

THE HISPIAN

7th August 2015

What the Heck?

On the surface, the human body appears to be a flawed design. Obviously, our brains are magnificent and our thumbs enable us to use tools which lower animals can't do. However, there seems to be a fault with our stomachs. No matter how many tasty calories we cram into them, they always want just one more roast potato. Then, instead of ejecting the excess fat, they feed it to our hearts and veins, and we end up all dead. Of course, we can use willpower to counter these demands, but this makes us dull and pointless. Simply look at the number of people on dating websites who neither drink nor smoke to know I'm right. If they did, they'd have a partner. It's that simple. My normal approach to the business of being fit is not bother. I eat lots, and then I sit in a chair. My idea of exercise is a good brisk sit. The upside to this is that I have a happy family and many friends. The downside is that I wobble and wheeze while going to the fridge for another piece of KFC. But, after being repeatedly pointed to my increasing girth by many friends, I decided to "get fit" One of the things I should explain at this point is that I am always very enthusiastic about new projects, but only for a very short time. If I was to get fit and thin, it needed to be done fast, before I lost interest. So last week, it was back to the gym.. and since then time has passed in a painful blur of cycling, trudging, rowing and discovery that it's uphill to my local SPAR, and uphill on the way home as well. This has made me dull, slow and, because there's no glass of red in my system at night, an even worse insomniac. And secretly, I have this nagging suspicion that what I'm doing is biologically unhealthy.



Pain is designed to tell the body something is wrong and that you'd better do something fast to make it go away. So why would you get on a rowing machine and attempt to beat what your body uses as a warning? In the dark ages, people had to run all day through the wild to catch deer so they all had boy-band torsos. But since Darwin, we realise that species evolve.. We have cars, so trying to look like a twelfth-century bushman is as crazy as a whale trying to re-grow its legs. Seriously, the thing about evolution is that each step has a point. Cows developed udders so they could be plugged into milking machines and humans developed the remote-control so we could spend more time sitting down. Fitness fanatics should take a lead from nature. Nobody suggests a lion could catch more wildebeest if it spent less of its day lounging around. Plainly, then, our stomachs are designed to demand food and feed fat to our arteries for a reason. I don't know what the reason is but I suspect it may have something to do with global warming. - Everything else does.

Speaking of evolution, we live in ridiculously convenient times. Just think: Whenever you need any kind of information, about *anything*, day or night, anywhere, you can just tap your finger on your smartphone and within seconds an answer will appear, as if by magic, on the screen. Granted, this answer will be wrong because it comes from the Internet, which is infested with weirdos, teenagers and a million misplaced apostrophes. But it's convenient. Today everything is convenient. You cook by pushing a microwave button. Your car parks itself, and your GPS tells you where to go. So we have it pretty easy.

But we have paid a price for this convenience: We can't do anything anymore. We're helpless without our technology. Have you ever been standing in line to pay a cashier when something went wrong with the cash register? Suddenly your safe, comfortable world crumbles and you are plunged into a terrifying post apocalyptic hell where people have to do maths *using only their brains*. Regular adults are no more capable of doing maths than they are of photosynthesis. I don't know about you, but I find that scary.

Have a great week Team !!

THE HISPIAN

7th August 2015

Your phone got Stagefright?



Zimperium recently released information about an Android vulnerability which makes it possible for an attacker to take over your smartphone and steal your information. The worst part of the vulnerability is that the attacker only needs to know your mobile number. The vulnerability, named **Stagefright**, is a media library that processes popular media formats. “Since media processing is often time-sensitive, the library is implemented in native code (C++) that is more prone to memory corruption than memory-safe languages like Java,” said Zimperium.

The problems in Stagefright code expose 95% of Android devices, which is close to a billion phones. Their research found multiple remote code execution vulnerabilities that can be exploited using various methods. The worst attacks require no user interaction. Unlike spear-phishing, where the victim needs to open a PDF file or a link sent by the attacker, this vulnerability can be triggered while you sleep and could even delete the message before you see it. You will only see the notification.” Android and derivative devices from version 2.2 are vulnerable. Devices running Android versions prior to Jelly Bean are at the worst risk due to inadequate exploit mitigations. So make sure your anti-virus is installed and up to date.

