanese-Led Team Creates Functioning Structure of Mini-Organs from Human iPS Cells



Takanori Takebe, a professor at Tokyo Medical and Dental University, speaks at a news conference about his research in Tokyo in mid-September 2019. | KYODO

JIJI

A team led by Japanese researchers said on September 26, 2019 that it had created a miniature multiorgan structure from human induced pluripotent stem (iPS) cells, in a world first.

The one-centimeter structure consists of miniature versions of the liver, pancreas and bile duct, according to its report published in the electronic edition of the British journal Nature.

The team, which was led by Professor Takanori Takebe of Tokyo Medical and Dental University, confirmed the multiorgan structure to be functioning, with bile flowing from the liver through the bile duct.

In the research, the team developed two types of tissue from iPS cells, placed them side by side and cultured them in an attempt to reproduce the organ development process after fertilized egg division.

At the tissue boundary, retinoic acid was generated, causing the emergence of progenitor cells of the liver and pancreas. By culturing the cells, the team obtained hepato-biliary-pancreatic organ domains.

The latest study followed the 2013 announcement by Takebe and others of the creation of a miniature liver.

A clinical study is being planned to transplant miniature livers into a patient with serious liver disease.

The team is also considering transplants of the miniature hepato-biliary-pancreatic structure to patients with diseases that damage the liver and bile duct.

The multiorgan structure is also expected to assist with the development of new drugs, the team said.

Japan Times

Vietnam Revamping Health Sector in All Fields: Health Minister

By Nguyen Quoc - Translated By Anh Quan



At the opening ceremony of Hospital Management Asia meeting on September 11, 2019 in Hanoi, Vietnamese Health Minister Nguyen Thi Kim Tien said the Vietnamese Government has been building action plan to improve the health sector in all fields.

One of the solutions the Ministry has implemented is setting up satellite medical clinics in order to transfer advanced techniques to grass-root facilities.

After five years of implementation, 23 nuclear hospitals and 138 satellite hospitals have been formed nationwide.

Moreover the sector has invested and prioritized ten specialties including oncology, surgical trauma, cardiology, obstetrics, pediatrics, endocrinology, neurology, clinical hematology, emergency resuscitation and poison control.

Besides, the sector also upgraded facilities, build greener infirmaries, enhance IT employment, e-medical record, Telemedicine; and paid medical services to appeal social



contributions.

However, the health minister pointed out that the sector has bumped into difficulties because of limited finance resources. In the next time, the health sector will focus on improving grassroot medical institutions, building clinical trial systems and paycollection methods.

Head of the Ministry of Health's Examination and Treatment Department Professor Luong Ngoc Khue said that the annual event is an opportunity for local and international health experts and policy makers to share experience in management of qualified hospitals and insights on evolving business models, innovative technologies.

Hospital Management Asia is an annual event for hospital owners, C-level executives, directors and industry leaders to exchange insights on healthcare management thinking, best practices and solutions.

SGGP

Surprise Findings: Is Social Media Really Hurting your Mental Health?

By: Jamie Morton, Science Reporter, NZ Herald



Kiwis have explored how platforms like Facebook, Twitter and Instagram influence our psychological wellbeing - with surprising findings. Photo / 123RF

We blame friends' posts about weddings, babies and holidays for driving "digital depression" - but is social media really that bad for mental health?

A new study that dug deep into how platforms like Facebook, Twitter and Instagram influence our psychological wellbeing suggests not.

In fact, the weak link the Kiwi researchers found was comparable to that of playing computer games, watching TV or just minding kids.

Surveys suggest more than three quarters of Kiwis are users - and the nearly two hours we devote daily to scrolling, tweeting, liking and commenting is up there with the average 168 minutes we give our TVs.

And worries around social media have been growing - especially when it comes to our young people - with each new international study pointing to potential risks.

Dr Sam Stronge, from the University of Auckland's School of Psychology, wasn't sure what the true picture was when she began investigating.

"There have been a couple of large international studies out recently - including one saying that social media is really bad, and other saying that nothing is going on - so we just wanted to figure out what was happening."

Using the sprawling, longitudinal New Zealand Attitudes and Values Study, Stronge quizzed 19,000 people using what's called the Kessler-6 scale.

This measure asked people questions such as how many times in a given period they felt hopeless, how many times in a given week they felt depressed, and to rate the strength of those feelings on a scale from zero to four.

A higher score on the scale indicated someone may be struggling with serious mental illness.

The results showed a small negative association between social media and psychological distress, with every extra hour of use in a given week linked with a slightly higher level of psychological distress as measured on the scale.

"Overall, we found that social media has very little to do with New Zealanders' mental wellbeing."

In fact, Stronge and her colleagues found that people would need to spend a "ridiculous, if not impossible" amount of time on social media to experience a significant negative effect.

