# 1AC round 5

### ADV – COVID

#### The time to expand vaccination on a global level is now---highly contagious mutations facilitate continued spread.

Kumar 7-12 Rajeesh Kumar, Rajeesh Kumar is Associate Fellow at Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi., 7-12-2021, "WTO TRIPS Waiver and COVID-19 Vaccine Equity," Manohar Paprikar Institute for Defence Studies and Analyses, <https://idsa.in/issuebrief/wto-trips-waiver-covid-vaccine-rkumar-120721>, EH and brett

Two significant factors rekindled the debate on TRIPS waiver for essential medical products—first, vaccine inequity, and second, the insufficiency of existing waiver provisions in fighting the COVID-19 pandemic. COVID-19 is an exceptional circumstance, and equitable global access to the vaccine is necessary to bring the pandemic under control. However, the world is witnessing quite the reverse, i.e., vaccine nationalism. Vaccine nationalism is “my nation first” approach to securing and stockpiling vaccines before making them available in other countries. A TRIPS waiver would be instrumental in addressing the growing inequality in the production, distribution, and pricing of the COVID-19 vaccines.

Vaccine Inequity

According to Duke Global Health Innovation Center, which monitors COVID-19 vaccine purchases, rich nations representing just 14 per cent of the world population have bought up to 53 per cent of the most promising vaccines so far. As of 4 July 2021, the high-income countries (HICs) purchased more than half (6.16 billion) vaccine doses sold globally. At the same time, the low-income countries (LICs) received only 0.3 per cent of the vaccines produced. The low and middle-income countries (LMICs), which account for 81 per cent of the global adult population, purchased 33 per cent, and COVAX (COVID-19 Vaccines Global Access) has received 13 per cent.10 Many HICs bought enough doses to vaccinate their populations several times over. For instance, Canada procured 10.45 doses per person, while the UK, EU and the US procured 8.18, 6.89, and 4.60 doses per inhabitant, respectively.11

Source:“Tracking COVID-19 Vaccine Purchases Across the Globe”, Duke Global Health Innovation Center, Updated 9 July 2021.

Consequently, there is a significant disparity between HICs and LICs in vaccine administration as well. As of 8 July 2021, 3.32 billion vaccine doses had been administered globally.12 Nonetheless, only one per cent of people in LICs have been given at least one dose. While in HICs almost one in four people have received the vaccine, in LICs, it is one in more than 500. The World Health Organization (WHO) notes that about 90 per cent of African countries will miss the September target to vaccinate at least 10 per cent of their populations as a third wave looms on the continent.13 South Africa, the most affected African country, for instance, has vaccinated less than two per cent of its population of about 59 million. This is in contrast with the US where almost 47.5 per cent of the population of more than 330 million has been fully vaccinated. In Sub-Saharan Africa, vaccine rollout remains the slowest in the world. According to the International Monetary Fund (IMF), at current rates, by the end of 2021, a massive global inequity will continue to exist, with Africa still experiencing meagre vaccination rates while other parts of the world move much closer to complete vaccination.14

This vaccine inequity is not only morally indefensible but also clinically counter-productive. If this situation prevails, LICs could be waiting until 2025 for vaccinating half of their people. Allowing most of the world’s population to go unvaccinated will also spawn new virus mutations, more contagious viruses leading to a steep rise in COVID-19 cases. Such a scenario could cause twice as many deaths as against distributing them globally, on a priority basis. Preventing this humanitarian catastrophe requires removing all barriers to the production and distribution of vaccines. TRIPS is one such barrier that prevents vaccine production in LMICs and hence its equitable distribution.

#### That renders current vaccines ineffective---best epidemiologists.

Dransfield 21 Sarah Dransfield, 3-30-2021, “Two-thirds of epidemiologists warn mutations could render current COVID vaccines ineffective in a year or less”, https://www.oxfam.org/en/press-releases/two-thirds-epidemiologists-warn-mutations-could-render-current-covid-vaccines, accessed 7/23/2021 EH and brett

Epidemiologists from some of the world’s leading academic institutions delivered a stark warning today of the risk the world is taking by failing to ensure all countries have sufficient vaccines to protect people from COVID-19.

In a survey of 77 epidemiologists from 28 countries, carried out by The People’s Vaccine Alliance, two-thirds thought that we had a year or less before the virus mutates to the extent that the majority of first-generation vaccines are rendered ineffective and new or modified vaccines are required. Of those surveyed, almost a third gave a timeframe of nine months or less. Fewer than one in eight said they believed that mutations would never render the current vaccines ineffective.

The overwhelming majority - 88 per cent - said that persistent low vaccine coverage in many countries would make it more likely for vaccine resistant mutations to appear.

The People’s Vaccine Alliance, a coalition of over 50 organisations including African Alliance, Oxfam, Public Citizen and UNAIDS warned that at the current rate it was likely that only 10 per cent of people in the majority of poor countries will be vaccinated in the next year.

Nearly three-quarters of those surveyed - who included epidemiologists, virologists and infectious disease specialists from institutions including Johns Hopkins, Yale, Imperial College, London School of Hygiene and Tropical Medicine, Cambridge University, the University of Edinburgh and The University of Cape Town - said that open sharing of technology and intellectual property could increase global vaccine coverage. The People's Vaccine Alliance is calling for the lifting of pharmaceutical monopolies and the sharing of technology to urgently boost vaccine supply.

Devi Sridhar, Professor of Global Public Health at the University of Edinburgh, said: “The more the virus circulates, the more likely it is that mutations and variants will emerge, which could make our current vaccines ineffective. At the same time, poor countries are being left behind without vaccines and basic medical supplies like oxygen.

“As we've learned, viruses don't care about borders. We have to vaccinate as many people as possible, everywhere in the world, as quickly as possible. Why wait and watch instead of getting ahead of this?”

While he didn’t specify a timeframe, Gregg Gonsalves, Associate Professor of Epidemiology at Yale University, echoed the urgency to vaccinate globally. Gonsalves said: “With millions of people around the world infected with this virus, new mutations arise every day. Sometimes they find a niche that makes them more fit than their predecessors. These lucky variants could transmit more efficiently and potentially evade immune responses to previous strains. Unless we vaccinate the world, we leave the playing field open to more and more mutations, which could churn out variants that could evade our current vaccines and require booster shots to deal with them.

“We all have a self-interest in ensuring that everyone around the world, no matter where they live have access to COVID-19 vaccines. The virus doesn’t respect borders and new variants somewhere on the planet mean none of us are safe.”

#### Waiving IP protections is essential to expand manufacturing and global exports. A litany of countries possess capacity but lack know-how -- the plan is key.

Kumar 7-12 Rajeesh Kumar, Rajeesh Kumar is Associate Fellow at Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi., 7-12-2021, "WTO TRIPS Waiver and COVID-19 Vaccine Equity," Manohar Paprikar Institute for Defence Studies and Analyses, <https://idsa.in/issuebrief/wto-trips-waiver-covid-vaccine-rkumar-120721>, brett

Another argument against the proposed TRIPS waiver is that a waiver would not increase the manufacturing of COVID-19 vaccines. Indeed, one of the significant factors contributing to vaccine inequity is the lack of manufacturing capacity in the global south. Further, a TRIPS waiver will not automatically translate into improved manufacturing capacity. However, a waiver would be the first but essential step to increase manufacturing capacity worldwide. For instance, to export COVID-19 vaccine-related products, countries need to ensure that there are no IP restrictions at both ends – exporting and importing. The market for vaccine materials includes consumables, single-use reactors bags, filters, culture media, and vaccine ingredients. Export blockages on raw materials, equipment and finished products harm the overall output of the vaccine supply chain. If there is no TRIPS restriction, more governments and companies will invest in repurposing their facilities.