Huawei P8 “Selects” Care.

Taking the fight to Samsung in South Africa, Huawei has announced that its new flagship Android smartphone will come with a warranty it calls “Huawei Select”.

This new warranty is similar to the accidental damage from handling warranty that Samsung launched with the Galaxy S4 but is strangely absent in subsequent Samsung Galaxy models.

Under the terms of Huawei Select, owners of the Huawei P8 will be able to send in their device for two free repairs for the duration of their 24 month contract.

The repairs may cover either two screen replacements, two logic board replacements (i.e. liquid damage), or one of each. This service has been available in South Africa since 3 July, and will be rolled out to the rest of Africa at a later stage.

Asked how they will fund Huawei Select, the product and marketing director for Huawei Technologies South Africa, Yudi Rambaran, said that it is not based on an insurance model, but internally funded.



In the event that a Huawei customer needs to make use of the free repairs, Rambaran said that any of the mobile operators or Huawei’s own customer care centres can book the device in.

THE HISPIAN

7th August 2015

Pills from your printer.

In a world first, the US Food and Drug Administration has given the go-ahead for a 3D-printed pill to be produced.



The FDA has previously approved medical devices - including prosthetics - that have been 3D printed. The new drug, dubbed Spritam, was developed by Aprecia Pharmaceuticals to control seizures brought on by epilepsy.

The company said that it planned to develop other medications using its 3D platform. Printing the drugs allows layers of medication to be packaged more tightly in precise dosages.

A separate technology developed by the firm, known as ZipDose, makes high-dose medications easier to swallow. Printing the drug meant it could package up to 1,000 milligrams into individual tablets.

The 3D-printed pill dissolves in the same manner as other oral medicines.

Being able to 3D print a tablet offers the potential to create bespoke drugs based on the specific needs of patients, rather than having a one product fits all approach, according to experts. "For the last 50 years we have manufactured tablets in factories and shipped them to hospitals and for the first time this process means we can produce tablets much closer to the patient," said Dr Mohamed Alhnan, a lecturer in pharmaceuticals at the University of Central Lancashire.

It would mean that medical institutions could adjust the dose for individual patients with just a simple tweak to the software before printing. Previously, such personalised medicine would have been extremely expensive to produce, said Dr Alhnan.

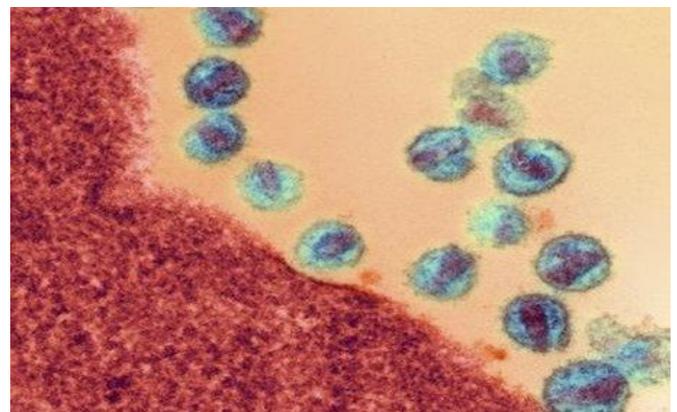
3D printing works by creating an object layer by layer. In the case of medicines, printers are adapted to produce pharmaceutical compounds rather than polymers which are more usually used. Such methods are already proving very useful in healthcare with doctors using the system to create customised implants for patients with injuries or other conditions.

And dentists, for example, use 3D printers to create replica jaws and teeth as well as other dental implants.

Spritam will launch in the first quarter of 2016, according to Aprecia.

HIV 'flushed out' of hiding.