Unlike similar research, this latest study also asked how



"Overall, we found that social media has very little to do with New Zealanders' mental wellbeing," University of Auckland researcher Dr Sam Stronge says. Photo / Nick Reed

people reported feeling after using social media compared to how they felt after doing a range of other daily activities such as looking after children, watching television or playing computer games.

There was only a small difference in reported psychological wellbeing whether using social media or doing other ordinary things.

"We accounted for as many variables in the data as possible so that we could accurately see how good or bad one hour of social media was for people's mental wellbeing and those results couldn't be explained by anything else," Stronge said.

Another aspect of the study was that, unlike much of the previous research which has focused on adolescents, this one questioned adults aged 18 to 95 years.

She was eager to ask more questions - for instance, whether people who already had worse mental health were harmed or helped by social media.

There had been little research on this to date - but findings had pointed to the latter more than the former.

"I'd really like to follow that up a lot more. What we do know is the worst way to use social media is passively - or just reading and scrolling and not interacting with people," she said.

"So if you're talking, or commenting, or interacting or posting your own photos, then you're spending more time looking at other peoples' holidays or weddings and comparing yourself to them."

Social media and us

International studies have painted a somewhat mixed picture when it comes to social media use.

A US study out last year, looking at Facebook, Snapchat, and Instagram use, found a causal link to poorer wellbeing, and its authors said people could ease depression and loneliness by cutting back.

And a separate US study, published last month, suggested teens who spent more than three hours a day on social media were more likely to report high levels of "internalising" - that included social withdrawal, difficulty coping with anxiety or depression or directing feelings inward.

But another study, by Oxford University researchers and looking at 12,000 British teenagers, found that any link between social media and life satisfaction was small at best.

Other studies have explored other potential risks, ranging from narcissism, bullying and fake news, obesity, sleep problems and addiction.

One paper by UK's Lancaster University found users risked becoming more addicted to social media even as they experienced stress from their use, as, instead of quitting, they instead just used the same platforms differently.

Social media has also been implicated in New Zealand's comparably dismal cyberbullying rates.

An international survey last year found more than a quarter of parents or caregivers believed their child had experienced cyberbullying themselves. Only India and Brazil recorded higher levels.

NetSafe New Zealand's encourages parents to set boundaries and expectations with their children before they join social media, and to check in with them regularly and look for any negative changes in behaviour.

NZ Herald

Eat your Fill and be Healthy

By Suthon Sukphisit



Grilled white tilapia with salt./ Suthon Sukphisit



Pad ped pla duk (stir-fried catfish)./Suthon Gaeng pa pla duk./Suthon Sukphisit Sukphisit



While it's good to monitor our cholesterol levels, we don't have to sacrifice our enjoyment of food

Among the most concerning health issues for Thais these days, especially in Bangkok, is high cholesterol. There are many contributing factors, but, broadly speaking, it's a result of unhealthy diets. However, the prospect of watching what you eat is a daunting one for many people, when it is so easy to get food anywhere at anytime. And once they've fallen into a pattern of unhealthy eating, most people find it difficult to escape the cholesterol trap.

The obvious advice, then, is to avoid consuming highcholesterol foods. We are recommended not to consume things like full-fat milk, fatty meat and salmon. Instead we should eat more beans, brown rice, fresh vegetables and garlic. It is suggested we substitute olive oil, sunflower oil or rice bran oil for palm oil and coconut oil.

An official campaign aimed at encouraging the public to monitor their cholesterol intake features a long list of foods with nutritional information. For example, a 100g oyster contains 231mg of cholesterol, squid contains 322mg, salmon 86mg, tuna 186mg, egg yolk 200mg, chicken 70mg, duck 82mg, pork 126mg, soft butter 186mg, fresh milk 24mg and cream 300mg.

This rough guideline was published some time ago and remains unchanged. The figures have an impact on people who are concerned about their fat intake, especially those already suffering from high cholesterol. But while the guidelines are designed to help, they can have the unintended consequence of making people fearful. Some become unduly worried and feel they are limited in their options.

In fact, there are plenty of options. Consumers can enjoy

eating and still stay healthy. Firstly, don't be too scared by the cholesterol levels as detailed in the list. How food is cooked and our own natural metabolism help break down fats. Perhaps more importantly, not all cholesterol is bad. Good cholesterol is vital to our health and well-being.

Secondly, Thai food is generally healthy. It is full of nutritious ingredients and can even contain medicinal properties.

Thai cuisine employs various cooking and food preparation methods; there's tom (boiled dishes), yang (grilled dishes), yam (spicy salad dishes) and tod (deep-fried dishes). Some ingredients are deep-fried before being cooked according to the recipe.

In the tom category, gaeng leang (spicy herbal soup with mixed vegetables) is a delicious and nutritious option. To cook this dish, we need to prepare curry paste by pounding shallots, pepper, shrimp paste and smoked fish or dry shrimp. Add the paste to the broth and bring to the boil. Then add vegetables such as pumpkin, Luffa acutangula, young watermelon, basil leaves and pepper. When done, season with salt.

