



## Vaccines Prevent Not Just Disease But Also Poverty

(Source: GAVI, The Vaccine Alliance Press Release)

In a Harvard study co-authored by GAVI, The Vaccine Alliance and other partners, and published in Health Affairs, it was revealed that in addition to saving millions of lives, vaccines will help prevent approximately 24 million people in some of the world's poorest countries from slipping into poverty by 2030.

"Vaccines don't just save lives, they also have a huge economic impact on families, communities and economies," said Dr. Seth Berkley, CEO of GAVI, The Vaccine Alliance. "A healthy child is more likely to go to school and become a more productive member of society later in life, while their families can avoid the often-crippling healthcare costs that diseases can bring. As this study shows, this is enough to save millions of people from the misery of extreme poverty. To realize these figures we now need to redouble our efforts to ensure every child, no matter where they're born, has access to lifesaving vaccines."

Sudden healthcare expenses push about 150 million people into poverty every year, making medical impoverishment one of the main factors forcing families below the World Bank's poverty line of less than US\$ 1.90 per day.

Vaccines will have the greatest impact on reducing cases of poverty caused by hepatitis B, helping an estimated 14 million people avoid medical impoverishment. Cases of poverty caused by measles and meningitis A will also be significantly reduced by vaccines, with an estimated 5 million and 3 million cases averted, respectively, while rotavirus is set to prevent 242,000 cases. Measles vaccine is estimated to prevent by far the highest number of deaths: 22 million of the 36 million in total.

According to the study, the poorest 20 percent of the population represented over a quarter of deaths prevented by vaccination. The researchers therefore concluded that the introduction of vaccines in the poorest regions will have the greatest impact on reducing both the number of deaths and the number of people forced into poverty by the cost of healthcare. The study underlines that sustained investments in vaccines could therefore make a large contribution toward achieving the Sustainable Development Goals and universal health coverage.

Gavi currently supports vaccine programs in all 41 countries included in the study, which have a combined population of 1.52 billion. The countries were selected based on the availability of data from Demographic and Health Surveys. The researchers made their conclusions after estimating the distribution of vaccine-averted deaths for each disease and simulating monthly household income for each income group.

A 2016 study by Johns Hopkins University, also published in Health Affairs, found that for every US\$ 1 spent on immunization, US\$ 16 is saved in healthcare costs, lost wages and lost productivity due to illness. Taking into account the broader benefits of people living longer, healthier lives, the return on investment rises to US\$ 44 per US\$ 1 spent.

The study was led by researchers from Harvard T.H. Chan School of Public Health and included contributions from the Erasmus School of Economics, University of Washington, London School of Hygiene and

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## Around the Globe...

- ♦ The IFPW Foundation Advisory Board held its first face to face meeting in New York City on April 9th. In attendance were *Gene Cavacini* with **McKesson**, *Gina Clark* with **AmerisourceBergen Corporation**, and *Tom Vanmolkot* with **Zuellig Pharma Asia Pacific**, as well as IFPW Foundation staff. The committee reviewed the foundations work and ratified its support for the implementation and expansion of the *STEP Leadership* course. The committee also discussed the opioid crisis in the U.S., progress on the United Nations' *Sustainable Development Goals (SDGs)* by pharma industry; and the impact of counterfeit medicines and the **Fight the Fakes** worldwide awareness campaign. IFPW Foundation is very appreciative of the committee's work, and its input on the various initiatives that are being considered and implemented. The next in person meeting will be held in Washington, D.C. in October in conjunction with the 2018 General Membership Meeting.

- ♦ From April of 2016 to March of 2017, more than 5,000 packages of counterfeit drugs (such as *Viagra*) were seized in Canada. Companies controlled by the online pharmacy **Canada Drugs** pled guilty to selling counterfeit and misbranded pharmaceuticals, and forfeited US\$29 million, an amount equal to proceeds of illegal drugs by the company from 2009 to 2012.

- ♦ Global healthcare company **GlaxoSmithKline** entered into a partnership with **Schneider Electric** in effort to highlight its corporate mission to manage its "*GSK Supplier Exchange*." The exchange is designed to be a members-only, non-competitive and free platform for GSK suppliers to engage with GSK directly so that experts and peers can build trust and improve environmental performance. The move will enable vital information to be passed to healthcare suppliers, embedding essential tools to improve environmental performance, through energy, water and waste management.

