Health Action International Asia Pacific (HAIAPti
(in collaboration with USM TWN DMDC IIUM)

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HAI AP News

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HAI AP Est. 1981

Health Action International (HAI) was formally founded in Geneva in 1981 and coordinated initially from Penang. In 1995 Health Action International Asia Pacific (HAI AP) was formed in the Asia Pacific Region as part of the international collaborative network to increase access to essential medicines and improve their rational use through research excellence and evidence-based advocacy. HAI AP is committed to strive for health for all now in line with the Peoples' Health Charter. *HAI AP News* is the official newsletter of Health Action International – Asia Pacific and presents the happenings in the regional campaigns for more rational and equitable health policies and carries material in support of participants' activities.

In this issue

August 6 and 9, 2025. respectively, saw the 80th anniversary of the atomic bombs dropped on Hiroshima and Nagasaki. One Malayan student survived the Hiroshima bombing in August 1945. His story leads this HAIAP News.

The end of British colonial rule in India and the establishment of an independent Indian nation was achieved on August 15, 1947. This day in August is celebrated annually as Independence Day in India.

In this Issue Uma Devi presents a comprehensive analysis of the multifaceted challenges associated with AMR.

World Antimicrobial Resistance Awareness Week (WAAW) falls from November 18-24 this year. Important and exciting activities are being planned and we look forward to hearing about and learning from experiences.

Battles for affordable access to essential medicines continue. There have been some victories but a huge range of challenges remain. There are many different 'angles' that need to be addressed.

Where battles against smoking have been successful the tobacco industry is succeeding again with a very lucrative black market. Australia's experience is shared.

Interpol has intercepted a significant haul of illicit pharmaceuticals in Malaysia and Dr Raina McIntyre explains why we must not forget about small pox.

Hard copies of ***HAIAP at 40*** are available free but postage needs to be covered.
Contact linda@twnetwork.org

It can be downloaded free of charge at:

https://www.twn.my/title2/books/pdf/HAIAP%20at%2040.pdf

Remember August 6 and 9, 1945

Dzulkifli Abdul Razak

August 6 and 9, 2025. respectively, saw the 80th anniversary of the atomic bomb on Hiroshima and Nagasaki.

This year's anniversary saw the extended aggression beyond Gaza!

Eighty years ago, two atomic bombs were dropped on two cities, two days apart. The current Gaza aggression as seen thousands of bombs dropped on an entire 'strip' of land involving millions of people - still counting!

The 80th anniversary therefore calls on the international community to reflect on its failure to contain such aggressions involving major players, made worse by global instability and uncertainty. The voices of the survivors of such horrific aggressions are vital to hear and for others to consider in order to raise 'new' consciousness, especially among the next war-prone generations.

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‘That’s why he lived’: a Malaysian survivor’s memories of Hiroshima

Dzulkifli Abdul Razak (Dzul) tells *Free Malaysia Today* of his late father's experience as a student at Hiroshima University when the atom bomb was dropped on August 6, 1945.

https://www.freemalaysiatoday.com/category/leisure/2025/08/06/thats-why-he-lived-a-malaysian-survivors-memories-of-hiroshima

Azureen Zainal August 6, 2025

Malayan citizen Abdul Razak Abdul Hamid in his uniform from Hiroshima University where he had been studying on scholarship in 1945.

The atomic bombs dropped by the United States on Japan tore through the fabric of time, ending World War II, ushering in the Atomic Age, and jolting the world into the Cold War.

While world leaders struggled to process the shockwaves from Hiroshima and Nagasaki – before these events were etched into the annals of civilisation – countless victims on the ground experienced an immeasurably intense tragedy.

‘I believe he was given a responsibility by God to survive and tell the story of what happened. That’s why he lived,’ said Dzulkifli Abdul Razak, recalling the story of his father, Abdul Razak Abdul Hamid – the only Malayan citizen to have survived the world’s first nuclear disaster that claimed over 140,000 lives.

Razak, then a 19-year-old student from Penang, had been on a scholarship from the Japanese government to study at Hiroshima University and was in a lecture room when the bomb went off.

‘My father said at first, everything went pitch black. Then there was a flash, like lightning. Then black again. Only after that did the building collapse. The roof came down but didn’t crush him. He was unconscious under that roof for a whole day.’

Razak then woke up in what remained of the classroom, sunlight streaming through the rubble. ‘He crawled out, following the sunlight, but could not recognise any of the buildings around him. It looked like a barren, desolate plain.’

With his first instinct being to return to his lodgings, Razak headed towards a river near the campus that could guide him back to where he lived.

Walking along that river opened his eyes to the consequences of that decision made in Washington that day.

‘Bodies were scattered everywhere,’ Dzul said. ‘Along the river, bodies had been swept downstream. People were suffering – and everyone was desperately thirsty.

‘My father brought them water but, after they drank, they all died – either from radiation or the shock of the difference in temperature between the water and their bodies.’

Dzul remembers his father telling him that the clothing of survivors had been fused to their skin due to the intense heat. ‘It was as if your body bore the pattern of the clothes you were wearing.

‘Some people would pull at their own hair in agony and it would fall out.’

These horrifying memories were retold time and again by Razak – stories passed down to Dzul now emeritus professor at Universiti Sains Malaysia.

‘Every Aug 6, my father would gather us siblings and retell what happened on the day the atomic bomb was dropped on Hiroshima in 1945,’ he said.

Razak's connection to Japan never faded; after his return from Hiroshima, and especially after his story became known, their family home was rarely without visitors.

'Our house became like a site for visits. My mother would prepare traditional snacks, and guests would often bring gifts.'

Razak died on July 18, 2013, less than two weeks after his 88th birthday.

Photos and personal items that belonged to Abdul Razak are safely preserved by the family.

Dzul describes his father as a deeply patient man whose stories always carried a message that still rings true today amidst ongoing political strife, racial rhetoric, and societal discord.

'Don't let our lives be filled with conflict,' Dzul recalled his father's wise words. 'Yes, Malaysia is peaceful today without bombs exploding, but in the hearts and behaviours of some, the seeds of war still grow.'

Two other Malayans – Nik Yusof Nik Ali and Syed Omar Syed Mohammad Alsagoff – had also been in Japan during the tragedy. They died at just 17 years old from radiation exposure while attempting to leave the campus.

Nik Yusof was buried in Nagano, and Syed Omar in Kyoto.

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In the video called *Bisik Hiroshima kepada Malaysia: Jangan biar hidup penuh seketa* Dzul explained:

> My father showed no signs of radiation at all. Only a scar on the back of his neck caused by a piece of wood that pierced him. He was only 1.5 km away from the blast site under a collapsed wooden building but he was not crushed. He came out 2 days after the blast at a time when radiation levels were still high.
>
> Still after conducting annual tests, the Japanese found he was not affected. He underwent the same medical examinations every year. So how could it happen? According to him it was the will of God. But I feel that perhaps my late father survived because he was given a responsibility - to tell the story of what happened - to pass on first hand information.

For Dzul, his father's message remains deeply relevant in today's society which is riddled with political conflict, racism and online slander.

> Every year on August 6 my siblings and I would sit together as our late father retold his experience, and he would always end by saying 'Never let there be war'. He truly hated war. But since war might seem like something distant from us he would say 'Don't let our lives be filled with conflict'.
>
> 'We must learn from history. Let the world take heed - there are no true victors in war. Never again should Hiroshima and Nagasaki be allowed to happen! Never let there be war!'

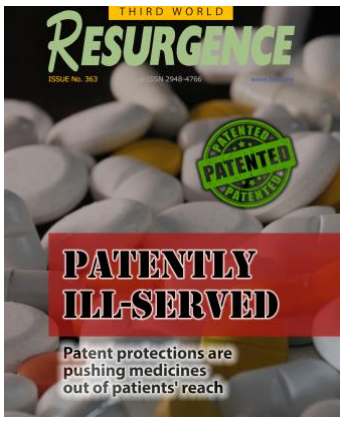
Please look at this video

https://youtu.be/f9Rpb80m-10

Third World Resurgence #363 2025/2

TRIPS@30: Thirty years of widening inequities in access to medicines
By *K.M. Gopakumar*
The TRIPS Agreement, the treaty that sets international standards for the protection of intellectual property, turned 30 this year. In its three decades of implementation, the stringent patenting requirements imposed by the agreement have often thwarted affordable access to medicines in developing countries.

WHO Pandemic Agreement: A win for multilateralism, a missed opportunity for public health?
The imperative of access to medicines and other essential health products was made painfully evident during the COVID-19 pandemic when unequal global distribution of vaccines wrought devastating consequences. A milestone agreement was adopted in May to improve international cooperation in tackling such health crises but, as the following *Third World Network* analysis reveals, fails to sufficiently plug gaps in access and in other areas of pandemic prevention and response.



No assurance of technology transfer during pandemic outbreaks By *Nithin Ramakrishnan*
The Pandemic Agreement does not guarantee provision of technology for the manufacture of health products, undermining prospects of broadening production and availability of these items in times of emergency.

Protecting profits, endangering lives By *TWN*
The new drug lenacapavir marks a breakthrough in the fight against HIV/AIDS but manufacturer Gilead's aggressive use of the patent system to prolong its monopoly on production is impeding access.

The ever-present threat of evergreening By *Kanaga Raja*
Apart from lenacapavir, other crucial medicines have also been the target of patent evergreening by Big Pharma. *Kanaga Raja* looks at the case of the tuberculosis drug bedaquiline in Thailand.

Colombian civil society's fight for access to affordable medicines By *Juliana López Méndez*

Civil society groups in Colombia have long championed greater accessibility of patented medicines, culminating in a historic move by the country to break the patent monopoly on a key HIV drug.

Rare diseases and roadblocks to affordable treatment Policy gaps and the unrealised potential of compulsory licences By *Chetali Rao*

Medicines for rare diseases are among the most expensive pharmaceuticals – costing up to millions per treatment – due in large part to patent protections. Compulsory licensing can offer a way out of the price trap.