Gaeng pa pla duk (soup-like catfish curry) is another wonderful low-fat option. The dish uses different types of aubergine, baby peppercorn, sweet basil and kaffir lime leaves. Tom klong pla duk yang (sour and spicy soup with grilled catfish) has similar ingredients to tom yam, as it includes galangal, lemongrass, dried chillies, shallots, kaffir lime leaves and sweet basil, and is seasoned with tamarind juice, lemon juice and fish sauce. Tom yam pla (sour and spicy soup with fish) and tom yam pla tu (sour and spicy soup with mackerel) are also seasoned with tamarind juice. Gaeng som (sour soup with mixed veggies) and southern-style gaeng leuang (similar to gaeng som but with turmeric) are full of nutrients and low in cholesterol as the dishes



Spicy soup with fish./Suthon Sukphisit



Nam prik mamuamg (chilli paste, green mango)./Suthon Sukphisit



Fresh vegetables served with nam prik./Suthon Sukphisit

are cooked using only fish and vegetables.

Most yam dishes feature ingredients with medicinal properties. There are many types of yam and we can easily adjust ingredients and flavours to our liking. For example, yam tua plu (spicy wing bean salad), yam yod kratin (spicy tree shoot salad), yam hua plee (spicy banana flower salad). These yam dishes are cooked using prawns, shallots, bird-eye chillies, roasted dried chillies and seasoned with tamarind juice, fish sauce and sugar. The dishes are sprinkled with fried shallots before being served.

Spicy salad with steamed mackerel (yam pla tu) is another dish highly recommended for the health-conscious. It features lemongrass, shallots, chillies, parsley and balm mint. The same ingredients are used for making yam pla salid (spicy salad with dried pla salid fish). Yam dishes use a lot of fresh vegetables and seasoned to attain a balance of spiciness, sourness and saltiness.

Then there are nam prik (chilli dips). Nam prik pla tu, a staple dish from central Thailand, is served with plenty of fresh vegetables. Nam prik noom, a northern variation, is delectable and easy to make. Roast prik noom chillies, garlics and shallots until

soft and burnt on the outside. Then peel off the skin and pound the contents with some salt.

Nam prik ka is also very simple to make. Roast galangal, red chillies, shallots and garlic until soft. Pound them together with some shrimp paste and serve with fresh vegetables.

The last of our recommendations is grilled and steamed fish. You can try grilled catfish or grilled white tilapia soaked in salt served with an Isan-style condiment made from pounded dried chillies, a little fish sauce and an array of fresh vegetables. Or you could try red tilapia or snakehead fish steamed with vegetables and served with chilli dip made jaew-style (using fish sauce, pounded dried chillies and a little fermented fish sauce). The results are irresistible.

There are so many more tasty low-fat options -- too many to list here. But the point is that you have a lot of choices, so there's no need to worry. If you are aware of cholesterol concerns and know to watch what you eat, you can still eat well, without fear of damaging your health.

Bangkok Post





Part II Education

World Bank, UNESCO Institute for Statistics Join Forces to Help Countries Measure Student Learning



Silvia Montoya, Director, UIS; Stefania Giannini, Assistant Director General for Education, UNESCO; Jaime Saavedra, Global Director for Education, World Bank

The World Bank and The United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) on July 4, 2019 announced a new partnership to help countries strengthen their learning assessment systems, better monitor what students are learning in internationally-comparable ways and improve the breadth and quality of global data on education.

This partnership is part of a collaborative effort to tackle the global learning crisis marked by the slowdown in the improvement of access to education in recent years – leaving over 262 million children, adolescents and youth out of school— and hundreds of millions who are in school but not learning enough.

"Over half of the world's children cannot read and understand a simple story by the age of 10 – this is unacceptable. Reading and numeracy are rights and must be tackled, urgently, to ensure children can develop the fundamental skills necessary for building the strong and resilient economies of the future," said Jaime Saavedra, World Bank Global Director for Education. "Many countries do not undertake the systematic measurement of learning needed to track progress and inform education policies. Without this data, policymakers are flying blind. This partnership will help ensure that countries have the right tools to measure learning and to close the data gaps underpinning the global learning crisis," said Saavedra.

"Our focus is on supporting developing countries to strengthen their national assessments and on working with other international partners and countries to generate the necessary consensus to produce the best education statistics necessary for an evidence-based policymaking process," said Stefania Giannini, Assistant Director-General for Education of UNESCO. "This partnership will allow us to collaborate on supporting countries with the tools and technical support they need to track progress towards the Sustainable Development Goal 4 (SDG 4), to see what is working, what challenges remain, and where improvements can be made."

Both the Sustainable Development Goal on inclusive, equitable and quality Education and the education-related component of the World Bank's Human Capital Index (HCI) released in 2018 provide an impetus for measuring learning outcomes in internationally comparable ways, and over time.