Similarly, the arguments such as that no other manufacturers can carry out the complex manufacturing process of COVID-19 vaccines and generic manufacturing as that would jeopardise quality, have also been proven wrong in the past. For instance, in the early 1990s, when Indian company Shantha Biotechnics approached a Western firm for a technology transfer of Hepatitis B vaccine, the firm responded that “India cannot afford such high technology vaccines… And even if you can afford to buy the technology, your scientists cannot understand recombinant technology in the least.”25 Later, Shantha Biotechnics developed its own vaccine at $1 per dose, and the UNICEF (United Nations Children’s Emergency Fund) mass inoculation programme uses this vaccine against Hepatitis B. In 2009, Shantha sold over 120 million doses of vaccines globally.

India also produces high-quality generic drugs for HIV/AIDS and cancer treatment and markets them across the globe. Now, a couple of Indian companies are in the last stage of producing mRNA (Messenger RNA) vaccines.26 Similarly, Bangladesh and Indonesia claimed that they could manufacture millions of COVID-19 vaccine doses a year if pharmaceutical companies share the know-how.27 Recently, Vietnam also said that the country could satisfy COVID-19 vaccine production requirements once it obtains vaccine patents.28 Countries like the United Arab Emirates (UAE), Turkey, Cuba, Brazil, Argentina and South Korea have the capacity to produce high-quality vaccines but lack technologies and know-how. However, Africa, Egypt, Morocco, Senegal, South Africa and Tunisia have limited manufacturing capacities, which could also produce COVID-19 vaccines after repurposing.

Moreover, COVID-19 vaccine IPR runs across the entire value chain – vaccine development, production, use, etc. A mere patent waiver may not be enough to address the issues related to its production and distribution. What is more important here is to share the technical know-how and information such as trade secrets. Therefore, the existing TRIPS flexibilities, such as compulsory and voluntary licensing, are insufficient to address this crisis. Further, compulsory licensing and the domestic legal procedures it requires is cumbersome and not expedient in a public health crisis like the COVID-19 pandemic.

#### Boosting manufacturing capacity is critical to a timely response to COVID AND ensures preparedness for future pandemics.

Jecker & Atuire 21, Dr Nancy S Jecker, Department of Bioethics & Humanities, University of Washington School of Medicine. Department of Philosophy, University of Johannesburg, Auckland Park, Gauteng, South Africa. Caesar A Atuire, Department of Philosophy and Classics, University of Ghana, Accra, Accra, Ghana. All Souls College, University of Oxford, Oxford, Oxfordshire, UK. Journal of Medical Ethics 2021;47:595-598. “What’s yours is ours: waiving intellectual property protections for COVID-19 vaccines.” <https://jme.bmj.com/content/47/9/595> brett

Since consequentialist justifications treat the value of IP as purely instrumental, they are also vulnerable to counterarguments showing that a sought-after goal is not the sole or most important end. During the COVID-19 pandemic, we submit that the vaccinating the world is an overriding goal. With existing IP protections intact, the world has fallen well short of this goal. Current forecasts show that at the current pace, there will not be enough vaccines to cover the world’s population until 2023 or 2024.15 IP protections further frustrate the goal of universal access to vaccines by limiting who can manufacturer them. The WHO reports that 80% of global sales for COVID-19 vaccines come from five large multinational corporations.16 Increasing the number of manufacturers globally would not only increase supply, but reduce prices, making vaccines more affordable to LMICs. It would stabilise supply, minimising disruptions of the kind that occurred when India halted vaccine exports amidst a surge of COVID-19 cases.

It might be objected that waiving IP protections will not increase supply, because it takes years to establish manufacturing capacity. However, since the pandemic began, we have learnt it takes less time. Repurposing facilities and vetting them for safety and quality can often happen in 6 or 7 months, about half the time previously thought.17 Since COVID-19 will not be the last pandemic humanity faces, expanding manufacturing capacity is also necessary preparation for future pandemics. Nkengasong, Director of the African Centres for Disease Control and Prevention, put the point bluntly, ‘Can a continent of 1.2 billion people—projected to be 2.4 billion in 30 years, where one in four people in the world will be African—continue to import 99% of its vaccine?’18

#### COVID escalates every hotspot---extinction.

RECNA et al. 21, Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA), Asia Pacific Leadership Network (APLN), and the Nautilus Institute. Journal for Peace and Nuclear Disarmament Volume 4, 2021. “Pandemic Futures and Nuclear Weapon Risks: The Nagasaki 75th Anniversary pandemic-nuclear nexus scenarios final report” <https://www.tandfonline.com/doi/full/10.1080/25751654.2021.1890867> brett

The relationship between pandemics and war is as long as human history. Past pandemics have set the scene for wars by weakening societies, undermining resilience, and exacerbating civil and inter-state conflict. Other disease outbreaks have erupted during wars, in part due to the appalling public health and battlefield conditions resulting from war, in turn sowing the seeds for new conflicts. In the post-Cold War era, pandemics have spread with unprecedented speed due to increased mobility created by globalization, especially between urbanized areas. Although there are positive signs that scientific advances and rapid innovation can help us manage pandemics, it is likely that deadly infectious viruses will be a challenge for years to come.

The COVID-19 is the most demonic pandemic threat in modern history. It has erupted at a juncture of other existential global threats, most importantly, accelerating climate change and resurgent nuclear threat-making. The most important issue, therefore, is how the coronavirus (and future pandemics) will increase or decrease the risks associated with these twin threats, climate change effects, and the next use of nuclear weapons in war.5

Today, the nine nuclear weapons arsenals not only can annihilate hundreds of cities, but also cause nuclear winter and mass starvation of a billion or more people, if not the entire human species. Concurrently, climate change is enveloping the planet with more frequent and intense storms, accelerating sea level rise, and advancing rapid ecological change, expressed in unprecedented forest fires across the world. Already stretched to a breaking point in many countries, the current pandemic may overcome resilience to the point of near or actual collapse of social, economic, and political order.

In this extraordinary moment, it is timely to reflect on the existence and possible uses of weapons of mass destruction under pandemic conditions – most importantly, nuclear weapons, but also chemical and biological weapons. Moments of extreme crisis and vulnerability can prompt aggressive and counterintuitive actions that in turn may destabilize already precariously balanced threat systems, underpinned by conventional and nuclear weapons, as well as the threat of weaponized chemical and biological technologies. Consequently, the risk of the use of weapons of mass destruction (WMD), especially nuclear weapons, increases at such times, possibly sharply.

The COVID-19 pandemic is clearly driving massive, rapid, and unpredictable changes that will redefine every aspect of the human condition, including WMD – just as the world wars of the first half of the 20th century led to a revolution in international affairs and entirely new ways of organizing societies, economies, and international relations, in part based on nuclear weapons and their threatened use. In a world reshaped by pandemics, nuclear weapons – as well as correlated non-nuclear WMD, nuclear alliances, “deterrence” doctrines, operational and declaratory policies, nuclear extended deterrence, organizational practices, and the existential risks posed by retaining these capabilities – are all up for redefinition.

A pandemic has potential to destabilize a nuclear-prone conflict by incapacitating the supreme nuclear commander or commanders who have to issue nuclear strike orders, creating uncertainty as to who is in charge, how to handle nuclear mistakes (such as errors, accidents, technological failures, and entanglement with conventional operations gone awry), and opening a brief opportunity for a first strike at a time when the COVID-infected state may not be able to retaliate efficiently – or at all – due to leadership confusion. In some nuclear-laden conflicts, a state might use a pandemic as a cover for political or military provocations in the belief that the adversary is distracted and partly disabled by the pandemic, increasing the risk of war in a nuclear-prone conflict. At the same time, a pandemic may lead nuclear armed states to increase the isolation and sanctions against a nuclear adversary, making it even harder to stop the spread of the disease, in turn creating a pandemic reservoir and transmission risk back to the nuclear armed state or its allies.

In principle, the common threat of the pandemic might induce nuclear-armed states to reduce the tension in a nuclear-prone conflict and thereby the risk of nuclear war. It may cause nuclear adversaries or their umbrella states to seek to resolve conflicts in a cooperative and collaborative manner by creating habits of communication, engagement, and mutual learning that come into play in the nuclear-military sphere. For example, militaries may cooperate to control pandemic transmission, including by working together against criminal-terrorist non-state actors that are trafficking people or by joining forces to ensure that a new pathogen is not developed as a bioweapon.