HIV can be flushed out of its hiding places in the body using a cancer drug, researchers show. The cornerstone of treatment, anti-retroviral therapy, kills the virus in the bloodstream but leaves "HIV reservoirs" untouched.



The study, published in PLoS Pathogens, showed the drug was "highly potent" at reactivating hidden HIV. Experts said the findings were interesting, but it was important to know if the drug was safe in patients.

THE HISPIAN

7th August 2015

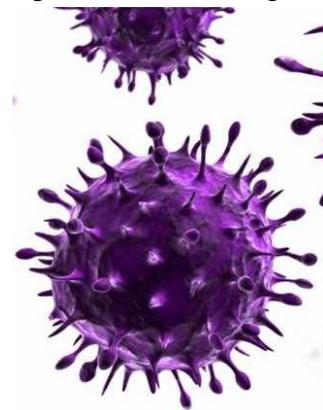
The power of the HIV reservoir was shown in a recent case termed "the Mississippi baby." She was given antiretroviral drugs at birth. Despite appearing to be free of HIV for nearly two years after stopping treatment, she was found to be harbouring the virus.

A strategy known as "kick and kill" is thought to be key to curing HIV - the kick would wake up the dormant HIV allowing the drugs to kill it.

The team at the UC Davis School of Medicine investigated PEP005 - one of the ingredients in a treatment to prevent cancer in sun-damaged skin.

They tested the drug in cells grown in the laboratory and in parts of the immune system taken from 13 people with HIV.

The report said "PEP005 is highly potent in reactivating latent HIV" and that the chemical represents "a new group of lead compounds for combating HIV".



One of the researchers, Dr Satya Dandekar, said: "We are excited to have identified an outstanding candidate for HIV reactivation and eradication that is already approved and is being used in patients.

"This molecule has great potential to advance into translational and clinical studies."

However, the drug has still not been tested in people who are HIV-positive.

Prof Sharon Lewin, from the University of Melbourne, said the results were "interesting" and marked an "important advance in finding new compounds that can activate latent HIV". This study adds another family of drugs to test to potentially eliminate long-lived forms of HIV although much more work needs to be done to see if this works in patients. Although PEP005 is part of an FDA approved drug, it will first take some time to work out if it is safe to use in the setting of HIV."

Suntan vitamins in Winter.



Everyone should consider taking vitamin D supplements to counter the lack of sunshine in winter. The draft Scientific Advisory Committee on Nutrition guidelines suggest, from the age of one, 10 microgram pills be taken to ensure people get enough. Current advice is only at risk groups - including pregnant women, under fives and over 65s - should take supplements. But as there is no easy way of assessing who is getting enough vitamin D, SACN has proposed a blanket recommendation for everyone because of the benefits it would bring.

The risk of getting too much vitamin D is considered to be extremely low.

Official estimates suggest one in five adults and one in six children may have low Vitamin D levels. People get most of their vitamin D from the action of sunlight on their skin. But the amount in food is small, unlike many other vitamins.

The low level of sunlight during winter months means people are at risk.



THE HISPIAN

7th August 2015

Windows 10: should you upgrade?

Windows 10 launched on 29 July, with Microsoft offering Windows 7 and Windows 8.1 users the ability to upgrade for free in the first year after its launch. The upgrade download will be about 3GB, and will take between 20 minutes and an hour to install – depending on the device.

Those who don't qualify for the free upgrade – people using Windows Vista or older versions of Windows – will be able to buy Windows 10 for the same price as Windows 8.

In South Africa, Windows is priced as follows:

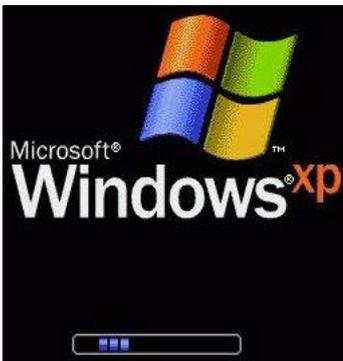
- Windows 8.1: R1,540
- Windows 8.1 Pro: R2,630
- Windows 8.1 Pro Student Offer: R480

So it's finally here, but there is one question that you must answer for yourself: *“Should I upgrade to Windows 10?”*

If you are unsure about whether any specialised software will work on the new version of Windows, you should not upgrade until its developer has confirmed support for the OS.