30 years of TRIPS and 20 years of patenting in Egypt: Why access to medicines might still be a challenge By *Heba Wanis*

In the face of strict, internationally imposed patenting requirements, Egypt continues to prioritise affordable medicines for its people.

ECOLOGY

Notes from a vanishing shore By *Sigrid Marianne Gayangos*

Amid overfishing, urbanisation and climate change, Filipino artisanal fishing communities are fighting to maintain their way of life.

ECONOMICS

Tax the rich and corporations to close the climate finance gap By *Franziska Mager*

By righting rigged tax systems, governments will be able to fund global climate solutions and still have billions left to invest in domestic development.

Steering AI towards the public interest By *Lean Ka-Min*

A recent paper provides a blueprint for fostering innovation in artificial intelligence outside the dictates of Big Tech.

WORLD AFFAIRS

Resistance works By *David Vine*

How small groups took on great powers and won a victory for decolonisation, Africa, indigenous peoples and more

For over half a century, a small Indian Ocean archipelago has been the focus of a David-and-Goliath struggle against British colonialism and US militarism – a struggle that has now yielded a positive outcome.

Haiti's political impasse By *Greg Beckett*

Haiti's current form of 'chokepoint governance' represents a structural transformation in how politics works in the country.

HUMAN RIGHTS

Comics and graphic novels can empower refugees to tell their stories on their own terms By *Dominic Davies and Candida Rifkind*

The growing genre of 'refugee comics' is disrupting a media landscape that tends to reduce migrants to either threats or victims.

WOMEN

Ten years after Ni Una Menos: Feminism, resistance and the future By *Maisa Bascuas*

Maisa Bascuas traces the trajectory of the popular feminist movement seeking to unify the struggle against social injustice in Argentina and beyond.

CULTURE

African music festivals and the politics of reclamation By *Achille Tenkiang*

If they can navigate questions of ownership, authenticity and exploitation, African music festivals hold promise of becoming genuine platforms for both celebrating contemporary continental artistry as well as honouring cultural heritage and memory.

Tobacco wars in Australia

Beverley Snell

Between 2019 and 2023, Australia experienced its steepest drop in smoking rates in the past 30 years, with the share of adults smoking falling from 11.6% to 8.8%.

Plain packaging, health warnings, restrictions on how smokes are displayed and education about the dangers of cigarettes have all helped lower tobacco smoking rates in recent decades.

The gains were hard-fought, particularly against fierce opposition from the tobacco industry, and have earned global praise.

However, there has been a concerning spike in cigarette smoking among older age groups particularly of cheap illegal cigarettes from an enormous black market.

https://www.theguardian.com/business/2025/jun/23/australia-tobacco-excise-vape-regulation-war-on-nicotine#:~:text=Patrick%20Commins%20Economics%20editor,recently%20in%20Harm%20Reduction%20Journal.

In Australia, vaping rates among younger Australians have declined, with the federal government action leading to a drop of over a third for those aged 15 and above. Vaping rates among children, particularly those aged between 14 and 17 has declined with some describing it as an embarrassment to be a vaper. It is not the same in other age groups.

The changes are alongside the broader 'war on nicotine', including high taxes on legal tobacco products and restrictions on e-cigarette sales, that have led to a flourishing black market.

In March 2025 a *Four Corners*[1] investigation followed a web of shipping routes, Middle Eastern factories, false documents, unmarked white vans and violent criminals, all fuelling the multi-billion-dollar tobacco industry.

We have gathered significant information from Four Corners and other sources.[2]

https://www.abc.net.au/news/2025-03-03/black-market-tobacco-manchester-cigarettes-four-corners/104978592

Dedicated smokers remain and no one buys legal smokes anymore unless they are absolutely desperate. Australia risks losing the 'war on nicotine' as illegal tobacco sales explode.

It is argued that unaffordable legal cigarettes and an effective ban on retail e-cigarette sales are responsible for the explosion in black market trade for both products.

With Australian cigarettes the most expensive in the world and crime associated with illicit tobacco and vapes rising, Australian health authorities are considering a move

[1] Four Corners is a respected Australian investigative journalism/current affairs documentary television program. https://www.abc.net.au/news/programs/4corners

[2] https://www.abc.net.au/news/2025-03-03/black-market-tobacco-manchester-cigarettes-four-corners/104978592

towards a 'harm reduction' approach. Are cheaper cigarettes the answer to squashing the illicit trade?

A packet of cigarettes costs up to $50 in taxes when sold legally but might be sold for as little as $15 under the counter.

'We want to make sure the growth in the illicit trade isn't undermining tobacco control,' Professor Becky Freeman, a leading expert in tobacco control policy in Australia said.

'We have done an excellent job on demand reduction,' she said. 'But we haven't controlled supply that well at all.'

'If we see any increases in smoking that would be very alarming. ... 'Freezing tobacco taxes at the moment makes sense – until we get enforcement sorted out there's no point in putting in extra taxes'.

A 2023 investigation by *The Age* [3] reported that some gangs were importing illegal cigarettes via container ports or manufacturing them locally. Illicit tobacco is sold through otherwise legitimate-looking stores, often owned or operated by front companies.

Illegally imported cigarettes are mostly sold in 'normal' tobacco shops and 'corner stores'. Cigarette buyers are quite aware where to find cheaper cigarettes. They are boxed in plain packaging, complete with a graphic image and the obligatory health warning — just like the ones available from a supermarket for two or three times the price.

'Manchester Classic Gold' is possibly the most prolific illegal, and counterfeit, cigarette brand on the market, imported in vast quantities. But there are many other 'brands' as well.

Manchester is produced in a multitude of colours and flavours, and while packs often feature health warnings, they're not compliant with Australian standards.

Manchester could potentially be legally sold in countries with little or no tobacco regulation, such as the Central African Republic, Serbia and the Democratic People's Republic of Korea.

United Nations Office on Drugs and Crime research expert Ted Leggett says: ' Manchester is not clearly packaged for legal sale almost anywhere in the world. 'They can just say, 'It's just business. We're just selling to a wholesaler. If they want our product; we sell it to them. We ship to them, they're responsible from that point on.'

Four Corners[4] found that usually there is no evidence the owners and operators of carriers are aware of the illicit cargo. It is possible they are the victims of a practice called 'piggybacking'.

Piggybacking occurs when a legitimate company's details are hijacked by smugglers to lessen suspicions at the border. In other cases, the sealed containers are simply addressed to warehouses rented by the importers.

They arrive in Australia's ports in container ships and slip into a highly organised system of storage and distribution.

The investigators found there are sophisticated smuggling operations, often involving organised crime. The operations often involve misdeclaration of goods, concealment within legitimate cargo, and the use of false documentation.

Methods of Importation:

In Australia, illegal tobacco products are typically imported by concealing them within legitimate shipping containers or through international mail, often using false declarations to avoid detection and taxation. Criminal syndicates exploit loopholes and vulnerabilities in customs and border control to smuggle the products, which are then distributed through various channels, including retail outlets and online platforms.

Fire bombings of tobacco shops

International crime gangs have been behind 140 fire-bombings since the tobacco wars began in March 2023 as warring factions have tried to seize control of Melbourne's illicit tobacco and vape market.

[3] 'How a turf war over illegal tobacco sparked a wave of firebombings across Melbourne'. The Age. 28 October 2023.

In Victoria, stores from Melbourne to regional areas selling illegal tobacco and vapes, have been incinerated by rival gangs. Stores have been burnt throughout Australia but Victoria seems to be the focus.

The **Melbourne tobacco wars** are an ongoing series of violent criminal incidents centred on turf wars between organised crime groups over control of the illegal tobacco trade. The groups use the violence, including shootings, arson, and petrol bombings to extort money from shop owners, forcing them to sell illicit tobacco products or pay a 'tax' to operate. The attacks that are fuelled by the high profits from the illicit tobacco trade as well as the lack of a licensing or registration system for tobacco retailers. The problem is difficult to track and control. Taskforce Lunar, established by Victoria Police, is investigating the conflict.

Over 100 people had been arrested in connection with the conflict as of March 2025.

Local tobacco crops still exist

Police are still detecting — and destroying — illegal tobacco crops, often concealed among other crops. But organised crime networks have become more sophisticated as demand for cheap cigarettes has grown, and they've adapted their operation from farming to importation.

Rohan Pike is a former Australian Federal Police (AFP) and Australian Border Force (ABF) officer who helped establish the original tobacco strike team, when the black market was, as he describes it, a 'modest problem'. He says criminal syndicates and outlaw motorcycle gangs have had their claws in tobacco since the days when the crop was legally harvested in Victoria.

Now he says 'We're easily the most expensive country for tobacco in the world and it was natural that crime was going to follow. It has become a very lucrative black market. The number one driver of the problem is the enormous price of tobacco products.'

https://www.abc.net.au/news/2024-05-30/cigarettes-flood-black-market-costing-billions-in-lost-revenue/103869440

Interpol crackdown on illicit pharmaceuticals worth US$1.5m in Malaysia

A recent exposure by Interpol has occurred in Malaysia

HAIAP News December 2012 included a feature: **Controlling counterfeit medicines in South East Asia - science and collaboration.**
https://www.haiasiapacific.org/wp-content/uploads/2014/03/HAIAPNews4Dec2012.pdf

In June 2025 illicit drug smuggling was in the news again. On 25 June 2025 recorded 769 arrests and USD 65 million in illicit pharmaceuticals seized in a global bust.

https://www.interpol.int/en/News-and-Events/News/2025/Record-769-arrests-and-USD-65-million-in-illicit-pharmaceuticals-seized-in-global-bust

https://www.youtube.com/watch?v=OecV0xGyZKoKUALA LUMPUR:

Malaysian authorities seized more than RM7 million (US$1.6 million) worth of illegal health products, as part of a global blitz targeting the online sale of illicit pharmaceuticals.

The products range from prescription drugs and over-the-counter supplements to traditional remedies. The sweep was part of Operation Pangea, an annual global bust coordinated by international police organisation Interpol.