To date, however, the COVID-19 pandemic has increased the isolation of some nuclear-armed states and provided a textbook case of the failure of states to cooperate to overcome the pandemic. Borders have slammed shut, trade shut down, and budgets blown out, creating enormous pressure to focus on immediate domestic priorities. Foreign policies have become markedly more nationalistic. Dependence on nuclear weapons may increase as states seek to buttress a global re-spatialization6 of all dimensions of human interaction at all levels to manage pandemics. The effect of nuclear threats on leaders may make it less likely – or even impossible – to achieve the kind of concert at a global level needed to respond to and administer an effective vaccine, making it harder and even impossible to revert to pre-pandemic international relations. The result is that some states may proliferate their own nuclear weapons, further reinforcing the spiral of conflicts contained by nuclear threat, with cascading effects on the risk of nuclear war.

#### But, the impact is not just universal---COVID reproduces injustices

C G Nicholas Mascie-Taylor & K Moji 20, Nick Mascie-Taylor is Professor of Human Population Biology and Health and Director of Research in Global Health at the University of Cambridge, UK and a Fellow of Churchill College, Cambridge. Kazuhiko Moji is Professor of Human Ecology and the Dean of Nagasaki University School of Global Humanities and Social Sciences, and the Director of Department of Global Health at Graduate School of Tropical Medicine and Global Health. October 31-November 1, and November 14-15, 2020 (Japan Time). A Working Paper presented to The 75th Anniversary Nagasaki Nuclear-Pandemic Nexus Scenario Project “Pandemics” <https://www.recna.nagasaki-u.ac.jp/recna/bd/files/Taylor_Moji_Nagasaki_WP_20201012_final.pdf> brett

In the context of COVID-19, the pandemic has caused the largest recession in history, with up to a half of the global population at one time being placed on lockdown. Supply shortages have occurred in a number of sectors due to panic buying, increased use of goods to fight the pandemic, and disruption to factories. There have been widespread reports of shortages of pharmaceuticals and the technology industry, in particular, has been warning about delays to shipments of electronic goods. Possible instability generated by an outbreak and associated behavioural changes could result in price spikes, and disruption to markets. Such price rises would be felt most by vulnerable populations who depend on markets for their food as well as those already depending on humanitarian assistance to maintain their livelihoods and food access.

Gender, social and political impacts

When crises strike, women and girls are harder hit by economic impacts than men. Around the world, women generally earn less and save less, are the majority of single-parent households and disproportionately hold more insecure jobs in the informal economy or service sector with less access to social protections. This leaves them less able to absorb the economic shocks than men. For many families, school closures and social distancing measures have increased the unpaid care and domestic load of women at home, making them less able to take on, or balance, paid work. The situation is worse in developing economies, where a larger share of people are employed in the informal economy in which there are far fewer social protections for health insurance, paid sick leave and more. Although globally informal employment is a greater source of employment for men (63%) than for women (58%), in low and lower-middle income countries a higher proportion of women are in informal employment than men. In Sub-Saharan Africa, for example, around 92% of employed women are in informal employment compared to 86% of men.

In the context of COVID-19 it is likely that the pandemic could result in a prolonged fall in women’s incomes and labour force participation. The ILO estimates global unemployment will rise to between 5.3 million (“low” scenario) and 24.7 million (“high” scenario) from a base level of 188 million in 2019 as a result of COVID-19’s impact on global GDP growth. In the U.S.A. men’s unemployment went up from 3.55 million in February to 11 million in April in 2020 while women’s unemployment – which was lower than men before the crisis – went up from 2.7 million to 11.5 million over the same period. The picture is even bleaker for young women and men aged 16–19 in the U.S.A., whose unemployment rate jumped from 11.5 per cent in February to 32.2 per cent in April 2020.

Evidence suggests that pandemics can have significant social and political consequences leading to clashes between states and citizens, driving population displacement and heightening social tensions and discrimination. HIV rates went up in Cambodia and E Timor after UN Peacekeepers went in and the 1990s and early 2000s saw extremely high HIV/AIDS prevalence rates among African militaries, leading to increased absenteeism and decreased military capacity and readiness.

Large scale outbreaks of infectious disease have direct and consequential impacts. For example, widespread public panic during disease outbreaks can lead to rapid population migration and migrants face increased health risks arising from poor sanitation, poor nutrition and other stressors. Migration also increases the risk of further spreading an outbreak.

Outbreaks of infectious diseases can cause already vulnerable social groups, such as ethnic minorities, to be stigmatised and blamed for the disease and its consequences. Discrimination against Asians during COVID -19 has been well documented in the USA, Canada, Australia and UK. Migrants in Singapore bore the biggest brunt of COVID-19, and more recently in HK. But in these instances, insecure employment is the main problem, and not ethnicity per se.

#### Neocolonial dynamics limit COVID vaccines to the Global North---that results in debt imperialism and undermines the right to health.

Sharifah Sekalala 21 et al., Warwick Law School, University of Warwick, Coventry, UK. Lisa Forman, Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada. Timothy Hodgson, International Commission of Jurists, Johannesburg, South Africa. Moses Mulumba, Center for Health, Human Rights and Development, Kampala, Uganda. Hadijah Namyalo-Ganafa, School of Law, Makerere University, Kampala, Uganda. Benjamin Mason Meier, Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA. BMJ Glob Health. 2021; 6(7): e006169. Published online 2021 Jul 12. “Decolonising human rights: how intellectual property laws result in unequal access to the COVID-19 vaccine” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8277484/> brett

The current global distribution of COVID-19 vaccines is largely dictated by power disparities and inequities in financial and other resources, with predominantly high-income countries contracting bilaterally with individual pharmaceutical companies (many in their own countries) for specific vaccines, leaving countries from the Global South facing inequitable vaccine access. Bilateral deals between states and pharmaceutical companies, whether completed by Global North or Global South states, significantly compromise the effectiveness and equity of the COVAX initiative, limited as it already is by the coercive influence, vested interests and participation of pharmaceutical companies and their host nations. The African Union, for example, endorsed the TRIPS waiver to relax WTO rules so that LMICs could create their own COVID-19 vaccines, but this collective effort across African countries faced resistance from Global North countries and pharmaceutical companies.

The IP system appears to have pushed countries in the Global South that may prefer not to be dependent on the charitable model of the COVAX scheme to join high-income countries in engaging directly with manufacturers to purchase COVID-19 vaccines. This has included African countries, despite the African Union’s criticism of the inequities resulting from IP law protections. This process has reproduced colonially entrenched power dynamics, in which poorer countries lack the bargaining power to obtain competitive rates and, consequently, typically end up paying far more than the wealthier, developed countries. More broadly, countries in the Global South are pressured into participating in global systems of trade that result in the exploitation of their own populations by unjust global economic systems and IP laws.39 The high cost of vaccines for countries from the Global South constitutes a large proportion of their health expenditure, and this comes at the expense of other health priorities.

In many cases, the only way in which Global South countries can purchase vaccines is to move themselves further into debt. Given the detrimental neocolonial implications of debt, with a long history of loan conditionalities through structural adjustment programmes, increasing debt to service health needs contributes to the worsening of inequalities between the Global North and Global South.40 These programmes may increase debt and undermine development in ways that limit the realisation of the right to health.41 The World Bank has set aside US$12 billion and has already disbursed loans of US$500 million for vaccines in low-income and middle-income nations;42 poorer nations, instead of servicing already depleted health systems, are forced to divert additional funds to servicing debt.

#### Raising the threat level of COVID is key to motivate responses---AND, when combined with our advocacy, is decolonial

Sara E. **Davies 17**. Griffith University. 2017. “Advocating Global Health Security.” Global Insecurity, edited by Anthony Burke and Rita Parker, Palgrave Macmillan UK, pp. 253–272. CrossRef, doi:10.1057/978-1-349-95145-1.