Users may also want to wait until the first big patch for Windows 10 is pushed out before upgrading.

Windows XP



If you are still on **Windows XP** (or older), that means Microsoft no longer offers support for your operating system.

While you can't get the upgrade to Windows 10 for free, it is definitely time to upgrade because you are at risk in so many ways.

You can either buy a new PC that ships with Windows 8.1 Pro or Windows 10, or pay for a new version of Windows.

If you're not keen on Windows 10, you should investigate switching to a modern operating system. Free Linux distributions are available for those who do not want to pay for an OS, Like Ubuntu for example.

Windows Vista

Mainstream support for **Windows Vista** ended on 10 April 2012, but Microsoft has said it will still provide security fixes for the operating system until 11 April 2017.

If you're happy with Vista then you don't have to upgrade, and you certainly aren't incentivised to do so since Windows 10 won't be free for you. However, if you meet



the minimum hardware requirements for Windows 10, it is worth considering the upgrade. Alternatively, you could look at buying a new PC that includes a more recent edition of Windows.

Windows 7

If you're running **Windows 7** and are happy with it, the choice to upgrade is not straightforward. Mainstream support for Windows 7 ended on 13 January 2015, but Microsoft will continue to provide security updates until 14 January 2020.

THE HISPIAN

7th August 2015

Cape Town is a Telecoms Leader.

Would you believe that South Africa has a rich telecommunications history, which stretches back to April 1859 when the first telegraph was installed, and it appears that the Western Cape was first in line to benefit from this technology. This telegraph was a single-wire earth return telegraph line (a circuit run) on wooden poles between Cape Town and Simonstown, installed by The Cape Of Good Hope Telegraph Company. It was a Cooke and Wheatstone-system – a visual needle telegraph.



The first telephones were installed in Cape Town in 1878, two years after Alexander Graham Bell filed his patent for an “apparatus for transmitting vocal or other sounds telegraphically”. Adolph

Boettger, owner of a small watchmaker’s shop in Shortmarket Street in Cape Town, imported a few telephones from Siemens & Halske. These telephones were immediately used experimentally to link the dwelling of the Telegraph Departments chief clerk with the St George’s Street Post Office. The early telephone models used in SA before the advent of telephone exchanges in the country (1878-1882) worked over private wires and are referred to as Bell telephones. In 1878 the Bell Telephone Company also sent Sir Garnet Wolseley 12 sets of telephones for use in the colonial War in South Africa. If these phones were indeed used in the war, it was the first time ever that the telephone was used in warfare.

The photo at left shows the first phone used in South Africa, which was provided to the Hispian by Telkom’s library services.

Now it’s Google Cars

Google has quietly set up its own car company called Google Auto LLC. This is according to the Guardian, which has obtained documents stating as much. According to the Guardian, Google Auto LLC is headed by Chris Urmson, the head of Google’s self-driving car project.

Google is a self-driving car pioneer, and in December 2014 the company unveiled its first fully-functional, automated vehicle.

The company also recently announced it was in talks with General Motors, Ford, Toyota, Daimler, and Volkswagen.



THE HISPIAN

7th August 2015

EDs Feature – 5 incorrect “facts” we learned at school.

We have been taught a lot of different things about our bodies by our schools, our parents and our friends. A few of these things are completely wrong, and any drive to change assumptions we have had about our bodies for pretty much all of our lives will be met with resistance. Science does provide proof that will dispel some pre-school lessons or old-wives tales that most of us have heard before.

Here are five myths about our bodies that have been debunked:

1) We have five senses

We all remember learning that we have five senses – sight, smell, hearing, taste and touch.