This time, a six-months effort across 90 countries resulted in the seizure of 50.4 million doses of illicit pharmaceuticals worth US$65 million, highlighting the alarming scale of the global trade in unapproved and counterfeit medicines, said Interpol on Thursday (Jun 26).

Malaysian authorities seized more than RM7 million (US$1.6 million) worth of health products, as part of a global blitz targeting the online sale of illicit pharmaceuticals.

Interpol's acting assistant director of criminal networks Alfonso Meijuto Rodriguez told CNA that the duration of this year's operation was extended to six months in order to gain a better understanding of the issue.

'In previous editions of Operation Pangea, which lasted over a week, we noticed that much more data and information needed to be collected for a deeper

knowledge of the phenomena,' he added. 'So we decided to amplify the timeline.'

Nervous system agents, including psychostimulants, anti-anxiety drugs, and medications for Parkinson's disease, topped the list as the most seized product types.

Operation Pangea also saw the arrest of 769 suspects and the dismantling of 123 criminal groups worldwide. Interpol said that the seizures and arrests are the largest in the operation's 17-year history.

In total, law enforcement agencies launched 1,728 investigations and issued 847 search warrants, it added.

Tip-Offs and Takedowns

Malaysian authorities said its enforcement action was prompted by public tip-offs submitted online.

Mohd Zawawi Abdullah, director of the pharmacy enforcement division at Malaysia's Ministry of Health,

said its public complaints management system allows people to report suspicious products or sales. 'Once we verified the complaint, our team moved in to carry out enforcement actions,' he said.

Tens of thousands of boxes filled with illicit medicine were discovered by authorities in a raid across the Klang Valley region surrounding Kuala Lumpur. The sting targeted warehouses believed to be distribution hubs for the online trade of illegal pharmaceuticals. It also covered shophouses, and residential units where pharmaceuticals were being stored and repackaged illegally. Officers from the health ministry led the charge, alongside local authorities and Interpol.

As part of the operation, authorities also intercepted travellers arriving at Kuala Lumpur International Airport with large quantities of unregistered medicine that far exceeded the amounts permitted under their prescriptions or visa durations.

Hidden among personal items, the drugs were believed to be part of a wider network of imports disguised as personal use, but intended for sale.

Malaysian authorities seized more than RM7 million (US$1.6 million) worth of health products, as part of a global blitz targeting the online sale of illicit pharmaceuticals.

Online trade

Operation Pangea also saw the shutdown of approximately 13,000 criminal-linked websites, social media pages, channels, and computer bots used to market and sell illegal or falsified medicines.

Interpol commended the efforts of various national authorities in monitoring and taking down the online listings.

'Malaysia and Singapore have been very active participants in this operation for years, with the steady shutdown of listings as an important component in the fight against pharmaceutical trafficking,' said Meijuto Rodriguez.

Malaysia was responsible for 7,000 of the takedowns, the highest number recorded by any country. Malaysia was followed by Russia, Ireland, Singapore and Iran.The five countries collectively accounted for 96 per cent of all listings taken down.

'Unlike physical stores, online sellers can disappear or change the platform overnight, which makes our enforcement more complicated,' said Zawawi.

'Many people don't realise the risk of unregistered products and are easily misled by flashy advertisements or social media influencers.'

The trade in counterfeit medicine is not just a crime but a threat to public health linked to more than a million deaths each year, according to the World Health Organization.

Smallpox could rise again, says bioterrorism expert

In an extract from her book Vaccine Nation, **Professor Raina MacIntyre,** respected Australian epidemiologist says the virus is extremely contagious, highly airborne and could be synthesised.

https://www.ausdoc.com.au/news/smallpox-could-rise-again-says-bioterrorism-expert-professor-raina-macintyre/0

Raina MacIntyre 13 May 2025

'My interest in smallpox started in 2006 when I was on a

committee that had to plan for potential biological warfare or terrorism.

'Bacteria and viruses that can be used as bioweapons are classified into three groups, with the highest risk group referred to as category A. It includes smallpox, anthrax, plague and Ebola.

'When I studied bioweapons, I felt that smallpox — caused by the variola virus — was the most serious threat as it was highly contagious and killed one-third of the people who caught it. It was a scourge on Earth for

thousands of years, causing recurring epidemics and at least 500 million deaths. One in three infected people died until it was eradicated in 1980 using vaccines.

'I did a study to quantify the risk of category A bioweapons and found that smallpox and anthrax ranked at the top of the list. Yet policymakers thought smallpox was unlikely because it was eradicated.

'Intelligence agencies worry that some countries may have secret stockpiles of the virus but also that it could be made in a lab.

'A decade after eradication, virologists in Canada created a very closely related virus from scratch, proving that smallpox, too, could be made in a lab. it is called synthetic biology.

'Edward Jenner's discovery of the cowpox vaccine eventually led to the eradication of smallpox, but the story is an interesting one.

'Initially, the WHO aimed to use mass vaccination, but it was difficult, if not impossible, in some countries because of vast distances and widely dispersed remote and rural populations.

'It was left to Dr William (Bill) Foege, former director of the US Centers for Disease Control from 1977 to 1983, to come up with the brilliant idea of ring vaccination.

'While working on smallpox eradication in Africa, he figured out that, if you can trace the contacts of a case of smallpox and vaccinate them, you can bring an epidemic under control.The time it takes to become ill after being exposed to the smallpox virus is 12 days on average.'

Dr William Foege, University of Washington:

'Because of the relatively long incubation period, the vaccines work well even if given after exposure to smallpox, albeit with reduced effectiveness compared with primary prevention.

'Although in the era of smallpox about 60% of contacts of a case of smallpox became infected, it means there was time for public health teams to trace contacts and vaccinate them. And that is how eradication of smallpox was achieved and how epidemics were controlled in the last hotspots of the world, such as India.

'One thing that gets forgotten is that smallpox was highly airborne, with the potential to transmit over long distances.

'In the last 100 years before eradication, when community outbreaks were becoming more uncommon, the British observed that smallpox would occur in a radius of about 1km from smallpox hospitals in the community.

'They noticed the same thing in communities around smallpox ships on the River Thames. These ships were used to treat smallpox cases and separate them from the community, with very strict rules forbidding patients from coming on shore.

'The British termed this phenomenon 'aerial convection'. They also introduced policy changes to restrict the location of such facilities close to highly populated areas.

'Much of this knowledge has been lost since eradication, and I have no doubt that, if a smallpox epidemic occurred, the infection control experts would tell us to wash our hands as they did with COVID-19.

'I led research documenting and collecting all the long-range transmission events that showed how far smallpox could be transmitted through the air. In many cases, it was 1km or more. There were also several examples of transmission inside buildings, from floor to floor.

'The 1978 infection and subsequent death of Janet Parker, a medical photographer in the UK who was working on the floor above a smallpox laboratory at the University of Birmingham, is one example.

'The scientist was conducting research on variants of smallpox virus known as whitepox viruses, which were considered to be a threat to the success of the WHO's eradication program but he was careless with safety around his experiments, resulting in the virus somehow floating up to the floor above (assumed to be through ventilation ducts) to infect poor Janet Parker. She was the last person known to have died from the virus.'

[Note funeral arrangements taken - at the end of the following piece]

Janet Parker: Photographer in wrong place at the wrong time

Janet Parker had a splitting headache. A migraine, she thought, as she knocked off work early on Friday afternoon, August 11, 1978, and headed home to the duplex she shared with her husband on Burford Park Road in the Kings Norton section of Birmingham, England. By midweek, she developed a rash, prompting a doctor's visit. He prescribed an antibiotic, but the rash persisted.

She was sent to East Birmingham Hospital, where she was admitted at 3 p.m. on Aug. 24. Doctors suspected Variola major, a serious form of smallpox, which was thought to have been eradicated globally. Electron microscopy of vesicle fluid confirmed the diagnosis and Parker was immediately transferred to Catherine-de-Barnes Isolation Hospital in Birmingham.

The hospital was one of a handful of isolation facilities remaining in the United Kingdom. Built in 1907, the Catherine-de-Barnes campus once housed as many as 16 victims of diphtheria, typhoid fever and smallpox but, as risks from these diseases diminished, the need for 'fever hospitals' also declined. Indeed, Catherine-de-Barnes had been mothballed, though caretakers Leslie and Dorothy Harris had spent the previous 11 years cleaning and preparing the hospital so it could be readied for patients on an hour notice.

Within an hour, the British press were tipped off. By morning, a full-fledged panic ensued.

Although the inquiry found no certain cause for Parker's contraction of the disease, the most likely culprit was the ductwork that ran from the lab to a small room in Parker's office where she spent the

greater part of one late July day on the phone, ordering photographic supplies.

Parker was the final victim of the epidemic, dying on Sept. 11, 1978. Her body was cremated to prevent spread of the disease and the crematorium was closed and thoroughly cleaned after the procedure. The funeral home handling her body canceled all other funerals and the hearse carrying her remains was escorted by unmarked police cars to minimise the possibility of an accident. The hospital ward where Parker spent her final days was sealed for five years. In October 1979. authorities fumigated the East Wing of the Birmingham Medical School.

Read more on Janet Parker and the interesting events around her sad misfortune. https://tinyurl.com/98t98zz8

Feature: Antimicrobial Resistance - A Multifaceted Global Threat

Uma Devi, TWN HAIAP

Introduction

Antimicrobial resistance (AMR) poses an unprecedented threat to global health, food security, and development. As bacteria, viruses, fungi, and parasites evolve mechanisms to survive antimicrobial drugs, the effectiveness of modern medicine is rapidly diminishing. The year 2025 has seen a range of alarming developments—from soaring child mortality linked to resistant infections, to environmental factors accelerating resistance spread, and critical gaps in surveillance and stewardship around the world.

This bulletin synthesises seven pivotal stories from 2025 that illustrate the multifaceted nature of the AMR crisis. By examining issues spanning clinical challenges, environmental science, policy, and international cooperation, the report aims to inform health professionals, policymakers, researchers, and the public about the current landscape of AMR and the urgent actions needed to contain it.