For the last two decades a strategy employed by health professionals, scientists, and diplomats has been to play the ‘health security card’ to achieve particular trade, diplomatic, strategic, and development goals (Elbe 2011). The presumption has been that the securitisation of health will harness global political leadership and resources. This marriage of health issues to security logic has been met with a mix of applause, caution, and critique (Feldbaumet al. 2010; McInnes and Rushton 2013; Hanrieder and Kreuder-Sonnen 2014). But the presumption has remained that, for the most part, the marriage of health issues to security will ‘harness political leadership and resources for various international health issues’ (Elbe 2011: 220). In the last 15 years, there have been three United Nations Security Council (UNSC) resolutions that have specifically referred to health matters – S/Res/1308 (2000), S/Res/1983 (2011), both concerning HIV/AIDs, and S/Res/2177 (2014) in response to the Ebola viral disease outbreak in West Africa. In December 2012, the United Nations General Assembly (UNGA) passed resolution A/67/L.36, Global Health and Foreign Policy, the fifth resolution on global health and foreign policy resolution to pass in the UNGA since the adoption of the first resolution on Global Health and Foreign Policy in 2008 (A/63/33). The UNGA also adopted resolution A/69/1 giving support to the measures recommended by UN Secretary-General to contain the Ebola outbreak (A/69/389 2014). The decision of the UNSC to adopt three resolutions on health matters in 15 years and the UNGA sessions on global health and foreign policy have received mixed views. Some point to these events as illustration of the weakness of the global health security narrative (Youde 2014). In particular, it has been noted that the Ebola outbreak in 2014 was initially met with no international capacity outside of the World Health Organization (WHO) to respond to this crisis. The creation of the UN Mission on Ebola Emergency Response (UNMEER) in September (2014) was the first, and some argue should be the last, effort to respond to a viral outbreak (Panel of independent experts 2015). Others contend that, given that there is no procedure under the UN Charter for the General Assembly or Security Council to examine health matters – let alone develop a mission like UNMEER – broader UN engagement in health beyond the WHO could point to the success of the global health diplomacy (McInnes 2015). The question is what does successful global health diplomacy look like? Do we see in practice the securitisation of health as essential to pursue international diplomatic engagement in global health? There have been recent claims that the successful international engagement in health initiatives such as the Global Fund for AIDS, TB, and Malaria (Global Fund) and Millennium Development Goals (MDGs) have been achieved without asserting their necessity ‘primarily on security considerations’ (McInnes and Rushton 2013: 16; see also Sridhar 2012; Gagnon and Labonte 2011). However, the assumption remains that linking health issues, specifically health emergencies and infectious disease outbreaks to security discourse will create more opportunities for diplomatic cooperation and engagement (see Feldbaum et al. 2010; Hafner and Shiffman 2013). This chapter explores this argument beginning with the period where the phrase ‘global health diplomacy’ and ‘global health governance’ began to gain usage in international relations in the 1990s. In the first part of the chapter I briefly present the conceptual history of health security and its relationship to ‘global health diplomacy’. I explore the argument that the success of global health diplomacy has come from the preponderant use of security language, referents, and discourse (cf. Elbe 2011; Feldbaum et al. 2010; Kickbusch et al. 2007; McInnes and Rushton 2013). In the second part of the chapter I examine two cases, one where a type of security logic was deliberately employed to frame the ‘health emergency’ (Framework Convention on Tobacco Control or FCTC) and one where human rights logic was initially deployed when advocating for its creation (the Global Alliance for Vaccine Immunization or GAVI). I evaluate what ‘health security’ looks like in these global health initiatives and explore the presumption that ‘security discourse’ must be present in comparing these two major, successful global health initiatives. HEALTH SECURITY States have a history of formal international agreements addressing health matters and health threats, particularly infectious diseases, from the Decree of Quarantine in Ragusa-Dubrovnik in 1377 (Mackowiak and Sehdev 2002) to the International Sanitary Conference in 1851 (Fidler 2003) and the revised International Health Regulations in 2007 (Davies et al. 2015). However, the treatment of health as a ‘low politics’ priority at the international level remained the case through most of the formative years of nation-building in the nineteenth and twentieth centuries (Fidler 1999). This was in spite of its great strategic benefit for colonial era expansion, winning wars and rapid industrialisation (Diamond 1997). In contemporary politics, a range of actors – such as foreign governments, non-governmental organisations (NGOs), pharmaceutical companies, private donors, and international organisations – drive a variety of different health agendas that influence priorities within individual states and affect the resources that are available to individual health workers and opportunities for patients (Youde 2012). Likewise, the post–Second World War Bretton Woods system had a profound influence upon health-care policy and practice around the world, with key lending institutions like the World Bank promoting particular health-care systems and policies in their lending programmes (Sridhar 2012). In this period, key discourses such as ‘Health for All’, the Essential Medicines List, and Right to Health emerged in the absence of linkage to security. These discourses brought in a range of actors including international organisations,NGOs and transnational corporations with the power to shape health opportunities and outcomes within and amongst states (Gagnon and Labonté 2011). In the 1990s, however, foreign and defence ministries became increasingly interested in global health policy – particularly infectious diseases – which would be referred to as having a ‘securitising’ effect on health (McInnes and Lee 2006). 14 ADVOCATING GLOBAL HEALTH SECURITY 255 During the 1990s, key events combined with a paradigm shift in International Relations (IR) and security studies (particularly in Western developed countries with the end of the Cold War) (Paris 2001) to connect security to health (Enemark 2007; Collier and Lakoff 2008). Acute awareness was growing amongst Western states that they were not immune to health events such as infectious disease outbreaks. The outbreak and spread of HIV across developing and developed countries during the 1980s; fear of biosecurity attacks with the breakdown of security in laboratories across the former Soviet Union (Koblentz 2010); sudden outbreak of the plague in India in 1995 and the arrival of West Nile virus near New York City in 1999; and the return of ‘slow-burn’ diseases thought eradicated such as Tuberculosis (TB), measles and meningitis in the United States, United Kingdom, and Australia (Price- Smith 2002). As well, new strains of disease, such as haemorrhagic dengue fever and drug-resistant malaria were on the rise due to significant climate change impact in South Asia, Southeast Asia, and Pacific (Kim and Schneider 2013). Andrew Price-Smith argues that prior to President Clinton’s appointment of the National Science Council on Emerging and Re-Emerging Infectious Diseases in 1995, developed states had grown complacent to the fact that ‘despite their enormous technological and economic power, it is extremely unlikely that developed countries will be able to remain an island of health in a global sea of disease’ (2002: 122). Clinton’s move created a wave of interest in other developed countries, particularly the United Kingdom, Australia, and Canada, all shifting to appreciate and contextualise health threats in foreign policy terms (McInnes and Lee 2012: 32). Until then, on the rare occasion that health policy was discussed at the international level it was in relation to (mostly) infectious disease outbreaks such as plague and cholera, or large-scale efforts such as the mass immunisation programme led by WHO to eradicate smallpox. During infectious disease outbreaks, emphasis had been squarely placed on the responsibility of the host state and regardless of the capacity of its public health system to effectively respond (Fidler 1999). Meanwhile, the spread and scale of HIV/AIDS raised fears about its potential to threaten state cohesion and national economies. There was a particular focus on military forces being at risk of HIV infection, and the political insecurity these infectious could bring in societies (Singer 2002; Elbe 2006). The apparent potential for HIV/AIDS to cause state collapse or serious disruption that could ricochet throughout neighbouring states 256 S.E. DAVIES was considered a realistic scenario in sub-Saharan Africa, as well as some parts of South and East Asia and the Pacific (Shisana et al. 2003; Ramiah 2006; Price-Smith et al. 2007). It was specific reference to the threat of HIV/AIDs on peacekeepers that led to the first resolution on health, Resolution 1308, being passed in the UN Security Council in 2000 (UNSC 2000). In response to these developments, a host of analysts, including Solomon Benatar (1998, 2002), Peter W. Singer (2002), Robert Ostergard (2002), called for IR to engage with the economic, humanitarian, political, and security ramifications of the AIDS epidemic. At the same time, David Fidler and Andrew Price-Smith called for equal attention to the economic, political, and social insecurity that stems from a range of infectious diseases already prevalent in countries (Fidler 2003; Price-Smith 2002). Using quantitative analysis of the relationship between infectious diseases and state capacity, Price-Smith claimed that ‘infectious disease [already] constitutes a verifiable threat to national security and state power’ (Price-Smith 2002: 19). Health security, Price-Smith (2002: 9) argued, referred to the threat of the disease on particular populations as well as the country’s economic and political stability becoming unsustainable as a result of a pathogen wiping out the core population base. While a disease may have a different impact in different states: [I]ncreasing levels of disease correlate with a decline in state capacity. As state capacity declines and as pathogen-induced deprivation and increasing demands upon the state increase, we may see an attendant increase in the incidence of chronic sub-state violence and state failure. State failure frequently