The partnership will harness key global initiatives of the two institutions to strengthen countries' national capacity for the design, administration and analysis of large-scale national learning assessments. The UIS is leading global efforts to expand internationally comparable data on learning outcomes, leveraging countries' national measurement efforts. The World Bank is developing a Global Education Policy Dashboard to enable countries to monitor how well their education systems are oriented toward improving learning and educational attainment for all children.

"Several countries like Indonesia are already making progress in generating better data on learning, while others like Brazil and Kenya are using better data to inform policies that drive improvements in learning outcomes. The WB-UIS partnership aims to support similar efforts in many more countries around the world," said Omar Arias, World Bank Manager for Global Knowledge and Innovation in Education.

"Global education data generation and exchange is another key element of the partnership. The two organizations will create a unified data source of globally comparable indicators on education for use as a global public good," said Silvia Montoya, Director of UIS.

The partnership is framed within the overarching Strategic Partnership Framework signed last year between the United Nations and the World Bank Group to consolidate their joint commitment to help countries implement the 2030 Agenda for Sustainable Development.

World Bank Press Release

Improve Vocational Training to Boost IT Jobs in Sri Lanka

By Ryotaro Hayashi

Sri Lanka is making progress on improving public TVET, but IT courses have yet to generate the needed employment opportunities.

As Sri Lanka transitions toward upper-middle-income status, it aspires to become a knowledge-based economy by 2025 based on knowledge, information and capabilities drive knowledge-based economy, less jobs in IT than in other priority sectors. and access to quality education and trainings will make significant role to realize this vision.



One key element of this is the provision of vocational training to ensure skills are available that industries are demanding. To make this happen, the government launched its Skills Sector Development Program (SSDP) in 2014 and there have been numerous reforms, such as strengthening industry linkages.

But, how far are these reforms achieving the intended results of improving employability of graduates from public technical and vocation education and training (TVET) institutions? Some pointers that TVET does lead to jobs are provided in the justreleased ADB tracer study Sri Lanka: Public Training Institutions in 2016, which assessed employability of seven major public TVET institutions in Sri Lanka.

A key finding is that job placement of TVET graduates rose on average to 56.2% in 2016, from 50.3% in 2011. This is an improvement, but it also means that 43.8% of graduates had no job after graduation.

The tracer study tracked public TVET graduates between October 2014 and September 2015, so it was a little too early to use it to evaluate the effectiveness of SSDP.

Though critics could still use it to question the effectiveness of government TVET programs, a breakdown of the data gives reason for optimism. If the voluntary unemployed are excluded from the calculation, the employment rate rises to a significantly more respectable 72% in 2016.

Various factors are behind voluntary unemployment. The most important reason is for graduates to continue further training and education. It might also occur because of household commitments or illness.

It is encouraging is that some training institutions are doing quite well. For instance, the job placement rate of the Ceylon-German Technical Training Institute was 81.9%, and the University of Vocational Technology, 81.4%. Compared with 65.5% in 2017 for state university graduates, TVET institutions clearly provide quality and industry-relevant training for youth.

Perhaps the most surprising finding of the tracer study, however, is that the job placement rate of information technology (IT) graduates lags behind the three other priority industries studied: building and construction; hotel and tourism; and metal and light engineering.

For IT graduates, the job placement rate in 2016 was 50.9% for men and 38.0% for women. This was partly because many vocational training IT courses were basic without serious job orientation. These basic courses are provided to accommodate the needs of the society to empower youth, but the figures are a startling contrast to job placement among university-level IT graduates, at more than 90% in 2017.

So, what can Sri Lanka's government highly skilled workforce. The intellectual In Sri Lanka, TVET programs have created do to improve the employability of vocational training graduates? The ADB tracer study provides a few hints.

> First, IT courses require depth to improve access to jobs. Use of Word, Excel, and PowerPoint are prerequisites and foundational in any industry, but IT industries need highly skilled workforce, for example, who can code programming language.

> Institutions need to align training courses with industry standards, since IT is essentially a skill-driven sector. The IT industry—informed by the tracer study findings—has proposed a "learning-while-earning" model for industry entrants, in which school graduates are hired by IT companies and given custom training to suit company needs.

> Second, the IT industry requires strong communication skills and more general (non-IT) business skills to cater to the needs of diverse clients. More work is needed to ensure TVET is providing this.

> As the fastest changing industry and a driver for change in other industries, IT also calls for a workforce that can learn new skills and transform itself. The TVET sector should prepare such IT workers and offer them lifelong learning opportunities.

> Third, and more broadly, it is important that the government and institutions face uncomfortable truths about TVET, as revealed in the tracer study. They need to take note of the evidence, such as the low job placement rates in IT courses. Analyzing job placement rates by industry, gender, and geographical location can shed light on areas for further improvements.