The Paediatric Toll of AMR: 3 Million Child Deaths in 2022

Antimicrobial resistance (AMR) has long been a looming threat to global health, but a recent revelation has pushed it to the forefront of international concern. In April 2025, a ground-breaking study presented at the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Congress revealed a shocking statistic: over 3 million child deaths in 2022 were associated with AMR, particularly in Southeast Asia and Africa. The research, led by the Clinton Health Access Initiative (CHAI) and the University of Melbourne, paints a grim picture of a global paediatric crisis driven by systemic healthcare failures.

At the core of this tragedy lies the unregulated and excessive use of powerful antibiotics, notably those categorised under the WHO's 'Watch' and 'Reserve' lists. These drugs are meant for use only when first-line treatments fail. Yet, due to poor sanitation, lack of proper diagnostic tools, under-resourced health systems, and poor supply systems, healthcare providers in many low- and middle-income countries (LMICs) are compelled to resort to these drugs as first-line treatments.

This widespread misuse not only contributes to drug resistance but also reflects deeper systemic issues. Basic healthcare infrastructure remains weak, and antibiotic stewardship—especially in paediatric care—is virtually nonexistent in many regions. In countries with limited diagnostic capabilities, clinicians often prescribe antibiotics 'just in case,' creating fertile ground for resistant pathogens to flourish.

The pathogens don't stay confined to one location. In today's interconnected world, resistance can spread rapidly, crossing borders and jeopardising treatment efficacy globally. What begins as a localised crisis in underdeveloped health systems can quickly evolve into a global public health emergency.

The implications of this crisis are profound. Children, particularly those under five, are already among the most vulnerable to infectious diseases. When infections become resistant to treatment, outcomes are often fatal. Moreover, resistant infections extend hospital stays, increase healthcare costs, and strain already overburdened health systems.

To address the crisis, experts have issued an urgent call to action:

- Strengthen AMR surveillance systems, particularly in LMICs, to generate real-time data on resistance trends.
- Promote rational use of antibiotics through national stewardship programs targeting paediatric care.
- Ensure equitable global access to first-line antibiotics, diagnostic tools, and basic sanitation.
- Build capacity in healthcare systems, including training healthcare workers in rational antibiotic use and improving infection prevention and control.

Solving the AMR crisis among children isn't just a scientific or medical challenge—it's a moral imperative. Without coordinated international action, we risk losing an entire generation to diseases we once knew how to cure.

For further reading and source details:
CIDRAP News Article – April 14, 2025
https://www.cidrap.umn.edu/avian-influenza-bird-flu/more-h5n1-detections-us-dairy-cows-and-poultry-who-unveils-h5-surveillance

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Climate Change Fuels AMR Spread: A One Health Emergency

The climate crisis is no longer a distant environmental issue—it is now deeply entangled with one of the most urgent threats to human health: antimicrobial resistance (AMR). A major 2025 review published in *Discover Public Health* has brought global attention to the alarming ways in which climate change is accelerating the spread of drug-resistant bacteria, with potentially devastating consequences.

At the heart of this issue lies a complex web of interlinked systems: the environment, human health, agriculture, and microbial ecosystems. This is where the One Health approach becomes critical—recognising that the health of people is closely connected to the health of animals and the environment. The review underscores that climate-driven changes are not just altering habitats—they are reshaping the behaviour, evolution, and spread of microbes, including those that resist antibiotics.

Rising global temperatures allow pathogens to survive in environments that were previously inhospitable. Warmer water bodies, for instance, now support larger populations of bacteria, including resistant strains. At the same time, extreme weather events—such as floods and hurricanes—can spread resistant pathogens across communities by overwhelming sanitation systems and contaminating water supplies.

Agricultural practices also play a significant role. As temperatures rise, pests and diseases affecting livestock become more frequent, prompting increased antibiotic use in animal farming. This cycle contributes to resistance not only in animals but also in the environment through runoff and waste, which can carry resistant bacteria into soil and waterways.

Moreover, poor waste management and pollution from pharmaceuticals exacerbate the crisis. In many parts of the world, antibiotics are released untreated into rivers and streams, creating ideal breeding grounds for resistant microbes. Combined with changing weather patterns and population displacement, the resistant strains can spread far and fast.

The review calls for immediate, integrated action on AMR and climate change, warning that treating them as separate challenges will only delay solutions.

Recommendations include:

- Integrating AMR into national climate adaptation plans.
- Strengthening environmental surveillance of antibiotic-resistant bacteria, particularly in water and soil systems.
- Reducing antibiotic use in agriculture, while promoting alternatives such as vaccination and improved animal husbandry.
- Improving waste treatment infrastructure, especially near pharmaceutical manufacturing hubs.
- Educating stakeholders across sectors—from healthcare workers to farmers—on the interconnected risks posed by climate change and AMR.

Actions require cooperation across disciplines and borders. The One Health framework offers a blueprint, but it demands political will, sustained funding, and global coordination.

Ignoring the climate-AMR connection means allowing two slow-moving crises to feed into each other—until the consequences become irreversible. The world must act now, not only to halt climate change but to protect the antibiotics that underpin modern medicine.

For further reading and full report:
Discover Public Health – 2025 Review on AMR & Climate
https://doaj.org/article/d2811439a1ed4435bbcaa4435f8d3611

https://wedocs.unep.org/bitstream/handle/20.500.11822/38373/antimicrobial_R.pdf

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WHO Releases AMR Research Bibliography for South-East Asia: A Crucial Tool for researchers, policymakers, and healthcare professionals

In June 2025, the World Health Organization (WHO) took a vital step toward strengthening antimicrobial resistance (AMR) efforts in South-East Asia by publishing a comprehensive AMR research bibliography spanning two decades of regional studies. Covering the years 1990 to 2010, this curated resource offers a deep dive into the evolution of AMR research across one of the world's most vulnerable yet critically important regions.

The release of this bibliography marks more than an archival exercise—it's a strategic move to equip policymakers, researchers, and health planners with the historical and scientific context necessary for targeted interventions. With AMR escalating as a global health crisis, the South-East Asia Region (SEAR)—home to nearly two billion people—is among the most at-risk due to its dense population, high infectious disease burden, and widespread antibiotic misuse.

By documenting research trends, gaps, and institutional strengths across countries such as India, Indonesia, Bangladesh, Sri Lanka, and Nepal, the WHO hopes to inspire evidence-based action plans that reflect the region's specific challenges and capacities.

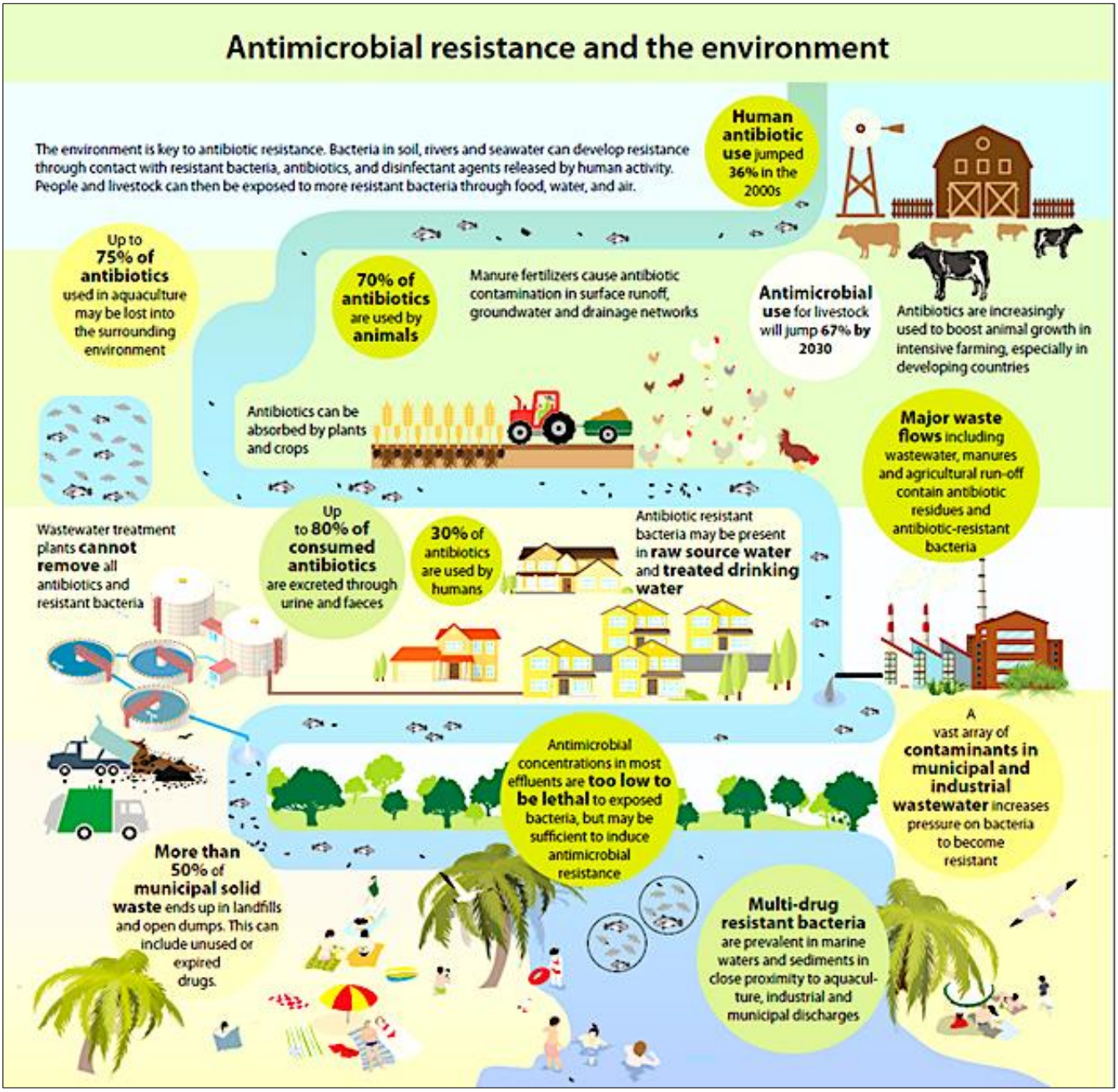
Why it Matters Now

Despite AMR gaining traction as a global policy issue in the past decade, many regional strategies have lacked

continuity, coordination, and data. One of the persistent challenges has been the absence of a clear record of past scientific work, making it difficult for policymakers and researchers to avoid duplication, identify gaps, or build on previous findings. The WHO's bibliography addresses this void.