produces chaos in affected regions as neighbouring states seal their borders to prevent the massive influx of disease-infected refugee populations. Adjacent states may also seek to fill the power vacuum and may seize valued territory from the collapsing state, prompting other proximate states to do the same and so exacerbating regional security dilemmas. (Price-Smith 2002: 15) In a similar vein, David Fidler’s seminal 1999 book International Law and Infectious Diseases argued that with the increased risk of drug-resistant microbes in the twenty first century, as identified by public health officials (Institute of Medicine 1992; Heymann 1996), it will become important to ‘understand the international politics of infectious disease control, or microbialpolitik’ (Fidler 1999: 19). Microbialpolitik, argued Fidler, was ‘wrapped up not only in traditional concerns such as sovereignty and power but also in the implementation of scientifically sound infectious disease policies at the national and international levels’ (ibid.). Both Fidler and Price-Smith argued that the risk of newly emerged infectious diseases and drug-resistant infectious diseases required that all governments engage with the problem as if they were threats to national security. Likewise, Laurie Garrett argued in 2001 that ‘a sound public health system, it seems, is vital to societal stability and, conversely, may topple in the face of political or social stability or whim. Each affects the other: widespread political disorder or anti-governmentalism may weaken a public health system, and a crisis in the health of the citizens can bring down a government’ (Garrett 2001: 5). These ideas continued to influence the global politics of health into the twenty-first century (Fidler 2009; Davies 2012). In a 2010 study on the influence of global health on foreign policy, Feldbaum and his colleagues found that most discussion and policy from diplomatic engagement focused on the interplay of national interests and security, which meant that most diplomacy focus and discussion was on the containment of infectious diseases (Feldbaum et al. 2010: 87). At the time, WHO also immersed itself in the health security argument: Collaboration between Member States, especially between developed and developing countries, to ensure the availability of technical and other resources is a crucial factor not only in implementing the [International Health] Regulations, but also in building and strengthening public health capacity and the networks and systems that strengthen global public health security will. (WHO 2007: 13) Of course, health diplomacy refers to the pursuit of international health cooperation on matters of concern to states (Kickbusch et al. 2007). It is the amalgam of cooperation in areas where there is the possibility of genuine technical cooperation for a diverse range of diseases (Youde 2012: 25). However, because health diplomacy involves the interplay of national interests, power and diplomatic compromise, ‘state interests have been critical to either the success or obstruction of such agreements . . . and issues of national security remain atop the foreign-policy hierarchy’ (Feldbaum et al. 2010: 87). The counter-narrative to the health security discourse described above is that the securitisation of health promotes an instrumental pursuit of health. To capture foreign policy interest and engagement, global health discussions produce a ‘hierarchy of illnesses’ whereby some health issues receive interest and resources whilst other equally deadly health matters do not (Youde 2012: 160). Jeremy Shiffman’s (2006: 411–420) work on the peaks and troughs of investment in global health initiatives has revealed that despite disease burden to a population, some infectious diseases (i.e. HIV/AIDS) consistently attract stronger short-term investment from donor states – primarily those that are contagious or linked to the national security interests of donor states. However, it would be a mistake to assume that the threat of infectious disease alone encapsulated all diplomatic engagement with health issues at the turn of the twenty-first century. The rise of non-traditional security has also been attributed to the increased influence of the introduction of different social science methods and theories to International Security Studies (Buzan and Hansen 2009: 188). This has influenced research into the subject matter of security studies and IR. If insecurity and grievances amongst the population played a large part in the civil wars that gripped the 1990s (Fearon and Laitin 2003), engagement with health is not just a security concern for developed states but also for developing states. In other words, appreciations of health security were not one-dimensional. It was possible to advocate for a vision of health security that sought to protect individuals as much as states. Indeed, a human centred appreciation of security – coined ‘human security’ by the 1994 United Nations Development Programme (UNDP) Human Development Report (see MacFarlane and Khong 2006) – sought to redefine the ‘traditional’ security with issues and concepts under the umbrella term ‘non-traditional’ security, including health (Chalk 2006). Thus, there does appear to be a significant relationship between international health events and the direction of research and policy engagement (Davies 2012). In the last decade, events such as the United Nations Security Resolution on HIV/AIDS (S/Res/1308) and SARS create an explosion of IR engagement with global health governance, particularly in the area of health security. This ‘phenomenon’ has been witnessed again with the Ebola outbreak (Youde 2014). Amongst all these engagements, two key approaches have emerged. First, those who accept the inevitability of a ‘narrow’ approach to health and IR, focused on infectious diseases and bioterrorism as security threats (Koblentz 2012). Alternatively, there are those who articulate a broader vision related to development, state capacity, and cross-national health issues (Shiffman 2006; Nunes 2014; Rushton and Williams 2012). One of the central claims of the former approach is that health securitisation is an effective way of galvanising diplomatic engagement amongst states and other actors, resulting in the allocation of political will and material resources (Collier and Lakoff 2008; Elbe 2011; Hafner and Shiffman 2013). In the next part of the chapter I examine this core assumption. In particular, I explore whether the effectiveness of health initiatives is tied to their securitisation, focusing on the examples of two major health initiatives. I examine the Tobacco Free Initiative (TFI) and the GAVI. Interest in these two cases comes from exploring the above presumption that security and health, particularly concerning infectious diseases, drives, and delivers policy momentum. While there is debate about whether that momentum translates into ‘real’ policy progress or whether it is mere rhetoric deployed at particular crises/events with no lasting impact, there is no debate that health security has dominated global health and foreign policy discourse (Feldbaum et al. 2010; McInnes and Rushton 2013). Below, I briefly examine the dominance of health security in successful global health initiatives – one where you would expect it to be deliberately deployed (GAVI) and one where it was not (TFI). TFI and GAVI, I contend, are interesting cases precisely because they confound the issueframing conventions about the relationship between health and security. CONFOUNDING EXPECTATIONS A global health initiative is defined in this chapter as ‘an emerging and global trend in health. They are usually focused on state, international organisation and public–private partnerships. Global initiatives typically target specific diseases and are supposed to bring additional resources to health efforts’ (WHO 2015). Case Selection and Discourse Analysis This section briefly compares two international health initiatives: the TFI and GAVI. The TFI sought to reach an international agreement under international law that countries would adopt to regulate the sale and production of tobacco. This global health initiative was in aid of preventing the unchecked rise of tobacco related illnesses – non-communicable diseases – including cancer (various), emphysema, heart disease, stroke, and diabetes (to name a few). In the case of the TFI, and in light of the 260 S.E. DAVIES literature discussion concerning health security above, it would be expected that there was little to no presence of security discourse in the early days of this initiative. It was (and is) about introducing tobacco control legislation, addressing unregulated sale and distribution of tobacco to address preventable tobacco-related diseases in young populations in already over-burdened public health-care systems (Roemer et al. 2005). In contrast, the GAVI is a public and private partnership between states, international organisations, pharmaceutical companies, and philanthropic donors that sought cooperation amongst this diverse group of actors to manufacture, purchase and deliver life-saving vaccines against deadly infectious diseases in the most remote, dangerous and impoverished locations around the world. GAVI is, ostensibly, the initiative where it would be expected to see initial employment of ‘security’ rhetoric given it is addressing the health insecurity of under five children in need of vaccination from, mostly, contagious infectious diseases. In fact, the immediate previous iteration of GAVI – the Child Vaccination Initiative – used security type discourse such as ‘mission’, ‘operation’, and ‘threat’’ under the steerage of a former US defence army medic (see Muraskin 2002). These cases were also selected because they shared some important features. Both the TFI and the GAVI are concerned with one specific health concern – tobacco and immunisation; both were launched within a similar time where health security discourse was gaining policy attention; both initiatives required the involvement of multiple stakeholders, including national governments, to enjoy success. The main difference, of interest to this chapter, is that the association of security with the health issue confound the type of cases analysed to date in the IR literature on global health security. I reveal below that the non-communicable, ‘slow moving’ health threat engaged more securitised discourse than the high morbidity communicable health threat. The comparison of the two cases was organised around a common framework involving three steps. 