> Based on the 2016 tracer study, the Government of Sri Lanka is making progress on improving the public TVET system. But it also needs to look at the rationale behind TVET programs, particularly for IT courses.

> The 2016 tracer study sets a credible baseline. The next one, in 2019, will provide firm evidence with which to evaluate the SSDP – and with it generate more ideas for effective policy measures.

> Ryotaro works on improving the education sector in South Asia, particularly Bangladesh, Sri Lanka, India and Nepal. Before joining ADB as a Young Professional in 2015, he has worked for 10 years in international development organizations like the World Bank, the Japan International Cooperation Agency, and Japan Bank for International Cooperation.

> > Asian Development Bank Blog

Turkey Favorite Destination for International Students

ISTANBUL/Anadolu Agency

Besides hosting millions of migrants, Turkey is also home to 172,000 foreign students pursuing education in its 206 universities. Over the years, the country has emerged as favorite destination for international students, particularly from Muslim nations.

Turkey made big investments in education, particularly in the higher education sector, to attract international students, Mehmet Bulut, the Rector of Istanbul Sabahattin Zaim University (IZU), told Anadolu Agency.

The IZU rector said the Turkish government along with other foundations, are supporting students with facilities including scholarships and dormitories.

"We have nearly 2,000 foreign students enrolled in our university. They are good at academics. It has helped us to raise the quality of education," said Bulut.

We also allow students to travel to Europe and other countries to acquire knowledge, he added.

Bulut said that hosting and providing education for foreign students was designed to prepare future global leaders.

President of Istanbul-based Federation

President of Istanbul-based Federation of International Students Association (UDEF) Mehmet Bolat said that Turkish educational institutions are aiming to host 350,000 foreign students by 2023.

Bolat said the education sector in Turkey has developed in leaps and bounds,

referring that there were just 10,000 foreign students in 2004.

"A decade ago, foreign students used to choose to pursue education in technical education. But, off late social sciences have picked up the pace," he added.

Three state-run universities in Istanbul, Eskişehir and Karabük are hosting most of the international students, according to UDEF president.

Most of the foreign students are from Syria, Azerbaijan, Iraq, Kazakhstan, Turkmenistan, Afghanistan and Somalia.

Hurriyet Daily News

Sydney Taps into Potential of 'Mini-Degrees'

How to build your CV without interrupting work-life balance

Clinicians and healthcare professionals stuck in a work rut or feeling overwhelmed by new advancements in their industry now have more options to strengthen their skillset with the creation of Sydney Professional Certificates.

There is a wide variety of courses available, ranging from Data Literacy for Health Policy Makers to the Psychology of Pain. The latter is unique to the University of Sydney.

Comprising of two units of study, Sydney Professional Certificates will enable professionals to stay up-to-date with the latest technologies, treatments and techniques. Delivered mostly online by senior clinicians and experts in the field, these courses are designed with industry in mind.

The first roll out of health-related micro-credentials at the University of Sydney marks the beginning of future plans to introduce and offer courses offered by other faculties.

Designed to be flexible and bite-sized

Professionals are often faced with increasing pressure from employers and hiring managers to stand out from their colleagues, by earning badges or micro-credentials.

"Once you finish University, the responsibility for learning falls on the individual," says Associate Professor Annette Katelaris, Director of Professional Medical Education at the Sydney Medical School.

"Usually in medicine, after completion of training,



practitioners use journals, conferences and seminars to stay up-to-date. While these are essential, there remains a role for curated and assessed learning so that content is studied systematically, and the learner receives feedback on what they know and their gaps in knowledge," explains Associate Professor Katelaris.

Micro-credentials can help junior professionals progress their career or pursue opportunities in sub-specialty areas. They can also help seasoned professionals modernise their qualifications and stay abreast of industry advancements. Sydney Professional Certificates were created to meet this rising industry demand.

'Top up' your learning

Unlike other continuing education methods, Sydney Professional Certificates will rigorously assess learning and offer an opportunity for students to directly consult experts.

"There will be professionals who may have already done postgraduate study in a previous life, who are seeking to 'top up' their learning and qualifications with changes in their field," says Dr Hayley Fisher, Academic Director, Post-Bachelor and Continuing Education.

"Then there will be people who are thinking about study, but not sure whether they want to commit to a masters. This lets them dip their toe into the water with study, that can then be counted towards a longer masters program. The Sydney Professional Certificate fits both these needs and audiences."

The University of Sydney News

Russia to Simplify Naturalisation for International Grads

By Viggo Stacey

The Russian government has announced a bill that seeks to make it easier for international graduates from country's universities to obtain citizenship, with changes coming in as early as December 2020. However, only graduates of public, or "state", educational or scientific institutions will be eligible.

to the Russian Citizenship Law and the seek naturalisation in the country. Photo: pixabay/ Foreign Nationals' Legal Status Law, graduates would no longer require residence permits meaning they would avoid "complicated procedures" associated with applying

for Russian citizenship.