- Facilitating collaborations by identifying regional experts and institutions with experience in AMR work.
- Enabling smarter funding allocation by guiding donors and governments toward impactful areas of research and intervention.

The bibliography also supports WHO's broader push for 'One Health' coordination in South-East Asia—



Key benefits of the bibliography include:

- Mapping research density across countries and disciplines, helping nations identify where their strengths and weaknesses lie.
- Highlighting under-researched areas, such as resistance in non-hospital settings or among animal and environmental reservoirs.

acknowledging that AMR cannot be tackled by the human health sector alone. Agriculture, veterinary care, environmental science, and pharmaceutical regulation all play vital roles in containing the spread of resistance.

A Foundation for the Future

As countries in the region align with Global Antimicrobial Resistance and Use Surveillance System (GLASS) standards and develop their own National Action Plans,

this resource serves as a foundation for strategic planning. It helps countries move from intention to implementation, ensuring that policies are grounded in regional realities rather than borrowed models.

It's also a timely reminder that progress against AMR must be built on knowledge—and that history has valuable lessons to offer. Moving forward, WHO encourages all stakeholders to use the bibliography not only as a reference but as a living tool, to be updated and expanded as the region's AMR response matures.

For researchers, this is a long-overdue roadmap. For policymakers, it's a compass pointing toward smarter, stronger interventions. For the region, it could be a turning point in the battle against drug resistance.

For further reading and to access the full bibliography: https://twn.my/title2/health.info/2025/hi250601.htm

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UK closes major AMR program amid aid cuts

By Third World Network

The UK government has quietly shut down the Fleming Fund, a £265 million programme designed to combat antimicrobial resistance (AMR) in developing countries, following cuts to the international aid budget. The decision was confirmed during a parliamentary committee hearing and reported by The Telegraph and The Observer.

Established in 2015, the Fleming Fund has played a key role in Britain's global health leadership, funding surveillance systems and laboratory infrastructure across 25 countries in Africa and Asia. Named after Alexander Fleming, the British scientist who discovered penicillin, the fund was created in response to the O'Neill Review to strengthen the global response to antimicrobial resistance (AMR)—a growing crisis responsible for 1.27 million deaths annually and estimated to cause millions of deaths per year by 2050 without urgent intervention.

While AMR disproportionately affects lower-income countries, it also poses a major domestic threat. In 2023, over 66,000 people in England suffered serious antibiotic-resistant infections, contributing to an estimated 30,000 deaths annually. Experts warn that infections acquired abroad can—and do—reach UK hospitals through travel and migration.

During a parliamentary committee hearing, Ashley Dalton, Parliamentary Under-Secretary for Public Health, was asked directly about the decision to close the Fleming Fund. She acknowledged the move, explaining that the government faced difficult financial choices and that, although the Fleming Fund itself would end, the partnerships, data sharing, and expertise it fostered would continue.

A government spokesperson later confirmed the decision, telling The Observer that to fund a necessary increase in defence spending, the government had reduced its development assistance budget. These aid cuts are part of a broader shift under Prime Minister Keir Starmer's government, which earlier this year lowered the UK's development assistance from 0.5% to 0.3% of gross national income—a continuation of a downward trend from prior governments.

Global health experts warn of severe consequences

Jeremy Knox, Head of Infectious Disease Policy at Wellcome, emphasised the risks, stating:

'The global response to antimicrobial resistance (AMR) is still not going far or fast enough to tackle this crisis. For the last decade, the Fleming Fund has been a flagship example of the UK's global leadership on AMR. As with many areas of global health, cuts like these will be felt most acutely in countries in Africa and Asia. It also risks sending a signal that the UK is dialling back its commitment to global health efforts at a challenging moment.'

Lord Ara Darzi, executive chair of the Fleming Initiative and director of the Institute of Global Health Innovation at Imperial College London, called the closure 'a catastrophic abandonment of Britain's leadership.' He warned that cutting this funding is 'tantamount to dismantling radar systems during wartime' and risks undermining the UK's domestic and international biosecurity.

Professor Andrew Seaton, President of the British Society for Antimicrobial Chemotherapy (BSAC), highlighted the potential damage to partnerships and warned that the move could compromise the UK's biosecurity. He described the closure as a false economy, pointing out that sustained investment in AMR could generate a global economic return of nearly $1 trillion by 2050.

Adam Dixon, Adam Smith Chair at Panmure House, Edinburgh Business School, added:

'The premature closure of the Fleming Fund not only jeopardises years of progress in global AMR surveillance, but also sends the wrong signal about the UK's commitment to international health security.'

Why it matters

The Fleming Fund's closure comes amid a broader global retreat from international health commitments, with major donors including the UK, US, Germany, and France all scaling back aid. In an increasingly interconnected world, such policies ignore the reality that drug-resistant infections are a cross-border threat.

The UK has long been regarded as a leader in the fight against AMR. With the closure of the Fleming Fund, that reputation and its vital impact—may now be at risk.

Note

This story draws on reporting from multiple sources, including The Telegraph, The Observer, and official statements from the British Society for Antimicrobial Chemotherapy (BSAC) and Wellcome, published in July 2025.

The Telegraph – Major UK project to tackle AMR closed by aid cuts <https://www.telegraph.co.uk/global-health/science-and-disease/major-uk-project-to-tackle-amr-closed-by-aid-cuts/>

The Observer – Government axes antimicrobial resistance project in aid budget cuts <https://observer.co.uk/news/science-technology/article/uk-body-tackling-antimicrobial-resistance-scrapped-as-part-of-global-aid-budget-cuts>

BSAC – Statement on Closure of the Fleming Fund <https://bsac.org.uk/closure-of-the-fleming-fund-risks-undermining-uk-leadership-on-amr/>

Wellcome – Wellcome responds to closure of the Fleming Fund <https://wellcome.org/news/wellcome-responds-closure-fleming-fund>

For further reading:

The Observer & The Telegraph – July 2025 AMR Reports

https://www.telegraph.co.uk/superbugs-antibiotic-resistance/

https://www.telegraph.co.uk/superbugs-antibiotic-resistance/

https://observer.co.uk/news/science-technology/article/uk-body-tackling-antimicrobial-resistance-scrapped-as-part-of-global-aid-budget-cuts

Wellcome Trust Statement on Fleming Fund Closure

https://wellcome.org/news/wellcome-responds-closure-fleming-fund

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Colistin-Resistant Klebsiella Pneumoniae on the Rise in Africa: A Last-Resort Antibiotic in Jeopardy

A recent meta-analysis published in *JAC-Antimicrobial Resistance* on July 22, 2025, has sounded the alarm on the rapid spread of colistin-resistant *Klebsiella pneumoniae* across Africa. The study reviewed 30 research papers from 11 African countries and found that resistance to colistin—a critical last-resort antibiotic—has reached alarming levels, with a continent-wide prevalence of 21.6%. East Africa was identified as a particular hotspot, showing rates as high as 42.3%.

Why Colistin Matters

Colistin is often considered the antibiotic of last resort for treating infections caused by multidrug-resistant (MDR) Gram-negative bacteria like *Klebsiella pneumoniae*. This bacterium is a notorious cause of hospital-acquired infections, including pneumonia, bloodstream infections, and urinary tract infections. When resistance develops to first- and second-line antibiotics, colistin becomes one of the few remaining options to save lives.

The rise of colistin resistance threatens to undermine modern critical care, especially in intensive care units (ICUs) where vulnerable patients depend on effective antibiotic therapies. If Klebsiella strains become untreatable, mortality rates could skyrocket.

Drivers Behind the Resistance Surge

Several factors contribute to this worrisome trend:

Overuse and misuse of antibiotics: In many African healthcare settings, antibiotics are often available without prescription, leading to widespread misuse.

- Lack of antibiotic stewardship: Few hospitals have robust stewardship programs to monitor and control antibiotic use.
- Poor diagnostic infrastructure: Without accurate, timely diagnostics, clinicians may resort to broad-spectrum antibiotics unnecessarily.
- Environmental factors: Contaminated water sources and hospital environments facilitate the spread of resistant bacteria.

The Urgent Need for Action

The study authors emphasise that immediate interventions are necessary to slow down and reverse the spread of colistin resistance. These include:

- Implementing antibiotic stewardship programs that ensure antibiotics are prescribed only when needed and with appropriate dosages.
- Expanding diagnostic capacity to enable targeted therapy based on bacterial susceptibility profiles.
- Strengthening infection prevention and control (IPC) measures in healthcare facilities.
- Enhancing surveillance systems to monitor resistance patterns continuously.
- Promoting research on resistance mechanisms and developing alternative treatments.

Challenges and Opportunities

Addressing colistin resistance in Africa faces challenges such as limited funding, shortage of trained healthcare workers, and fragmented healthcare systems. However, international partnerships and funding initiatives, such as the now-closed Fleming Fund, have previously demonstrated how targeted support can improve surveillance and stewardship.

Local governments and health authorities must prioritise AMR on their national health agendas and seek sustainable investments in laboratory infrastructure and training.

Looking Ahead

The rise in colistin-resistant *Klebsiella pneumoniae* is a clear signal that Africa's fight against AMR is at a critical juncture. Without coordinated efforts to curb antibiotic misuse and improve healthcare delivery, last-resort treatment options may become obsolete.

This crisis echoes global trends but demands locally tailored solutions that address unique epidemiological and health system contexts across African nations.