- ♦ African states are considering ways to increase domestic

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## FarmaTrust: A Blockchain-based Platform to Eliminate Counterfeit Drugs

(Source: An article written by Nuno Menezes for BTC Manager)

Today's pharmaceutical industry plays a vital role in society's health, but it is also plagued with a wide range of challenges when it comes to ensuring the safety and efficacy of the drugs currently available on the market. Particularly in developing countries, these challenges include supply chain inefficiencies and unwanted business practices, among others. One organization that is trying to combat counterfeit drugs is UK-based startup, FarmaTrust, who is currently working on the development of a platform dedicated to helping users gain access to genuine and authentic medicines through a secure and efficient platform using blockchain technology. This peer-to-peer (P2P) platform is specially developed to prevent the distribution of counterfeit drugs by restricting the supply of fake drugs that often fall into the hands of unsuspecting patients worldwide.

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## University College London Hosts Panel Discussion on Global Impact of Falsified Medicines

(Source: Oksana Pyzik, Academic Lead, UCL)

Over 200 delegates attended a high level panel event “Addressing the Global Impact of Substandard and Falsified Medicines” on March 16th, 2018 organized by the University College London (UCL) Fight the Fakes Committee and co-hosted by the Commonwealth Pharmacists Association. Delegates from all sectors including academia, students, NGOs, civil society, regulatory bodies, and Pharma start ups, came together to learn more about the growing global health threat of substandard and falsified medicines. The panel featured world leading experts from Geneva to New York, including the Key Note speaker Mick Deats, Group Lead of the Medicines Safety & Vigilance team at the World Health Organization and Her Royal Highness Princess Dr Nisreen El-Hashemite, Executive Director of the Royal Academy for Science International Trust and the 2017 awardee of the Muhammad Ali Humanitarian of the Year Prize, as well as others. The exciting panel line up was moderated by Journalist and European Editor for Scrip and Pink Sheet, Eleanor Malone, and shone a light on the role of the pharmacist in the fight against fake medicines. The coordination of the event was supported by partners International Federation of Pharmaceutical Wholesalers and the International Federation of Pharmaceutical Manufacturers & Associations, with driving input from Christina Tucker, Morgane de Pol and Cyntia Genolet.

The Founder and Academic Lead of the UCL chapter of Fight the Fakes (FTF), Oksana Pyzik, chaired the panel and opened the event with an image of a Pharmacy in Macau, China advertising “medicine no fakes” demonstrating the widespread infiltration of substandard and falsified medicines into the supply chain globally and called for “all sectors to come together in the fight against fake medicines, and pharmacy education must be at the forefront of leadership in countering this growing global health threat.” UCL FTF Student Lead Trevor Lowe highlighted the four strategic pillars of the UCL Fight the Fakes movement: “Education, Research, Public engagement and Advocacy at all levels from grassroots to the heads of government, are essential to effectively raise awareness of the dangers of falsified medicines.”

As a result of the meeting further international collaborations have developed to focus on patient education, online pharmacy regulation and pharmacy education reform. Oksana Pyzik is currently spearheading innovative educational content in pharmacy students course material and said “Only by building student knowledge at the beginning of their careers can we expect a truly heightened and effective awareness amongst the pharmacy community. Fake medicines are a modern blight on our healthcare systems and it is essential teaching modules on this topic become firmly established across all pharmacy schools throughout the world. We believe what the UCL school of Pharmacy has established course material that can be shared across all pharmacy schools. Let’s not forget pharmacists operate at the point of care and they are in a unique position to inform patients about the dangers of buying medicines online and falsified medicines in general.”

A highlight of the evening was the Royal address by Princess Dr Nisreen El-Hashemite, who delivered an impassioned address of how she was personally impacted by fake medicines in 2011, and urged us all to make a pledge and unite in the fight against fake medicines: “We count on medicines to save lives and too often, we take it for granted that medicines do what they are supposed to. Yet according to the most recent WHO publications, 1 in 10 medicines circulating worldwide is either falsified or substandard. This is 1 in 10 times that we gamble with human life, 1 in 10 times that a patient may be poisoned, or left to deteriorate, 1 in

10 times that may result in patient death or disability. This is 1 in 10 times too many ... Every country is affected by this global health threat, and I too, have been touched by the crime of falsified medicines firsthand.”