Currently, graduates of Russian institutions can stay in the country after studying as temporary residents, and after working for three years, they can apply for a permanent residence permit.

The government wants to overhaul the procedure by dropping the three-year residency requirement, meaning international students will be entitled to apply for citizenship as soon as they have been awarded a degree from a public or state university.

In 2017 the government announced it would simplify visas for international students in a bid to increase numbers of students opting to choose Russia as a study destination. It also said it would invest US\$83.5m in driving numbers up to 710,000 by 2025.



The law change would make it easier for talent going on, made fiercer by globalisation Under the proposed amendments international graduates of Russian universities to and increased population mobility," he said quinntheislander

Alexey Maleev, vice-rector International Programs and Digital Innovation at the Moscow Institute of Physics and Technology said that human capital is becoming more important than financial or material assets.

"There is a worldwide competition for in a statement, adding that "an influx of 20-30-year-olds would be good not only

for the country's economy but also for its demography".

Head of the International Education Office at Saint Petersburg Polytechnic University Evgeniya Satalkina explained that simplified naturalisation would "increase a gifted foreign graduate's chances of landing a job with a Russian company and carving out a successful career in this country".

"On the other hand, it would give Russia a competitive advantage in the global education marketplace and a powerful tool for recruiting talent from around the world, as its universities should see an inflow of students from countries with fewer job opportunities," she added.

The move will "support Russia's effort to attract global student talent while providing its companies with employable graduates equipped with sought-after skills", Alexander Bedny, vice rector for International Affairs at Lobachevsky University said.

The Pie News

Hanoi Boosts Educational Cooperation with New Zealand

Vietnam News Agency (VNA)

A memorandum of understanding (MoU) on cooperation between Education New Zealand and the Department of Education and Training of Hanoi was signed in the Vietnamese capital city on October 29, 2019.

Speaking at the signing ceremony, Chairman of the Hanoi People's Committee Nguyen Duc Chung highlighted the city's recent education reforms. However, he noted that with the current education needs, Hanoi still lacks English teachers and programmes taught in English language.

While highly evaluating the quality of New Zealand's education programmes, Chung expected that the signing of the MoU marked a new milestone, opening more opportunities for expanding educational cooperation



At the signing ceremony (Source: VNA)

between New Zealand and Hanoi.

Chung hoped more specific and practical cooperation programmes between the two sides will be implemented, thus helping Hanoi learn experience in training human resources for education management.

For his part, Finance Minister of New Zealand Grant Robertson showed

his impression for the development of Vietnam in general and of Hanoi in particular, affirming this is a solid premise for strengthening the relations between the two countries in the coming time.

Issues related to curriculum reforms and enhancement of educational management capacity are New Zealand's strengths and interests, he said, expressing his belief that the MoU will help promote not only cooperation programmes but also specific education projects, thus helping Hanoi to modernise its education system, towards laying a foundation for cooperation in other fields between the two nations.

Under the MoU, the two sides agreed to provide further training for talents and train Hanoi's students through New Zealand's scholarships for high school students in Hanoi and other scholarship programmes of New Zealand's schools, as well as contests to encourage skills and knowledge development of students in Hanoi.

Education New Zealand and the municipal Department of Education and Training will cooperate to improve skills and professional competence of Hanoi's teachers and educational managers; promote cooperation and exchanges between Hanoi's schools and New Zealand counterparts; and work together to introduce New Zealand's high schools, universities and industrial-technological institutes as well as scholarship programmes and study opportunities in the Oceania country.

Vietnam Plus

Home Education a 'Huge Undertaking for Parents' – Ofsted

By Katherine Sellgren



Home education for many families is not a preferred choice but a last resort amid a breakdown in relationships with schools, Ofsted inspectors have warned.

Research by Ofsted found special needs, problems with a child's behaviour or wellbeing were the most common reasons. England's schools watchdog says parents need better advice about the cost and responsibilities of home educating and should be made aware of alternatives.

The research was based on seven local authorities in the East Midlands.

'It's so scary'

As part of the research, the watchdog spoke to 16 local authority (LA) representatives for home education, 36 senior leaders in secondary schools, 23 parents and seven children.

"It's scary. It's so scary... knowing that you've got to do it. When you've got no choice because your kids are mentally suffering and you're going down a road you don't want to," one parent said.

"There's no help, not even paper," said another.

"There must be some kind of help because the minute you go down home education, you're on your own and that is hard," a third said.

Parents said they often felt left to cope alone.

"It's very easy to misunderstand and think, 'Well, there's a council there, there'll be a budget there to help us with these sorts of things and there'll be support services,'" one parent said.

"We were told someone from the LA would be in touch - but nobody did. We could have been doing anything, shopping

every day, no-one would know," said another.