14 ADVOCATING GLOBAL HEALTH SECURITY 261 First, understanding the rhetoric and concepts used to frame the initiative. Each initiative has produced a significant volume of material outlining its purpose, scope and mandate. For the purposes of this chapter, I focused on the ‘founding’ document for each initiative. In the case of TFI, the Framework Convention on Tobacco Control, adopted by the World Health Assembly in 2003, 8 years after the Convention was first proposed in the 1995 World Health Assembly. The Framework Convention was the outcome of the TFI and details ‘a regulatory strategy to address addictive substances; in contrast to previous drug control treaties, the WHO Framework Convention asserts the importance of demand reduction strategies as well as supply issues’ (WHO 2003). Included in the Framework Convention document analysed is an Annex 2, which details the history of drafting the Framework from 1995 to 2003. For GAVI, the document analysed is the GAVI Meeting of the Proto-Board in Seattle, July 1999. This document details GAVI’s terms of reference, mission, objectives, functions, structure, milestones, and budget priorities. An interest in the discourse used in the founding document of each initiative is informed by the premise outlined in the above literature – to what extent security frames were employed to justify, conceptualise, and operationalise these two global health initiatives which remain, successfully, in place today. Second, once accepting the premise that securitisation is deliberately engaged the two documents were analysed to identify a set of ‘benchmarks’ to guide its assessment of the extent to which a health initiative has aligned with security. Both documents were examined in detail for the presence of ‘speech acts’ (Hansen 2012) – the initiative itself or actors associated with the initiative identified an existential threat or risk and speech acts that called for the adoption of extraordinary measures. Was the initiative itself referred to as ‘security’, ‘threat’, or ‘risk’. Who was the ‘referent object’ identified – the group threatened; who was the functional actor capable of protecting the referent object from the identified threat (Buzan et al. 1998: 26–39); and what was the ‘scale’ of securitisation utitlised to emphasise the need for extraordinary measures (Buzan and Weaver 2009). Third, discourse analysis (Hansen 2012). In this case, the discourse within the two documents were analysed using NVivo Software. For the purposes of this chapter, I refer to three query searches conducted to analyse the perspectives being presented in the two documents concerning the threat the initiative is addressing, who the initiative is ‘protecting’ and 262 S.E. DAVIES who is responsible for such protection. To facilitate answering these three levels of inquiry, three query searches within NVivo of each document were conducted: (1) word frequency analysis, (2) text search of ‘security’ terms and, and (3) text search of ‘other’ normative terms (development, rights, economy). A word tree was then developed for the second and third text searches with a ‘in context’ search up to ten surrounding words (on either side) to enable understanding of the context and usage of the key words, i.e. ‘threat’ or ‘poor’ being searched in the document. The word frequency search assisted with identifying the primary actors discussed in the documents – i.e. who was identified as the referent actor intended for that initiative versus the functional actor necessary to give effect to the initiative. Findings Discourse analysis of the TFI and GAVI documents produced three key findings. The first, unexpected, find was that the TFI initiative was framed just as much in security terms as was GAVI. The number of securitisation ‘speech acts’ (Hansen 2012) searched and located in the Framework Convention was practically the same at GAVI – 0.08% and 0.07%, respectively (speech act terms: secure, threat, risk, mission, extraordinary, urgent). In both cases, the presence of security language was less than 1% of each document. What was significant was that in the search for ‘other’ normative terms (terms: responsible, rights, develop, needs, poor) – the Framework Convention was comparatively high at 1.05%, and a similar search for GAVI came at 0.4% references. However, given the Framework Convention is a legal document the presence of ‘right/rights’ partly accounts for high percentage compared to GAVI. Contextual analysis of these terms reveals further detail in how the documents framed the problem, the referent actor and the functional actor (see Table 14.1). In the Framework Convention – despite higher use of ‘other’ (nonsecurity) normative language than GAVI – there is a clear disposition towards identifying the state as the ‘functional’ actor responsible for taking measures necessary to protect the population from tobacco sale, use, and morbidity. The Convention directly refers to populations at risk (women and minors) and the need for member states to support civil society capacity to inform and educate tobacco awareness in these populations. Again, this is a legal instrument so the emphasis on member states is not surprising as they are the only signatories. However, even in ‘other normative’ references to rights, responsibilities and need – primary emphasis remains on the state as the functional actor protects the population at risk of addiction rather than alternative dominant frames such as the right to health, the right to information. The Framework Convention leans towards more ‘traditional’ security language in conceptualising the state–individual relationship concerning tobacco control: risk and risk mitigation; threat and protection. In the case of GAVI, the 0.07% security references in contrast with its 0.4% ‘other’ references hints at a different frame being brought to this initiative. However, it is not particularly clear until, again, the broader context of these terms is analysed. In the case of GAVI the focus is overwhelming on the ‘mission’ of the alliance and ensuring institutional clarity to support the primary focus – the right of the child to immunisation. This is clearly stated as seen above, particularly in the mission and responsibility statements (Table 14.1). The only time the roles of functional actors are associated with either security or other terms are in the context of securing commitment from actors (broad range of board membership from states to international organisations, pharmaceutical companies, and civil society), and development of health sector capacity. Despite GAVI addressing the containment of infectious disease, there is no threat language present. Securitised speech acts are practically absent – even when ‘security’ terms are located. The emphasis is overwhelming on rights and alleviating deprivation. Both initiatives confound the expectations prior to analysis – the infectious disease focused initiative is ‘under-securitised’ in comparison to the non-communicable focused initiative. Finally, hinted at above, the emphasis on primary actors in these two documents revealed key similarities – both focus on the institutional arrangements and the actors most closely associated with these arrangements. In the case of GAVI the board (comprised of international organisation, civil society, member states, pharmaceutical, and philanthropic members) is the primary functional actor; in the case of the TFI, the actor that looms largest is the organisation (namely, WHO) followed by signatory states to the Convention. Discussion about the population who are to benefit and arguably be empowered from these initiatives, is not discussed as much as the organisation and accordingly the implementation arrangements around the initiative itself. To some extent, given the nature of these two documents, this is not surprising. However, its presence in two documents for two very different initiatives may reveal that the pathology of organisations rather than the framing of an initiative requires further study when engaging with the comparative success and failure of global health diplomacy (Barnett and Finnemore 2003; Hanrieder 2015). 14 ADVOCATING GLOBAL HEALTH SECURITY 265 CONCLUSION What is the value of securitisation when it comes to building and sustaining global political interest in health issues? Some contend that global health security has not run its course and continues to have utility in building state interest, particularly the resources of foreign affairs and defence departments, to secure global health diplomacy objectives (Kickbusch et al. 2007; Feldbaum et al. 2010; Elbe 2011). Others contend it is a ‘smokescreen’ that captures short bursts of attention that are episodic and may have immediate impact but no essential ‘follow through’ (McInnes and Rushton 2013). In this chapter, I explored how global health initiatives securitise and what becomes of them. I deliberately chose two successful initiatives with the expectation that one had securitised a conventional health issue – vaccine preventable infectious diseases – and one had not – tobacco regulation. In examining the cases of TFI and GAVI, I looked at their core document: their mission and value statements reflected in, respectively, the Framework Convention on Tobacco Control and the first meeting documents of GAVI. Speech acts, identified as the hallmark of securitising moves, were analysed in both documents and contrasted with ‘non-securitisation’ or ‘other normative’ language. The Framework Convention engaged in more securitising language or ‘speech acts’ compared to GAVI but both contained more references to human rights and responsibilities discourse. In neither case did it appear as if actors had taken a conscious decision to securitise the issue any more than they chose to articulate the issue in terms of human rights obligations. In the case of the Framework Convention where a focus on security was expected and to a greater extent seen here was an equally strong presence of human rights and ‘sovereignty as responsibility’ language. The security discourse may have helped capture attention but it was not the only discursive tool at play and neither did it obviously displace other discourses. In the case of GAVI, the initiative identified its primary mission as fulfilling the rights of the child; whereas for TFI, emphasis was member states fulfilling their responsibility to address the threat of tobacco related illness from tobacco usage. GAVI appears to have a single referent – the right of the child to health via immunisation; while TFI related to a multitude of actors. The operationalisation of the initiative(s) and their embeddedness in global health architecture dominated the discussion far more than the framing language. Framing language constituted a relatively small part of the discourse compared to the consuming discussion of institutional design. What this comparison of two global health initiatives reveals is that whilst security discourse might help capture the attention of states, it has not necessarily overtaken other policy frames such as human rights and ‘sovereignty as responsibility language’. Indeed, the key priority seems to be not whether the international community should be engaged with these issues, but the appropriate institutional design for initiatives to achieve these health goals.