See the full video pledge here: <https://www.dropbox.com/s/bd19gfp13yrp0xc/Final%20Dr%20Nisreen%20UCL%20FTF%20Video.mp4?dl=0>



Trevor Lowe, Bernard Naughton, Lynda Scammell, Mick Deats, Eleanor Malone, Oksana Pyzik, Professor Ibrahim Abubakar, Mike Isles

## FarmaTrust (cont.)...

The platform will utilize artificial intelligence technology to manage big data analysis and improve efficiency and revenue for commercial operations of the pharmaceutical industry. By using blockchain technology, FarmaTrust is endeavoring to resolve the challenges faced by the pharma industry as well as revolutionize the industry by providing an effective solution in terms of costs and assurance. The authenticity of these medicines is made via the blockchain with utility tokens referred to as “FTT” that will be used to record tracking of all the drugs coming to market.

Today’s pharmaceutical industry is dealing with several areas of concern – counterfeit drugs, online and digital prescriptions, demand of personalized medicines and chain inefficiencies top the list. When it comes to counterfeit drugs, the World Health Organization estimates that the global counterfeit drug industry moves more than US\$200 billion annually. Over 30% of medicines sold in developing countries are fake and include a wide array of drugs from simple over-the-counter medications, such as aspirin, to prescription medicines used to treat malaria, cancer, HIV and other life-threatening diseases. Through its new platform, FarmaTrust hopes to bring value-added services to the forefront of the pharmaceutical industry by assisting with the monitoring of drugs from their point of origin to the hands of the consumer, giving the patient complete control over their pharmaceutical needs.

FarmaTrust also entered into a one-year partnership with the government of Mongolia to address the counterfeit drug issue that has infiltrated the supply chain within that country. FarmaTrust CEO, Raja Sharif, spoke about these developments, saying “This project is a great multinational collaboration to mix blockchain and other emerging technologies to secure and optimize the pharmaceutical supply chain. Mongolia is a great starting point. With a population of just 3 million, tracking and implementation can quickly scale on the national level. Mongolia is also important as a strategic meddle point between Russia and China, two countries that have experienced large quantities of counterfeit medicines in the past.”

For more information on how FarmaTrust is working to secure the pharmaceutical supply chain, visit [https://farmatrust.io/sites/default/files/whitepaper/FarmaTrust\\_Whitepaper\\_v10.pdf](https://farmatrust.io/sites/default/files/whitepaper/FarmaTrust_Whitepaper_v10.pdf).



## Around the Globe (cont.)...

production within Africa to make medicines more affordable for local populations. Current outputs account for only 3% of worldwide production, leading to an extremely high dependence on imports from Europe. This has led to significant challenges with price, quality and traceability. The issue was addressed during the ID4D conference “*Medication in Africa: How to Better Respond to Issues of Accessibility and Quality*” organized by the French Development Agency in Paris on April 3rd.

- ◆ Findings in a report released by **The National Association of Boards of Pharmacy (NABP)** show that fake online pharmacies are rushing to make counterfeit versions of *fentanyl* available. From July 1 to December 31, 2017, NABP examined 100 websites deemed “Not Recommended” that offered prescription meds for sale to U.S. residents. On 54 of the 100 websites examined, NABP found controlled substances being offered for sale, including *fentanyl*, *Norco*, *oxycodone*, *Percocet* and *Xanax* – all highly addictive prescription medicines. NABP vigorously discourages U.S. patients from purchasing any drugs designated as “Not Recommended” and lists them on the NABP website. The report may be accessed at [http://www.safemedicines.org/wp-content/uploads/2018/02/NABP-Internet-Drug-OutletReport\\_February-2018.pdf](http://www.safemedicines.org/wp-content/uploads/2018/02/NABP-Internet-Drug-OutletReport_February-2018.pdf).

- ◆ The **U.S. Food and Drug Administration (FDA)** has issued a warning that fraudulent and unapproved flu medicines are infiltrating the U.S. market. While the worst of the flu season may be over, the FDA is reminding consumers that there are no legally-marketed over-the-counter drugs to prevent or cure the flu. The severity of the past flu season has brought to light new concerns about the risk of consumers buying unproven flu treatments or purchasing counterfeit anti-virals from illegitimate online pharmacies.