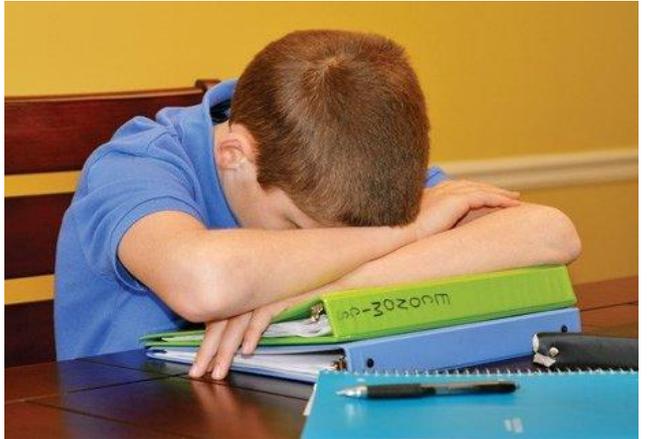
This is actually wrong, and dates back to Greek philosopher Aristotle. Even the idea that a “sixth sense” sometimes exists where people can “see dead people” is not scientifically possible. Modern scientists argue that humans might have as many as 20 senses. Some of these senses include:

Thermoception – the ability to perceive heat or cold

Proprioception – the ability to tell where your body parts are in relation to other body parts. So when the police pull you over for drunk driving and tell you to close your eyes and touch your nose – they are basically testing if this sense is impaired.

Equilibrioception – the ability to keep your balance, and sense the movement of your body – the sensory system for this is in your inner ear. When you were a kid and spun around, or when you still do it on your office chair as a grown-up, the feeling that the world is still spinning after you stop – that’s because of this sense.

Time – It seems pretty obvious, but it is the hardest sense to pin down. We all measure time, through the sun, the moon, the hands of a clock and erosion (over a long time), but scientists have a hard time explaining what time itself actually is. What we do know, is that humans can sense that time is passing. Where that gets even more complicated is when Albert Einstein’s theories of relativity are involved, which say people perceive time differently (See “Understanding Einstein” further in this issue)



2) We have only four tastes

That tongue map we all remember of the regions of the tongue that have specific taste buds is wrong. So is the idea that the only tastes are sweet, sour, salty and bitter.

A few years ago scientists acknowledged a fifth taste, which was unique from salty, called umami. Our tongues have receptors for this savoury fifth taste.

In July, scientists at the Purdue University in the USA announced that they had discovered

THE HISPIAN

7th August 2015

receptors on human tongues for a sixth taste, called oleogustus – or the taste of fat.

3) Humans only use 10% of their brains

A myth perpetuated by movies is that humans only use 10% of our brain, and the possibility exists for us to achieve superhuman intelligence by activating the other 90%. Scans show that in fact most of our brains are active, and even when we sleep our brains are still active, but they are just in a different state. Even slight brain damage could have disastrous consequences for a person, which goes to show that all of the brain is important. However, if the 10% theory is to be believed, you could remove huge chunks out of a person's brain without any noticeable difference.

So while the idea that a special pill or drug can unlock all the capabilities of the brain might sound like the answer to our nightmares about matric maths exams or the huge pile of work on your desk, we are all just left with having to study or work really hard.

4) You will get sick if you go outside with wet hair, or without a jacket

We remember this refrain as children, but in actual fact wet hair or not having a jacket will not make you sick.

Cold weather, on the other hand, might make it harder for your body to fight an infection you might already have, or come into contact with, but the reality is that colds and the flu are caused by simply coming into contact with viruses.

Wet hair or a lack of jackets, in and of themselves, do not cause sicknesses.

5) Sugar makes kids hyperactive

Some exasperated parents will roll their eyes at this, but there is actually no scientific link between your child bouncing off the walls, and the stash of sweets they managed to stuff into their mouth.