'Taken out of school in a day'

The Ofsted report says its research found parents "commonly viewed home education as the only option for them", especially when there had been a breakdown in the relationship between schools and parents.

And it warns the length of time for a child to be moved to home education can be very short.

"The period between a parent finding out about the possibility of home education and their child leaving school can be as little as one day," inspectors said.

Schools and councils are "rarely" told about a child moving to home education before they are taken out of class, Ofsted says, with some schools finding out it is a parent's intention only when a letter arrives.

The inspectors also raise concerns the views of the children themselves are not being fully heard.

"There need to be better mechanisms for considering children's views during decisions to home educate, particularly when a child expresses a view not to be home educated when a parent is considering home education," the report says.

It concludes home education "is a huge undertaking" for families.

Home education on the rise



The number of children in England educated at home is increasing, figures from the Association of Directors of Children's Services indicate.

In autumn last year, there were an estimated 58,000 children known to be educated at home, an increase of 27% on the previous year.

The largest number of children being home educated are in Key Stage 3, where pupils are typically aged between 11 and 14, while the greatest increase has been at Key Stage 4, where pupils are aged 14 to 16.

Despite a government consultation earlier this year, which included the right to more support for parents, no plans to legislate on home education in England were included in the Queen's speech.

Ofsted boss Amanda Spielman said: "Home education is a legitimate parental choice and can be a positive decision when parents are well equipped to provide a good education.

"However, children should not be moved to home education simply to resolve difficulties in school.

"Schools, local authorities and parents need to work together before such a decision is made, to make sure that home education is genuinely in the interests of children and not just the best thing for schools or parents.

"It's vital that parents are fully informed about the alternatives and that they understand all the implications and costs of home educating their child."

Association of School College Leaders director of policy Julie McCulloch said the report was "obviously

concerning".

"School leaders work tirelessly with young people and their parents to ensure they receive a high quality education and to support children who are having difficulties at school.

"However, cuts both to school

budgets and to wider support services make it increasingly difficult for schools to provide the high-level support that some children need, which can lead to frustration and friction between schools and families."

BBC News

Malaysia's Ministry of Education to introduce Al, Robotics and Computer Programming in School

By Katherine Sellgren



Pupils will be taught algorithms on how to develop both simple and more complicated computer programmes.

The subject of Design and Technology (RBT) related to Artificial Intelligence (AI), computer programming and robotics will be introduced to Year Four Pupils beginning 2020, according to a recent report.

The Ministry of Education's Curriculum Development Division deputy director stated that pupils will be taught algorithms on how to develop both simple and more complicated computer programmes.

Software like Arduino Micro Bit will be introduced to students at a primary school level under RBT, to expose them to Robotics, AI, and the coding and programming of hardware.

From 2020, students will also learn how to use Scratch, a freeware for coding and other resources.

RBT was introduced as subject to Form One pupils since 2017, with coding also already being taught in secondary schools via Basics in Computer Science (Asas Sains Komputer) and Computer Science (Sains Komputer).

These subjects, the report explained, exposed students to the use of simple coding methods using Microsoft Visual Basic, JAVA, HTML, Javascript, Microsoft Access, MySQL, XAMPP and Notepad.

The report noted that the ministry will do away with specific subjects on Microsoft Word and Powerpoint, explaining that this will be integrated into subjects where students will be required to use the software to prepare presentations.

Moreover, the ministry has been cooperating over the past few months with the Malaysia Digital Economy Corporation in training lecturers at the Institutes of Teacher Education (IPG), adding that the ministry aims to train about 500 teachers and provide them with adequate coding skills.

In April 2019, OpenGov Asia reported that there is growing concern around the increasing number of cybersecurity scams and data breaches. This has resulted in the immediate need for information in and training in how to more securely protect information.

In 2018, the Malaysia Computer Emergency Response Team (MyCERT) reported that more than 10,000 cybersecurity attacks on corporations and individuals nationwide occurred. Recent incidents including ransomware, banking account leaks and other data breaches were also reported.

By 2020, analysts estimate more than 50 billion devices will be connected globally, showing the increased importance of safeguarding the Internet space for both financial and personal safety.

As hackers and hacking technologies become increasingly sophisticated, the need for more digital security professionals is pressing. Many leading cybersecurity and tech firms have expressed concerns on global talent shortage respectively.

The Asia Pacific University (APU) has, thus, been prompted to address these concerns while demonstrating the university's strength in providing first-class education in the area of cybersecurity.

At APU, students will be trained to become qualified cybersecurity professionals who are ready to face challenges in the digital world through a wholesome experience.

With the support of industry partners and Malaysia Digital Economy Corporation (MDEC), APU is responding to the talent demand, working to train and nurture "superheroes" of the digital space who will combat digital crimes and safeguard digital assets when they graduate.

An industry advisory panel consisting of experts from the cybersecurity field is involved the design of the curriculum at APU, ensuring the syllabus taught is up-to-date and relevant for students to change and improve the landscape of secure computing.