For further reading:
JAC-Antimicrobial Resistance – July 2025 Meta-analysis
https://academic.oup.com/jacamr/article/7/Supplement_3/dlaf118.028/8200897

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Microplastics Drive Antimicrobial Resistance in E. coli: A Hidden Environmental Threat

A ground-breaking study published in *Applied and Environmental Microbiology* on March 12, 2025, has uncovered a surprising new driver of antimicrobial resistance (AMR): microplastics in the environment. Researchers from Boston University demonstrated that microplastics not only carry antibiotic-resistant bacteria but actively promote the development of resistance in *Escherichia coli* (E. coli), even in the absence of antibiotics.

The Microplastic-AMR Connection

Microplastics—tiny plastic particles less than 5 millimetres in size—have become pervasive contaminants in oceans, rivers, soils, and even the air. Previously, microplastics were primarily recognised as physical pollutants, but this study reveals a biological dimension: these particles serve as breeding grounds for bacteria, fostering the formation of biofilms—complex communities of microorganisms embedded in a protective matrix.

The lead researcher, Dr Neila Gross, explained: 'Microplastics are not just passive carriers of bacteria; they provide ideal surfaces that protect bacteria from environmental stresses and enable gene exchange that accelerates antimicrobial resistance.'

How Microplastics Promote Resistance

Biofilms formed on microplastic surfaces create microenvironments where bacteria can survive longer and communicate through horizontal gene transfer—a process by which resistance genes can spread between bacteria. This can happen even without the direct presence of antibiotics, challenging the conventional understanding that antibiotic exposure is the primary driver of resistance.

The study found that *E. coli* populations growing on microplastics developed increased resistance profiles over time compared to free-floating bacteria. This finding suggests that environmental pollution with microplastics could be silently fuelling AMR worldwide, beyond the clinical and agricultural settings traditionally associated with resistance emergence.

Environmental and Public Health Implications

As plastic use and pollution continue to rise globally, the presence of microplastics in ecosystems grows, creating widespread opportunities for resistant bacteria to emerge and spread. These resistant microbes can contaminate water supplies, enter food chains, and eventually affect human and animal health.

The study calls for AMR policies to expand beyond clinical stewardship and include environmental pollution control as a critical front in the battle against resistance.

Recommendations

- Incorporate waste management strategies that reduce plastic pollution, including better recycling, reduction of single-use plastics, and cleanup of contaminated sites.
- Monitor microplastic pollution as part of environmental AMR surveillance programs.
- Invest in research to understand the interaction between microplastics, microbial communities, and resistance gene transfer.
- Raise public awareness about the indirect health impacts of plastic pollution.

Further reading:
https://journals.asm.org/doi/10.1128/aem.02282-24

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Toward an Integrated One Health Approach

The research covered here reinforces the necessity for the One Health framework, which considers human, animal, and environmental health as interdependent. Tackling AMR requires coordinated action across sectors—including environmental protection policies—to address these newly uncovered drivers of resistance.

As we confront the twin challenges of plastic pollution and antimicrobial resistance, studies like these illuminate the unseen pathways linking our everyday consumption habits to global health threats.

For further reading:
Applied and Environmental Microbiology – March 2025 Study
https://journals.asm.org/journal/aem

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India's AMR Surveillance: Policy Promises vs. Ground Realities

Despite India's well-publicised national action plan on antimicrobial resistance (AMR) and its participation in the WHO's Global Antimicrobial Resistance and Use Surveillance System (GLASS), the country's surveillance efforts remain fragmented and inadequate. Speaking at

the ETHealthworld webinar in July 2025, Dr. Raman Gangakhedkar, former head of the Indian Council of Medical Research (ICMR), described India's AMR response as 'policy without progress.'

The Surveillance Gap

While India has made ambitious policy commitments, implementation on the ground is lagging. Key issues identified by Dr. Gangakhedkar include:

- Lack of a real-time, integrated national AMR database: Data from different states and institutions remain siloed, making it difficult to track resistance trends accurately.
- Minimal reporting from the private healthcare sector: The private sector, which serves a large portion of India's population, is not sufficiently engaged in surveillance efforts.
- Poor integration across sectors: Agriculture, animal health, and environmental monitoring are not adequately linked with human health surveillance, undermining a comprehensive One Health approach.

Challenges in Implementation

India faces several structural challenges that complicate AMR surveillance:

- Overburdened public health infrastructure: Many public hospitals lack adequate lab facilities or trained personnel for consistent AMR testing.
- Regulatory gaps: Antibiotics are often available over-the-counter without prescriptions, contributing to misuse.
- Limited awareness and training: Healthcare providers in rural and semi-urban areas may lack training in antibiotic stewardship and infection control.

These challenges have resulted in patchy data, which hinders policymakers' ability to make evidence-based decisions and allocate resources effectively.

The Urgent Need for a Coordinated One Health Surveillance System

Experts agree that India must build a coordinated, multi-sectoral surveillance system that brings together data from human health, veterinary medicine, agriculture, and the environment. Such integration would provide a clearer picture of resistance patterns, identify emerging threats early, and inform targeted interventions.

Strengthening Stewardship and Accountability

Alongside surveillance, India must enforce antibiotic stewardship programs that regulate antibiotic use across hospitals, clinics, farms, and pharmacies. Interventions include:

- Promoting rational prescription practices.
- Strengthening regulations to restrict over-the-counter sales.
- Educating healthcare workers, farmers, and the public on AMR risks.

Moving Beyond Policy to Action

Dr. Gangakhedkar emphasised that without these structural improvements, India risks remaining stuck in a cycle of policy declarations with limited measurable impact. Given India's population size and role as a major antibiotic consumer and producer, the effectiveness of its AMR response has global ramifications.

Conclusion

India's situation highlights the critical gap between policy frameworks and operational realities in the fight against AMR. Bridging this divide requires political will, increased funding, cross-sector collaboration, and robust enforcement mechanisms. Only then can India turn its AMR strategy from promise into progress—protecting both its population and global health.

For further reading:

ETHealthworld Webinar – July 2025

https://health.economictimes.indiatimes.com/news/policy/dr-raman-warns-of-indias-amr-surveillance-failures-as-10-year-policy-approaches/122998537

Summary

The fight against antimicrobial resistance is at a critical crossroads. As this report demonstrates, AMR is driven by interconnected factors across human health, agriculture, environment, and governance. Progress is uneven, with some regions making strides while others face setbacks, such as funding cuts or inadequate surveillance.

Addressing AMR demands a unified One Health approach that integrates data sharing, stewardship programs, environmental management, and community engagement on a global scale. The cost of inaction is high: rising mortality, loss of effective treatments, and escalating healthcare costs that threaten social and economic stability worldwide.

The stories highlighted here underscore the imperative for sustained political commitment, investment, and collaboration. By learning from current challenges and successes, the global community can work together to safeguard antimicrobial effectiveness for future generations.

World AMR Awareness Week (WAAW) 2025

The theme for World AMR Awareness Week (WAAW) 2025 is '**Act Now: Protect Our Present, Secure Our Future.**' This theme underscores the urgent need for bold, coordinated, cross-sectoral action to address AMR, a growing global threat that is already affecting our health, food systems, environment and economies. AMR is not a distant challenge; it is a present danger that demands immediate, sustained action. Drug-resistant infections are increasing, yet awareness, financing, investment and action remain insufficient.

Building on the momentum of the 2024 United Nations General Assembly High-level Meeting on AMR, this call to action urges all stakeholders, including governments, civil society, health-care providers, veterinarians, farmers, environmental actors and the public to translate the political commitments into tangible, accountable, life-saving interventions. To protect our present and secure our future, we must prioritize long-term investment and strategic action in the human, animal and environmental health sectors. Strengthening surveillance, ensuring equitable access to quality medicines and diagnostics, fostering innovation and building resilient systems all require long-term commitment and resources.

Investment in AMR action is smart. It is essential step toward a healthier, more secure future. Whether it is a hospital administrator establishing an antimicrobial stewardship team or a farmer adopting sustainable waste management practices, every action counts. No matter your role – whether shaping policy, delivering care, protecting ecosystems or raising awareness, 'Act Now: Protect Our Present, Secure Our Future' is a shared responsibility. Together, we can preserve the effectiveness of antimicrobials and ensure a healthier, more sustainable world for the generations to come.

https://www.woah.org/en/event/world-amr-awareness-week-2025/

Activities

Bangladesh: Gonoshasthaya Kendra An AMR club is being formed that will be recognised by Gono Bishwabidyalay University. We look forward to hearing more about the club.

Penang: Universiti Sains Malaysia. An AMR student work book has been prepared.

Please send news of activities so it can be shared.

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BATTLES FOR AFFORDABLE MEDICINES

Lancet: Zackie Achmat: irrepressible health activist

The closure of the Fleming fund comes on top of the demise of USAID and other funding sources,

https://www.thelancet.com/action/showPdf?pii=S0140-6736%2825%2901084-0

Zackie Achmat is best known for campaigning for universal access to antiretroviral therapy (ART) in Africa. His activism against apartheid, for LGBTQI+ people's rights, and for justice, equality, and human rights in South Africa have had a major impact.

In 1998, by then well known as co-founder of the Treatment Action Campaign (TAC), he publicly declared his HIV positive status and said he would not take ART until everyone had access. 'I needed them. I was offered medicines through friends and decided not to take them', he said.

In Achmat's mind was his mother, who when there were as many as 12 people in their house and little money, insisted that everything must be shared equally. His stance and TAC's campaigning led to important gains in access to ART. Achmat's health activism continues to be recognised and he was awarded the inaugural Paul Farmer Lectureship and Award for Global Health Equity in 2024 by the McGill School of Population and Global Health, McGill University, Montreal, Canada.