- ◆ A court in Benin has jailed seven local pharmaceutical executives charged with selling illicit drugs. Current president, *Patrice Talon*, has vowed a vigorous crackdown on counterfeit drugs, a practice which has alarmed watchdog groups and health organizations. The five wholesale distribution companies – **GAPOB**, **Ubipharm**, **CAME**, **Ebephar**, and **PromoPharma** – dominate the sector in Benin. In addition to the seven individuals given a four year sentence, fines were also imposed. Two other defendants (aides to an opposition leader, *Atao Hinnouho*) received six month sentences. Notably, Mr. Hinnouho has since fled the country.

- ◆ Health experts warn that a measles outbreak in Europe is rooted in the steadily growing anti-vaccine movement. Parents may not be vaccinating their children due to a widely-discredited research paper by *Dr. Andrew Wakefield* published 20 years ago. The report, published in *The Lancet*, linked measles, mumps and rubella vaccine to autism, and emphasized that the three vaccines, when given simultaneously, could alter the immune system causing brain damage. The findings were rejected and deemed “fraudulent” by the British Medical Journal and on February 2, 2010, *The Lancet* formally retracted the study due to serious flaws and undisclosed conflicts of interest. In May of 2010, Wakefield was stripped of his medical license. “Andrew Wakefield has been thoroughly discredited,” infectious diseases epidemiologist, *David Fisman* said in a statement to Global News. “There’s certainly no increased risk of autism.”

(Sources: *Euractiv*, *GlobalNews*, *Healthcare Global*, *Press Releases*, *SafeMedicines.org*, and *TheSpec.com*)

## Vaccines (cont.)...

Tropical Medicine, Johns Hopkins Bloomberg School of Public Health, Imperial College London, the Kaiser Permanente Washington Health Research Institute, Bill & Melinda Gates Foundation, and Gavi, the Vaccine Alliance. The study was funded by the Bill & Melinda Gates Foundation.

Gavi, the Vaccine Alliance is supported by donor governments (Australia, Brazil, Canada, Denmark, France, Germany, India, Ireland, Italy, Japan, the Kingdom of Saudi Arabia, Luxembourg, the Netherlands, Norway, the People’s Republic of China, Republic of Korea, Russia, South Africa, Spain, the State of Qatar, the Sultanate of Oman, Sweden, United Kingdom, and United States), the European Commission, Alwaleed Philanthropies, the OPEC Fund for International Development (OFID), the Bill & Melinda Gates Foundation, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, as well as private and corporate partners (Absolute Return for Kids, Anglo American plc., The Children’s Investment Fund Foundation, China Merchants Group, Comic Relief, Deutsche Post, DHL, the ELMA Vaccines and Immunization Foundation, Girl Effect, **The International Federation of Pharmaceutical Wholesalers (IFPW)**, the Gulf Youth Alliance, JP Morgan, “la Caixa” Foundation, LDS Charities, Lions Clubs International Foundation, Majid Al Futtaim, Philips, Unilever, UPS and Vodafone).

## IFPW Receives Grant Approval for STEP Leadership

(Source: IFPW Staff)

IFPW has received approval for a grant from GlaxoSmithKline valued at GBP 1 million (US\$1.4 million) for expanding and implementing the STEP leadership course in GAVI eligible countries. IFPW Foundation’s goal is to train 200 participants in the 2nd half of 2018. Supported by Derek Short, STEP Director, and Magloire Achidi, STEP Field Coordinator, IFPW Foundation, in partnership with GAVI and UNICEF, will systematically begin to address country demand and schedule training. Nigeria, Ghana, DRC, Benin and Kenya are expected to be locations of some of the first classes.

The implantation of STEP Leadership course is a means of showcasing the benefits of pharma distribution around the world and IFPW members will be asked to consider contributing facilitators and mentors. Mark Parish, (IFPW President), along with Chris Goetz (IFPW Executive Vice President & General Manager) and George Bray (IFPW Vice President, Member Engagement) have begun the process of surveying members and soliciting support.

For more information on opportunities to make a difference in the developing world and support IFPW Foundation, please email [info@IFPWFoundation.org](mailto:info@IFPWFoundation.org).



### IFPW Foundation Wants to Hear Your Organization’s Story!

The IFPW Foundation is looking for submissions for the **GLOBAL REVIEW Newsletter** that demonstrate your organization’s commitment to Sustainable Development Goals (SDGs), CSR, or other global health initiatives.

To submit an article for publication, please contact **Christina Tucker** at [c.tucker@ifpwfoundation.org](mailto:c.tucker@ifpwfoundation.org)