A paper published in the *Journal of the American Medical Association* in 1995, which looked at 23 other studies about the effects of sugar on children, concluded that “the studies to date found that sugar does not affect the behaviour or cognitive performance of children”.

It said the strong belief of parents that it makes their children hyperactive “may be due to expectancy and common association”.

The researchers did, however, say that sugar affecting “subsets of children” could not be ruled out.

So the possibility exists that the expectation of parents that sugar will cause their child to be hyperactive, might either lead to them seeing their child's behaviour in a specific way or could in fact cause the child to behave in a hyperactive manner when they consume sugar.



THE HISPIAN

7th August 2015

Tshwane Getting Faster

The City of Tshwane is racing ahead with its free Wi-Fi programme for residents by upgrading the speed of its network as well the number of sites. Tshwane on Wednesday announced that it has increased the speed from an average 7mbps (megabits per second) to 15mbps without incurring any additional cost to the city. That compares well to overall 3G speeds of 9.65mbps in SA, according to Speedtest.net.



The service is critical to the digital inclusion programme that seeks to expand internet access in South Africa's capital city. "The provision of free Wi-Fi illustrates our desire to build a resilient, inclusive and liveable city. We call on community members, parents and learners to take ownership of the assets that government is bringing to their lives and ensure their longevity, and to keep Tshwane connected, moving us towards being the e-Capital of Africa as well," said Executive Mayor Kgosietsso Ramokgopa.

As national policy implementation on 4G spectrum continues to delay the roll-out of high speed mobile broadband services, Wi-Fi has emerged as a key technology.

Data from Tshwane shows that 720 000 unique users have used the service since launch in 2013. That translates to 22 million sessions and in 2015, the service has seen 165 000 users per month. Maybe there's a chance for HISP house here?

Grab a cheap mobile on auction

Less than half of the 9 465 cellphones impounded from motorists who were caught using them while driving since 2012, have been reclaimed by the owners.

An average of 3 155 phones a year have been confiscated since the introduction of the City of Cape Town's impoundment policy which came into effect in July 2012, the City said in a statement.

To date, only 4 182 motorists have reclaimed their phones. Once a motorist's device is impounded, it is handed in at the traffic services office in a sealed evidence bag or box with a copy of the impoundment receipt and placed into a suitable safe. Owners may collect their phones 24 hours after they were impounded, provided they produce a receipt proving they have paid the impoundment fee of R1 100. This is in addition to the fine issued to the motorist for talking on a cellphone or texting while driving.

Smith said the City has yet to auction any of the cellphones, which it is able to do within three months of the impoundment date. "We are navigating our way through uncharted territory in respect of the mobile devices, particularly the issue of personal data that remains on the phone even with the removal of the SIM card," Smith said.

They were now waiting for a service provider to assist with the removal of data from the handsets. Only then will they begin auctioning it off.

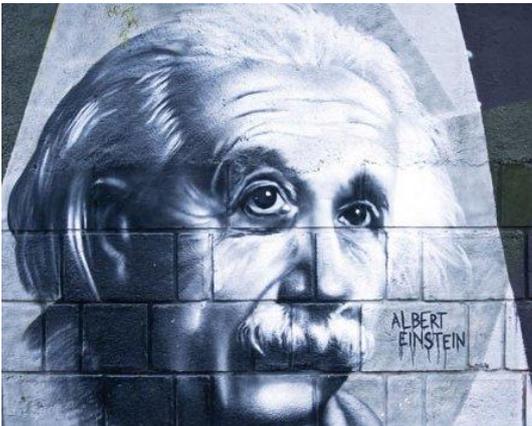


THE HISPIAN

7th August 2015

4 Quick ways to understand Einstein.

Most of you know who Albert Einstein is, or have some vague idea of the scientist with the wacky hair. What people have a hard time understanding are the theories that made Einstein a household name. According to Sheldon Herbst, from the University of Witwatersrand, this is because most of us are locking into a way of looking at the physical things in our universe based on the nearly 300-year-old theories of Isaac Newton. “Until we can speak to an 8-year-old and tell her that space-time is unified, and she doesn’t look puzzled, then we have not been freed from our Newtonian minds.” Here are four ways of understanding one of Einstein’s ground-breaking theories.