He contrasts that time to what is happening in 2025 with US President Donald Trump's cuts to USAID and major disruptions to PEPFAR programmes. 'At that time, all of us were preparing to die', he said, 'because medicines weren't available.' But now, he says, people in many countries in Africa have had access to HIV treatment and prevention and have been 'looking after our children, going to their weddings, being able to read, being able to walk, being able to see friends and enjoy life. All of us have now prepared for life, and suddenly we're placed on death row'. He foresaw cuts to the US aid budget in a Trump second term but was 'completely stunned' by the extent of them. He warns of the devastating impacts:

‘Without a very rapid set of interventions, we’ll be lucky to save a couple of million people on HIV treatment. The Achmat does not hope for a change of heart at the White House and believes ‘global resistance is a necessity’. US business must be persuaded to ‘take a long hard look at itself’, he said.

He thinks Indian drug companies, which supply a high proportion of Africa’s drugs, could cut prices; Brazil could also supply medication and China could put in money. He adds that ‘In Cape Town we work with some organisations in the African region putting together a coalition now to deal with the Trump HIV cuts. These things are indispensable to us.’ Achmat would also like to see strong collaboration between large international NGOs and other global health organisations in the response to these challenges.

Thailand: Ever-greening patents – the case of TB drug bedaquiline

The case of bedaquiline, a key drug in treating multi-drug-resistant tuberculosis (TB) in Thailand, is just one illustration of how multinational pharmaceutical companies have used the practice of 'ever-greening' patents to extend their drug monopolies.

by Kanaga Raja Penag: May 2025

The practice of 'evergreening' patents has always been a common trick used by multinational pharmaceutical companies to extend their monopolies - 20-year patent monopolies are often granted for each new application. The case of bedaquiline, a key drug in treating multi-drug-resistant tuberculosis (TB) in Thailand, being just one such example, according to the Thai Network of People Living with HIV and AIDS (TNP+). In a post on its website on 27 May.

For over five years, the Thai Network of People Living with HIV and AIDS (TNP+) and AIDS Access Foundation have been advocating for the removal of barriers to access to multi-drug-resistant tuberculosis (MDR TB) drugs by filing oppositions to patent applications for a MDR TB medicine known as bedaquiline. in Thailand.

It said that after long efforts, patent applications have been rejected and there is now no patent barrier to the drug bedaquiline in Thailand, allowing the country to import generic versions at an affordable price and provide it to patients under the national health insurance schemes at no cost.

Providing some background, Janssen Pharmaceuticals N.V., wholly owned by Johnson & Johnson (J&J), filed five patent applications for bedaquiline in Thailand, the first of which was for the base compound, which was granted and later expired in June 2023, while the other four were .evergreening. patent applications. In 2020, AIDS Access Foundation and TNP+ filed information with the Thai Department of Intellectual Property (DIP) to oppose and request that all four patent applications be rejected.

In June 2023, the Department of Intellectual Property decided to reject (thus not accept) two patent applications, which were applications filed for the use of bedaquiline for the treatment of multi-drug-resistant TB and latent TB. Although there were appeals from the company, this ruling is final and if J&J disagrees, the company may file a lawsuit with the Intellectual Property Court.

it was pointed out that the drug bedaquiline has been approved for inclusion in the National List of Essential Medicines for the treatment of multidrug-resistant TB since 2019. It said that from 2020 to 2024, Thailand’s national health insurance systems purchased and imported the original bedaquiline from J&J at an average cost of 35,672 baht per six-month treatment (about USD 1,100) for 724 patients per year on average.

However, from 2024 to 2025, J&J reduced the price to 11,734 baht per treatment. From 2025 to 2026, Thailand was able to purchase generic bedaquiline from India for only 5,348 baht per treatment (about USD 160), increasing access to treatment in Thailand to almost 1,000 cases per year. Mr Kittitrakul of TNP+ was quoted as saying:

The civil society’s movement on opposing the patent applications for bedaquiline started at the 50th Union World Conference on Lung Health in Hyderabad, India in 2019..

Civil society representatives from various countries met and agreed to join hands in campaigning for access to the drug for multi-drug-resistant tuberculosis called bedaquiline. by filing oppositions to the patent applications related to bedaquiline, he added.

Kittitrakul noted that in the following years, oppositions began to be filed in India, Brazil, Thailand, Ukraine, Belarus, Moldova, Kyrgyzstan, Vietnam, and Indonesia.

Although bedaquiline is not patented in the country and we can import or manufacture it, we found that J&J filed an additional application in late 2024 for the long-acting formulation of bedaquiline,. said Kittitrakul.

TNP+ submitted a letter and information to the Department of Intellectual Property, asking the Department to consider rejecting the patent application because it is an application against the Thai patent law and does not qualify for patent protection, he added. Ever-greening has always been used as a common trick by multinational pharmaceutical companies to extend their monopolies that hinders the public’s access to essential medicines. This tactic also causes heavy and unnecessary workload on the DIP’s patent examiners.

Kittitrakul suggested that the current patent system has been abused repeatedly and does not truly promote

innovation and access to medicines, but rather allows the multinational pharmaceutical industry to exploit it to increase their monopoly and make a profit on people's lives and health. This system creates and extends inequalities in access to medicines and should be reformed by taking public health interests before trade benefits.

Medicine Equality Now! News Research

New Analysis Exposes Path to Affordable Lenacapavir for HIV Prevention

15 Jul 2025

https://makemedicinesaffordable.org/new-analysis-exposes-path-to-affordable-lenacapavir-for-hiv-prevention/

A new analysis co-authored by Andrew Hill and featured in *The Lancet* shows that lenacapavir — a long-acting injectable for HIV prevention — could be produced for as little as $25 per person per year, potentially transforming global efforts to end the HIV epidemic.

Lenacapavir, administered just twice a year, has been shown to reduce HIV transmission to nearly zero. However, the drug's high price remains a major barrier to access, with Gilead Sciences currently pricing it at over $28,000 per person annually in the US market. Hill and his colleagues' work demonstrates that generic production costs are dramatically lower, paving the way for broader accessibility if patent barriers are overcome.

Updated production costs reveal opportunities for widespread access

The study, supported by the Make Medicines Affordable campaign [5], examined current prices of key starting materials and projected the cost of the active pharmaceutical ingredient using the most efficient synthesis routes. Factoring in formulation and a reasonable profit margin, the researchers estimate that lenacapavir could be manufactured and delivered for $35–$46 per year at a volume of two million treatments annually — and as low as $25 per year if scaled to five to ten million people.

Joseph Fortunak, the lead author and Professor at Howard University, along with Hill and a global team of researchers, say 'We are at a moment where we could see the virtual elimination of HIV infections, but only if the drug is made affordable and widely available.'

Licensing deals leave millions behind

While Gilead has signed voluntary licenses with only 3 generic manufacturers to supply low-cost lenacapavir to 120 lower-income countries, major regions with significant HIV burdens — such as parts of Eastern Europe, Central Asia, and most of Latin American countries — remain excluded. This leaves millions without access to this promising prevention tool.

'The licensing deals exclude some of the countries with the highest rates of new infections,' Hill warned. 'Governments need to recognise that they have the power to negotiate fair prices or consider compulsory licenses to protect public health.'

Pricing threatens global HIV prevention efforts

Advocates and experts have described the current pricing as 'utterly unaffordable' and a threat to public health. Professor Andrew Grulich from the Kirby Institute called Gilead's pricing 'absolutely crazy,' emphasisng that no health system can afford to implement lenacapavir widely at current prices.

'Prevention drugs must be priced to reach as many people as possible — they cannot be treated like luxury therapies,' Grulich stressed.

A Call for Urgent Global Action

The study by Hill and colleagues underscores the potential for generic lenacapavir to match or even undercut the price of existing oral PrEP regimens. With support from global health funders, pooled procurement strategies could help bring down costs and accelerate manufacturing at scale.

This analysis calls on governments, civil society organisations, and global funders to take bold, collective action now — to demand fair pricing, remove patent barriers, and ensure that no one is left behind in the fight to end HIV.

The full preprint, hosted by Preprints with *The Lancet,* outlines cost projections in detail and can be accessed here: Lenacapavir to Prevent HIV Infection: Updated Estimated Costs of Production for Generic Treatments[6]

[5] Make Medicines Affordable campaign is led by the International Treatment Preparedness Coalition (ITPC), formed in 2003 in Cape Town by a committed group of HIV treatment activists who refused to accept a world in which people with HIV were denied access to life-saving medicines.

[6] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5293409

Colleagues in the Netherlands challenge AbbVie in court for overpricing.

from Wibert Bannenberg

In the Netherlands, the Pharmaceutical Accountability Foundation (PAF) (also known as FtV) initiated a case against AbbVie, alleging overpricing of the drug Humira (adalimumab) between 2004 and 2018, and seeking a declaratory judgment that AbbVie acted unlawfully.The court, however, ruled that PAF lacked the necessary legal standing to pursue the claim, effectively dismissing the case. PAF is now considering an appeal.

Here's a more detailed breakdown:

The Allegations: PAF argued that AbbVie's pricing practices for Humira in the Netherlands were unlawful, violating fundamental human rights and competition laws. They claimed AbbVie overcharged, leading to displacement of publicly insured healthcare services and estimating excess profits of €1 billion.

The Court's Decision: The Amsterdam District Court dismissed the case, stating that PAF did not have the required legal interest to bring the claim, as defined in Article 3:303 of the Dutch Civil Code. The court focused on the procedural aspect of the case, not the merits of PAF's claims.

PAF's Reaction: PAF expressed disappointment that the court did not address the merits of the case and is considering an appeal.

Broader Context: This case is part of a larger discussion about drug pricing and the role of pharmaceutical companies in healthcare. The case also highlights the potential for public interest groups to challenge pharmaceutical practices.

Previous Actions: In 2021, the Dutch competition authority (ACM) fined AbbVie €19.5 million in a related case according to The Pharmaceutical Accountability Foundation. This earlier case inspired similar legal actions in other countries.

PUBLIC CITIZEN[7] challenges argument that High U.S. Drug Prices result from other countries paying less for brand-name medicines

Antibiotic Resistance Coalition Newsletter July 2025

Public Citizen submitted detailed comments to the U.S. Trade Representative's 2025 Request for Comments on concerns about foreign countries 'freeloading' on U.S.-funded pharmaceutical innovation. The USTR request for comments stemmed from President Trump's Executive Order 14297, 'Delivering Most Favored Nation Prescription Drug Pricing to American Patients.'