### Solvency

#### Plan: The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines related to the prevention, containment, and treatment of COVID-19.

#### Enforcement is done through waiving TRIPS protections and modifying relevant domestic law to ensure patent protections are reduced---spec is delineated in the card.

Jones et al. 21, Mike Jones, J.D., cum laude, Brooklyn Law School, 2014. Sean McConnell, University of Pittsburgh School of Law, J.D., 2002. Lauren Giambalvo, University of Georgia School of Law, J.D., magna cum laude, Order of the Coif, 2019; Georgia Law Review. Emily Harmon, Villanova University Charles Widger School of Law, J.D., 2020. Ipwatchdog, August 9, 2021. “What is a ‘Patent Waiver’ Anyway? Zooming Out on the TRIPS COVID IP Waiver Debate” <https://www.ipwatchdog.com/2021/08/09/patent-waiver-anyway-zooming-trips-covid-ipwaiver-debate/id=136381/> brett

Scientists, engineers, and everyday people have developed solutions for testing, preventing, and treating the COVID-19 disease. Ordinarily, we wouldn’t think twice about granting patents on these inventions. But, today, when COVID-19 is spreading all over the world and killing millions of people, some world leaders are questioning whether we should be granting the exclusionary rights of patent protection on inventions that help respond to the pandemic. Included in that group is the Biden-Harris Administration, which, in May, announced their support of an “IP waiver” on COVID 19 vaccines.

Patent Waiver

The “patent waiver” is a proposal to waive certain provisions of the Trade-Related Aspects of Intellectual Property (TRIPS) Agreement for three years. The TRIPS Agreement requires certain member countries (“Members”), including the United States, to have certain minimum intellectual property protections. While this proposal is often referred to as a “patent waiver,” the proposal would also waive sections associated with copyright, industrial designs, and undisclosed information.

The proposal seeks to waive Part II, Section 5 Patents of the TRIPS Agreement and the associated enforcement sections only with respect to “health products and technologies including diagnostics, therapeutics, vaccines, medical devices, personal protective equipment, their materials or components, and their methods and means of manufacture for the prevention, treatment or containment of COVID-19” for a period of three years. Article 27 of Section 5 requires that certain Members issue patents to inventions that “are new, involve an inventive step and are capable of industrial application.” However, Members have the option to refuse to grant patents to certain categories of inventions, including, “diagnostic, therapeutic and surgical methods for the treatment of humans or animals.” Article 28 explains that an owner of a patent can prevent others from “making, using, offering for sale, selling, or importing” (“infringing”) the patented inventions. Finally, Part III of the TRIPS Agreement explains the potential consequences of infringing a patent. Among other things, the infringer can be liable for money damages and the judicial authority of the Member may order injunctions.

Therefore, as the TRIPS Agreement currently stands, each Member must have patent laws that give patents to inventions that meet certain requirements, and each must provide avenues for patent holders to enforce its patent rights. As applied to the current situation, Members are required to grant patents to qualifying inventions related to “the prevention, containment and treatment of COVID-19” (with exceptions for pharmaceuticals if the Member does not allow pharmaceutical patents). Infringers could be liable for money damages and the judicial authority of the Member may order injunctions.

If provisions in Part II, Section 5 and the associated enforcement sections are waived, Members would no longer be required to issue patents or provide avenues for patent holders to enforce patent rights. The proposal does not, however, require Members to waive their own domestic patent rights. In other words, the proposal to waive certain provisions of the TRIPS Agreement, the “patent waiver,” does not directly waive any patent protections. Rather, the patent waiver grants to Members permission to waive their own domestic patent protections.

Patent laws are geographically limited; they only protect an invention in the country that issued the patent. For example, one cannot make, use, offer to sell, sell, or import an invention protected only by a U.S. patent in the U.S; however, one may do those things in another country where corresponding patent protection does not exist. Therefore, in order to waive patent protections worldwide, each Member subject the TRIPS Agreement’s requirement to have certain minimum intellectual property protection would have to waive its own domestic patent protections.

The United States patent laws are codified in Title 35 to the U.S. Code. It provides that inventors may obtain patents for their new and useful inventions and infringers are liable for making, using, offering to sell, selling, or importing into the U.S. patented inventions without the patent holders consent. Because the power to enact patent laws lies with Congress, Congress would likely have to waive these laws. If Congress chooses not to waive the U.S.’s patent laws, patent holders will continue to be able to enforce their U.S. patent rights in the U.S.

#### Public funding and massive pre-purchases are superior incentives to patents in a pandemic.

Lindsey 21, Brink Lindsey, Vice President @ Niskanen Center “Why intellectual property and pandemics don’t mix,” Brookings Institution, June 3, 2021. <https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/> brett

What approach to encouraging innovation should we take instead? How do we incentivize drug makers to undertake the hefty R&D costs to develop new vaccines without giving them exclusive rights over their production and sale? The most effective approach during a public health crisis is direct government support: public funding of R&D, advance purchase commitments by the government to buy large numbers of doses at set prices, and other, related payouts. And when we pay drug makers, we should not hesitate to pay generously, even extravagantly: we want to offer drug companies big profits so that they prioritize this work above everything else, and so that they are ready and eager to come to the rescue again the next time there’s a crisis.

It was direct support via Operation Warp Speed that made possible the astonishingly rapid development of COVID-19 vaccines and then facilitated a relatively rapid rollout of vaccine distribution (relative, that is, to most of the rest of the world). And it’s worth noting that a major reason for the faster rollout here and in the United Kingdom compared to the European Union was the latter’s misguided penny-pinching. The EU bargained hard with firms to keep vaccine prices low, and as a result their citizens ended up in the back of the queue as various supply line kinks were being ironed out. This is particularly ironic since the Pfizer-BioNTech vaccine was developed in Germany. As this fact underscores, the chief advantage of direct support isn’t to “get tough” with drug firms and keep a lid on their profits. Instead, it is to accelerate the end of the public health emergency by making sure drug makers profit handsomely from doing the right thing.

Patent law and direct support should be seen not as either-or alternatives but as complements that apply different incentives to different circumstances and time horizons. Patent law provides a decentralized system for encouraging innovation. The government doesn’t presume to tell the industry which new drugs are needed; it simply incentivizes the development of whatever new drugs that pharmaceutical firms can come up with by offering them a temporary monopoly. It is important to note that patent law’s incentives offer no commercial guarantees. Yes, you can block other competitors for a number of years, but that still doesn’t ensure enough consumer demand for the new product to make it profitable.