1. There are two types of relativity

One, called the general theory of relativity – says that space and time are actually different aspects of the same thing – and that this space-time can be warped and bent. The other, the special theory of relativity, deals with how things look different to people in different places, or when moving at different speeds.

2. Special relativity says the speed of light is always the same, no matter how fast you are going

If you are travelling at 120km/h in your car at dusk, and you switch on the car’s headlights, those lights are not travelling at 120km/h plus the speed of light. Their speed is always “the speed of light”. This sounds counter intuitive, but the simple fact is that the speed of light is constant and never changes.

3. Time moves differently for people observing it differently

If you are playing a game of table tennis at the roadside, and you bounce a ball twice in the same spot – it’s pretty obvious to you that the ball bounced twice in one spot. But if someone else is playing a game of table tennis on the back of an open truck, and they bounce the ball twice on the same spot as they drive past you, to you it looks like the ball bounced in two different places because the truck is moving. To the person on the truck however, the ball bounced twice in the same spot. This can apply to how time is measured. If it takes one second for the ball to bounce twice – the player on the truck’s one second will seem longer to you on the roadside because according to you the ball had to cover more distance in its bounces than yours. Einstein once told his secretary when she was bothered by inquisitive interviewers, who wanted to know what relativity really meant, to answer: “When you sit with a nice girl for two hours you think it’s only a minute, but when you sit on a hot stove for a minute you think it’s two hours. That’s relativity.”

4. The theory of special relativity is the stuff of science-fiction

The twin paradox is a thought experiment used by scientists to think about special relativity.

Let’s take a pair of identical 20-year-old twins. One is put onto a rocket and sent to our second nearest star, Alpha Centauri, almost at the speed of light. The other sits at home and bides her time. When the one in the rocket returns back from her nearly eight-year round trip – she will be eight years older, but her twin sister will be a pensioner. It might sound like science-fiction, but according to special relativity, this is entirely possible.

THE HISPIAN

7th August 2015

Malaria Vaccine – How good is “good enough”?

The first malaria vaccine is set to be given the green light by regulators today, opening the door for the World Health Organization to recommend its use in developing countries. But in this week's “Scrubbing Up”, Dr Seth Berkley, chief executive officer of GAVI (the Vaccine Alliance), and Dr Mark Dybul, executive director of the Global Fund to Fight Aids, Tuberculosis and Malaria, say it won't be a straightforward decision. How effective does a vaccine have to be before it should be made available? This is



far from straightforward. Clearly it needs to be capable of preventing disease, but to what extent? None are 100% effective. So in the cold light of day, for most countries it comes down to a complex calculation based on the cost effectiveness, lives saved, illness avoided and the availability of other effective interventions. For highly effective vaccines - ones which offer a high level of immunity - this normally proves uncontentious, but what about ones that are less effective? How much protection do they need to provide in order to justify their use? Such is the question World Health

Organization (WHO) experts will now be preparing to ask themselves as they consider whether or not to recommend the world's first malaria vaccine for use in affected countries in Africa. That's because, today, the European Medicines Agency is effectively giving the GlaxoSmithKline (GSK) vaccine - called Mosquirix - a green light.

'Many unknowns'

With nearly 200m cases of malaria every year, resulting in the deaths of around 1,200 children every day, this may seem like a no brainer. However the decision is a complex one. We don't know, for example, if the vaccine will give people a false sense of security. Clinical trial data suggests that Mosquirix offers only partial protection, preventing one in three cases of clinical malaria, a relatively low success rate compared to other approved vaccines. What's more, the clinical trials were carried out with the vaccine used in conjunction with high use of other interventions, such as long-lasting insecticide treated bed-nets and anti-malarial drugs. So we don't really know how effective the vaccine is by itself or how well it would perform outside the controlled setting of a clinical trial. In fact there are still many unknowns.