Public Citizen's analysis challenges the argument that high U.S. drug prices result from other countries paying less for brand-name medicines. Drawing on extensive evidence, Public Citizen explains that pharmaceutical companies actively set prices independently in each market to maximise profits, meaning that raising prices abroad would not reduce drug costs in the U.S. Furthermore, the analysis debunks industry claims that high prices are necessary to fund research and development (R&D), showing that companies often spend far less on R&D than their revenues suggest and prioritize shareholder payments over investments in pharmaceutical R&D.

This submission is significant to ongoing policy debates because it refutes the misconceived justification for the U.S.'s elevated drug prices and calls for urgent domestic reforms to improve affordability. It highlights how existing patent monopolies and anti-competitive tactics keep prices high without driving meaningful innovation. Public Citizen urges policymakers to implement stronger measures to curb excessive pricing, encourage fair competition, and explore alternative methods to fund drug development, including increased public investment and global coordination. These insights offer valuable guidance for policymakers concerned with the interplay of trade policy, pharmaceutical pricing, and public health.

Public Citizen Challenges Arguments that High U.S. drug prices result from other countries paying less for brand-name medicines.

30 years of TRIPS and 20 years of patenting in Egypt: Why access to medicines might still be a challenge

In the face of strict, internationally imposed patenting requirements, Egypt continues to prioritise affordable medicines for its people.

Heba Wanis

Drug policies in Egypt have historically prioritised access and affordability. To this end, two key measures were established in the mid-20th century amid the growth of an ambitious pharmaceutical industry: a government (compulsory) drug pricing mechanism, and a patent law (132/1949) which protected the pharmaceutical process but not the product. Until the early 2000s, Egyptians enjoyed low medicine prices, thanks to government controls and competition from generics, with a fair number of producers per product. Given the high

[7] Public Citizen is a US colleague of HAIAP. it is a nonprofit consumer advocacy organisation that champions the public interest including the right to health in the halls of power.

proportion of spending on health and medicines in Egypt paid for out of pocket, currently estimated to be 62.75%,[1] a no-product-patent industry combined with price controls meant that medicines remained accessible.

When the World Trade Organization (WTO)'s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) came into being, Egypt prepared itself for the new global paradigm starting from 2005 when the Agreement would come into force after a five-year transition period. The now famous Law 82/2002 on the Protection of Intellectual Property Rights has deliberately incorporated all possible safeguards against potential public health implications of the new Agreement, benefiting from the far-sightedness and expertise of its drafters.

The Law applied the minimum protection standards of the TRIPS Agreement and incorporated all its flexibilities, interpreting it in accordance with the principles and objectives stated in Articles 7 and 8 of the Agreement. The flexibilities related to public health protection include exceptions and limitations to patentability (Article 2 of the Law); compulsory licensing in cases of patent misuse or failure of exploitation (Articles 23 and 24); international exhaustion; and regulatory review (Bolar) exception (Article 10). The Law does not allow for patent linkage as it clearly demarcates the mandates of the patent office vis-à-vis the drug regulatory authority, so that the drug registration process is independent of the patent status. Nevertheless, transnational pharmaceutical corporations often exert pressure on regulatory authorities to prevent the registration of generic versions of their marketed products during their patent term, with some of the cases taken to court by the generic companies.[2]

Similarly, the Law does not recognise data exclusivity as a form of protection for test data submitted for registration in order for the regulatory authority to register generic versions of medicines utilising previously submitted clinical trial results. Test results are, however, protected by rules of unfair competition, but are not to be withheld when generic medicines need to be registered.

Meanwhile, the Egyptian Patent Office has gained the global reputation of being a proponent of public health and development. Over the years, its team of pharmaceutical examiners has accumulated expertise based on thorough understanding of both international and national law. The Office applies absolute novelty as a patentability criterion, thus setting high standards as to which patent applications pass the examination process.

Intellectual property (IP) law and examination practices in Egypt both create ample policy space for the generic-medicine industry to flourish. It was clearly demonstrated when the local pharmaceutical industry contributed to the success of Egypt's viral hepatitis treatment programme following the launch of the Plan of **Action for the Prevention, Care and Treatment of Viral Hepatitis 2014–2018.**

At the time, the US Food and Drug Administration (FDA)'s approval of sofosbuvir (SOF) in December 2013 marked new hope for treating the disease. A longstanding public health problem in Egypt, viral hepatitis C chronic infection prevalence rates had reached 10% among 15–59–year–olds and more than 25% among 50–60–year–olds by 2012, with an estimated 150,000 new infections annually, making the country a key global market for SOF.

The deal with the manufacturer, the US-based pharmaceutical giant Gilead, was set at $300 per box, that is, $900 per 12-week treatment course – low compared with the exorbitant globally announced price of $84,000 at the time, and yet too high for Egypt's modest national health budget, and certainly much higher than the calculated manufacturing cost of $68–136.[3]

The agreed price was valid until the Patent Office issued a decision rejecting the SOF patent application, indicating that the 'invention' failed to meet the patentability criteria of novelty and inventive step. This decision opened wide the door for local generic producers which produced SOF among other direct-acting antivirals (DAAs) at fractions of the global prices, thereby enabling the medicine to be made more accessible to the country's hepatitis patients, both under the national treatment programme or privately for those who could afford to buy it out of pocket.

Patent examination practices in Egypt not only play a crucial role in protecting the population from unnecessary pharmaceutical patents, which would lead to expensive medicines, but also create a wide operational space for local pharmaceutical companies with research and development (R&D) capacity to expand their portfolio. There is a great, as yet untapped, potential in the information made available in all patent applications filed and in a broad public domain. This goldmine of patent information has been strongly promoted by the Egyptian Patent Office among researchers in academic circles and in the local generic industry.

Compulsory licensing of patented medicines is another means to enhance their accessibility and affordability. While compulsory licensing is provided for by the IP Law 82/2002 (Articles 23 and 24) as a protection for public health, it has never been utilised. One reason is purely procedural: the 2002 Law states that a compulsory licence is to be approved by a Ministerial Committee, but this Committee was only established in 2020, that is, 18 years after the Law. The Committee is mandated with approving compulsory licences issued by the Patent Office; determining the financial rights of the patent holder when compulsory licences are issued; and revoking of patents.

Patents are only one, albeit significant, determinant of access to medicines. Pricing policy; local production capacity; health insurance coverage and private spending on health are among the other factors. Despite the high out-of-pocket expenditure on health (62.75%, as mentioned above), of which nearly half goes to medicines, Egypt's per capita pharmaceutical expenditure remains among the lowest in the Middle East and North Africa region, and is expected to decrease. The demand for generic medicines is surging in the market.[4] Such trends cannot be examined in isolation of the economic situation which has had an impoverishing effect on whole segments of the population.

Despite the claimed self-sufficiency in medicines, Egypt is a net drug-importing country, with imported finished products comprising 73% of products on the market, and 90–95% of the components of locally produced medicines being imported.[5] Arguably, certain therapeutic groups such as oncology medicines and biological products continue to be primarily imported, hence exhibiting high prices.

There are local pharmaceutical companies with far-sighted R&D plans. Such companies have developed their own strategies to navigate local, regional and global markets through ambitious partnerships and pharmaceutical alliances with resulting voluntary licensing agreements and joint technological ventures. However, on the domestic front, there continue to be challenges as the relatively newly established Egyptian Drug Authority, now operating independently from the Ministry of Health, reviews and updates its mandate after the restructuring of national drug regulation and national drug procurement.[6]

While operating in a complex environment, the pharmaceutical sector in Egypt has demonstrated resilience, thanks to its large manufacturing base and to legislative safeguards. In the period since the TRIPS Agreement came into force, time and experience have shown that the national IP regime has still got wide, as yet unutilised, policy space for the pharmaceutical industry to build upon, including a vast public domain created by patent information and rejected patents. These are learning and production opportunities for local manufacturers whose presence and sustainability in a developing-country market are fundamental for access and affordability of medicines.

Heba Wanis is a researcher in public health with the Third World Network. Her work focuses on access to medicines, pharmaceutical policy, drug regulation, pricing and intellectual property. Heba holds a Master of Public Health degree from the University of Edinburgh and an MA in Community Psychology from the American University in Cairo.

Notes

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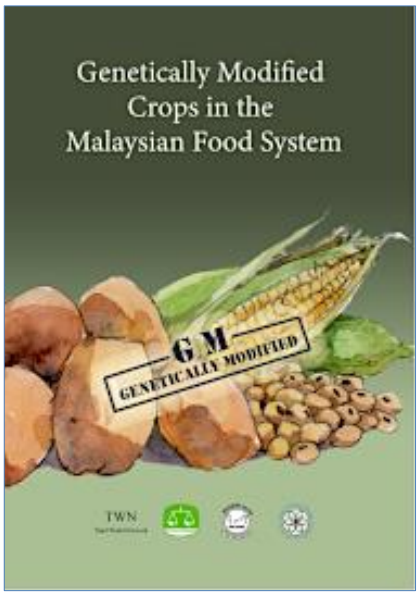

Genetically Modified Crops in the Malaysian Food System
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Download the book
English Chinese Malay
About the Book
Approvals for the import into Malaysia of genetically modified (GM) crops for food and feed have increased markedly in recent years. Most of these crops are of the herbicide-tolerant and/or insect-resistant varieties, giving rise to health concerns of exposure to herbicide residues and insecticidal toxins via food consumption. The food safety risks are compounded by the proliferation of varieties "stacked" with multiple tolerance and resistance traits, and by crops developed using RNA interference (RNAi) technology that may pose uncertain, unintended consequences. In light of these serious biosafety issues, this report calls for more comprehensive risk assessments and greater regulatory oversight of GM crops to protect Malaysian consumers. Until such precautionary measures are put in place, GM crops for food, feed and processing should not be approved in Malaysia.
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