It is clear that Malaysia is working to create an educational environment conducive for tech learning. This will result in students becoming equipped with the skills and resources they need to meet and overcome the challenges prevalent in a digital economy.

OpenGov Asia

Blockchain Meets Education

By Jirayut Srupsrisopa

As 'edtech' gains traction, demand grows for ways to protect everything from student data to professors' research

Blockchain technology is rapidly gaining favour for its exemplary cybersecurity capabilities. Blockchainenabled security development has become a paramount goal in industries such as finance and banking, supply chain and logistics, and healthcare. Beyond cryptocurrency

and other existing use cases, blockchain can also make a huge difference in the lives of students.

Educational technology (edtech) has now arrived in our classrooms. From desktop and mobile applications to internet-supported classrooms and artificial intelligence, technology is transforming the educational sector. American University magazine has forecast the global edtech market will be worth \$93.7 billion by 2020.

With the growth of web-based learning, students and educational institutions are keeping more information in cloud storage, which unfortunately makes them very susceptible to online attacks and data tampering.

The data generated by educational institutions is typically deemed not as valuable as financial information. However, schools have evolved far beyond being just recorders of students' educational history and are now sophisticated data aggregators. Consider that in addition to students' transcripts, educational institutions hold students' medical data, personal information such as addresses and phone numbers, professors' teaching history, and many other forms of information.

As well, educational institutions have an increasingly active role in innovative research, generating intellectual property that may not always be respected by governments, private companies or hackers.

PHISHING AND WORSE

In 2018, the San Diego Unified School District admitted that a phishing attack had breached the personal data, including health information, of some 500,000 students and staff. Also last year, a cyber-attack originating in Iran targeted about 100,000 email accounts of professors worldwide and stole details of 320 research projects from universities, governments and companies in the US. And in March 2019, Chinese hackers targeted 27 universities including the Massachusetts Institute of Technology (MIT), looking for highly sensitive data on work they were doing for the US Navy.

Such incidents have the potential to enable everything from large-scale identity theft and credit card fraud, to theft of military research that could be a matter of life and death.

While we cannot take back what happened, we can use blockchain to prevent similar attacks. It improves the security of universities' cloud storage by encrypting the data and securing the



information in its ledger. Since the ledger is shared across several computer networks, the data will not be held by a single entity and will not be vulnerable to cyberattacks.

What this means is that course content, research, personal information and all education-related data can be traced and saved online by students and professors directly, without any of it being exposed or leaked to others, in a very seamless process.

FAKE DEGREES

College diplomas are the most expensive pieces of paper that a person can earn. Tuition alone for a four-year college degree in the US from a public university can cost between \$25,000 and \$40,000. And according to a 2018 report by the US Bureau of Labor Statistics, there is still a huge pay gap between applicants with a four-year degree and those with only a high school diploma. No wonder buying a fake degree seems to be a good way to score a good-paying job. That helps explain the rise of Axact, a Pakistan-based outfit that claimed to be "world's largest IT company".

In fact, it was nothing but a fraudulent degree mill. Before police and prosecutors brought it down, it had sold 215,000 fake qualifications in the names of about 350 fake high schools and universities.

Selling fake degrees is hardly a victimless crime, as there could be serious safety and security implications. Would you fly in an aircraft with a pilot that had fake qualifications? That happened recently in India. Would you want your house built by an architect with forged certification? That happened in New York.

The lack of a global certification database to verify degrees is a perennial problem that has been exacerbated by the rise of online scam artists. The only sure way to verify the credentials of a job applicant is to contact the registrar at the university the person claims to have attended. This is very time-consuming, so many employers forgo background checks.

Blockchain is the answer to this pressing need. Not only can it store time-stamped data, it is also tamper-proof and accessible anywhere in the world.

Tracking of certification is easy, low-cost, and can be done 24/7.

Blockchain security for cloud storage and certification is no longer just an idea. Sony is already creating an online repository of educational data with the use of IBM's blockchain.

MIT Media Lab and Learning Machine have also launched Blockcerts, which aims to store notarised academic records on a blockchain. In Thailand, Bitkub Blockchain Technology is offering blockchain integration in several industries, including the education sector.

How such technology can be harnessed as a viable tool in our education system will be in the hands of the government and universities if such adaptation takes place.

Bangkok Post

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 1996, CACCI has grown into a network of national chamber of commerce with a total now of 29 primary Members from 27 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

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Ernest Lin, Director General; Amador R. Honrado, Jr., Editor
Wendy Yang, Contributing Editor; Teresa Liu, Assistant Editor
7F-2, No. 760, Sec. 4 Bade Road, Taipei 10567, Taiwan; Tel: (886 2) 2760-1139; Fax: (886 2) 2760-7569
Email: cacci@cacci.biz; Website: www.cacci.biz