We don't know, for example, if the vaccine will give people a false sense of security and lead to reduction in the use of bed-nets and other interventions. So, if Mosquirix can potentially save lives or reduce illness now - even if only in one in three cases - then can we really justify holding off? Given the vast scale of the number of people affected, we have a duty to fill these gaps in our knowledge. Indeed, governments of malaria-affected countries are keen to see a malaria vaccine soon. For many countries malaria is a hugely important issue and a big drain on their economies.



Not only does it kill 584,000 people every year, the vast majority being African children under the age of five, but through recurring sickness it takes many adults out of work for prolonged periods.

THE HISPIAN

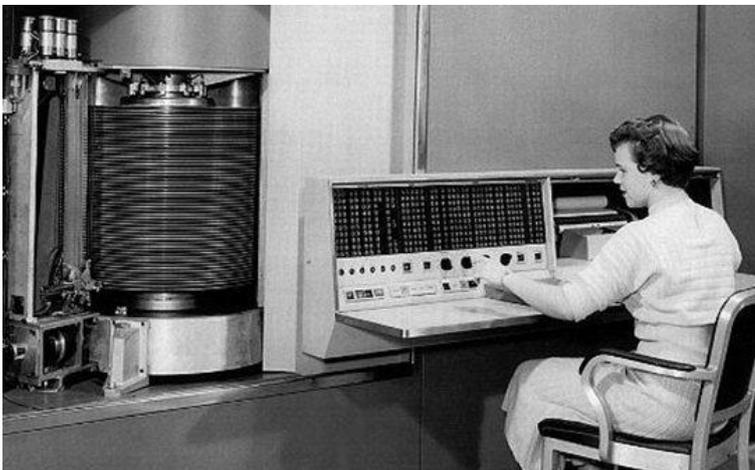
7th August 2015

Who needs more than 16k of RAM?

South Africa has a rich computing history, with some of the first machines in the country dating back to 1921.

The first real computer milestone for South Africa was when the government bought a modern “electronic tabulator” from IBM in 1952. It was also the year IBM South Africa was formed.

The most desired machine at the time was the IBM 407 Accounting Machine – the last and best of the all-electromechanical IBM accounting machines. The IBM 407 prepared reports and records from punched cards. The computing device then accumulated totals, subtotals, and other statistics in counters made of gears, and printed the results on its integrated 132-column line printer. Early programmers also found ways to make the IBM 407 act as an input/output device, making it more than a mere calculating unit.



IBM told us that the first IBM 305 RAMAC in South Africa was delivered to a brokerage firm in 1959. The IBM 305 RAMAC (Random Access Method of Accounting and Control) was the first commercial computer that used a moving-head hard disk drive for secondary storage. (See the pic below for an idea of disk size. – 2kb on that disk. – ED.)

The IBM 305 RAMAC was an electronic general purpose data processing machine that maintained business records on a real-time basis. The 305 was one of the last vacuum tube

systems designed by IBM, and more than 1,000 of them were built before production ended in 1961.

In 1960, the first IBM 1401 data processing system in South Africa was installed in the IBM Service Bureau in Johannesburg. The all-transistorised IBM 1401 data processing system was first unveiled in October 1959. The computer weighed about *five tons* and had *16 kilobytes* of memory. The IBM 1401 was the company’s first affordable general-purpose computer, and placed the features found in electronic data processing systems at the disposal of small businesses.

Rhodes University was the first university in South Africa to install a computer – an ICT 1301 in November 1965. Mike Lawrie was the customer engineer for the computer, who said one of the “fun” things run on the device was a dating program for the Arts and Science Ball in September 1967.

“The idea was that the computer would give you a shortlist of possible partners to invite to the Ball,” said Lawrie.

So even back then, dating sites were popular and next time you complain that your laptop is too heavy, take another look at these pics.