DIRECT SUPPORT MAKES PATENTS REDUNDANT

The situation is different in a pandemic. Here the government knows exactly what it wants to incentivize: the creation of vaccines to prevent the spread of a specific virus and other drugs to treat that virus. Under these circumstances, the decentralized approach isn’t good enough. There is no time to sit back and let drug makers take the initiative on their own timeline. Instead, the government needs to be more involved to incentivize specific innovations now. As recompense for letting it call the shots (pardon the pun), the government sweetens the deal for drug companies by insulating them from commercial risk. If pharmaceutical firms develop effective vaccines and therapies, the government will buy large, predetermined quantities at prices set high enough to guarantee a healthy return.

For the pharmaceutical industry, it is useful to conceive of patent law as the default regime for innovation promotion. It improves pharmaceutical companies’ incentives to develop new drugs while leaving them free to decide which new drugs to pursue – and also leaving them to bear all commercial risk. In a pandemic or other emergency, however, it is appropriate to shift to the direct support regime, in which the government focuses efforts on one disease. In this regime, it is important to note, the government provides qualitatively superior incentives to those offered under patent law. Not only does it offer public funding to cover the up-front costs of drug development, but it also provides advance purchase commitments that guarantee a healthy return.

It should therefore be clear that the pharmaceutical industry has no legitimate basis for objecting to a TRIPS waiver. Since, because of the public health crisis, drug makers now qualify for the superior benefits of direct government support, they no longer need the default benefits of patent support. Arguments that a TRIPS waiver would deprive drug makers of the incentives they need to keep developing new drugs, when they are presently receiving the most favorable incentives available, can be dismissed as the worst sort of special pleading.

That said, it is a serious mistake to try to cast the current crisis as a morality play in which drug makers wear the black hats and the choice at hand is between private profits and public health. We would have no chance of beating this virus without the formidable organizational capabilities of the pharmaceutical industry, and providing the appropriate incentives is essential to ensure that the industry plays its necessary and vital role. It is misguided to lament that private companies are profiting in the current crisis: those profits are a drop in the bucket compared to the staggering cost of this pandemic in lives and economic damage.

#### Neg objections are not intuitive

HRW 6/3 Human Rights Watch, 6-3-2021, "Seven Reasons the EU is Wrong to Oppose the TRIPS Waiver," https://www.hrw.org/news/2021/06/03/seven-reasons-eu-wrong-oppose-trips-waiver///ramamurty

As the Covid-19 pandemic has devastating human rights, social, and economic consequences across the globe, European Union (EU) representatives have repeatedly stated their commitment to the idea that Covid-19 vaccines should be a universal common good and that no one is safe from Covid-19 unless everyone is safe. Yet the EU has consistently opposed India and South Africa’s proposal at the World Trade Organization to temporarily waive certain intellectual property rules under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), a measure that would expand access to lifesaving vaccines and other health products. Human Rights Watch is among the hundreds of civil society organizations around the world urging support for the TRIPS waiver. The arguments used by the European Commission to justify its opposition are inaccurate, misleading, and misguided. We address them individually here, focusing on the following seven truths: Intellectual property is currently a barrier to swiftly scaling up and diversifying the production of Covid-19 health products, including vaccines. The European Commission claims that intellectual property (IP) is not a barrier to scaling up the manufacturing of vaccines or other health products needed for the Covid-19 response, suggesting that sharing IP would not immediately speed up manufacturing. Right now, there are manufacturers with capacity to produce additional Covid-19 vaccines and other health products at factories in Bangladesh, Canada, Denmark, India, and Israel, but they are unable to contribute because they do not yet have the right licenses. So, IP is a barrier to them. The TRIPS waiver proposal sponsors and experts at the leading science journal Nature, Médecins Sans Frontières (MSF) Access Campaign, the Third World Network, and others have presented many other concrete examples of how enforcement of IP rules blocked, delayed, or limited production of chemical reagents for Covid-19 tests, ventilator valves, Covid-19 treatments, and elements of Covid-19 vaccines. IP constraints have not only led to vaccine shortages but have also led to shortages of key raw materials like bioreactor bags and filters. Rather than manufacturers being held back by an inherent lack of manufacturing and technological capability, studies have shown that transnational claims to IP impede new manufacturers from entering and competing in the market. The same dynamics are playing out today with Covid-19. Even though a waiver will not automatically expand production overnight, it paves the way for speedy technology transfers and manufacturing. The waiver by itself will not automatically result in widespread and diversified manufacturing, but it will ease complex global rules governing IP and exports and give governments freedom to collaborate on technology transfers and exports without fearing trade-based retaliation. It will help reduce the dependence on any one country or region for medical products and mitigate the risks of export restrictions. With new variants emerging and some evidence that repeat vaccine boosters may be needed, the waiver will enable governments around the world to be prepared for a long-term response to Covid-19. Experts have mapped out plans for how the manufacturing of mRNA and other vaccines, could be dramatically expanded in a relatively short period of time. Waiving certain IP rules in the TRIPS agreement over the next three years could help create diverse regional manufacturing hubs and protect the EU and the rest of the world from future pandemics, supply chain disruptions, and resulting economic disaster. Concerns that widening the universe of producers may lower or compromise quality standards are unfounded because stringent regulatory authorities and the World Health Organization (WHO) would continue to play their existing role as arbiters of quality and safety for vaccines, which have a very stringent process for approval. Dose-sharing and COVAX will not be enough to deliver universal and equitable vaccine access. The European Commission points to its participation in COVAX to suggest that it is effectively leading efforts to promote equitable access to vaccines. Individual member states have begun to use COVAX to share some of the doses they prebooked with countries in need. However, COVAX currently only aims to provide vaccines for 20 percent of participants’ populations, far from the coverage needed to end the pandemic. Vaccine supply shortages have already hampered COVAX’s ability to reach that target. The facility began delivering vaccine doses in late February, but has only been able to deliver 71 million vaccine doses to over 100 countries as of May 25, 2021 barely enough to cover 1 percent of the combined populations of those countries. Further, COVAX is heavily dependent on AstraZeneca’s vaccines manufactured at the Serum Institute of India. Because of the huge surge in Covid-19 in India, the Indian government has currently restricted export of vaccines, and COVAX is facing a shortfall of 190 million vaccine doses. Serum Institute of India recently announced that it expects to resume supplying COVAX only by the end of 2021. Finally, COVAX only applies to procurement and allocation of vaccines. India and South Africa’s proposal would cover a broader range of health products and technologies needed for the Covid-19 response including tests, treatments, personal protective equipment, and more. The devastating recent surge in infections and deaths in India, Brazil, and Nepal shows that we need more than vaccines to save lives. Temporarily waiving patent monopolies will not end all future innovation to develop vaccines and drugs. Pharmaceutical companies and their lobbying groups claim that patent monopolies to commercialize their inventions spur innovation and that waiving such monopoly rights during a devastating global pandemic, “would jeopardize future medical innovation, making us more vulnerable to other diseases.” The UN Committee on Economic, Social and Cultural Rights stated in April 2020 that “Pandemics are a crucial example of the need for scientific international cooperation to face transnational threats … [i]f a pandemic develops, sharing the best scientific knowledge and its applications, especially in the medical field, becomes crucial to mitigate the impact of the disease and to expedite the discovery of effective treatments and vaccines…. The Committee reiterates that ultimately, intellectual property is a social product and has a social function and consequently, States parties have a duty to prevent unreasonably high costs for access to essential medicines.” It is a disservice to humanity to claim scientists and researchers would have no interest in developing lifesaving vaccines and drugs without the promise of patent monopolies. Jonas Salk, the inventor of the polio vaccine, did not claim any monopoly over it and gave it away for free. When he was asked who owned the patent for his vaccine, he reportedly said, “Well, the people, I would say. There is no patent. Could you patent the sun?” Economists Mariana Mazzucato and Jayati Ghosh, and public health activist Els Torreele, argue that IP rights were never designed to be used during pandemics. “Patents erect barriers against competitors when what is needed is technological co-operation, harnessing our global scientific and technological capabilities to fight the virus together,” they explain. The 1994 Marrakesh Agreement, which established the WTO allows for waivers in exceptional circumstances. What could be a more exceptional circumstance than a global pandemic that has claimed the lives of 3.5 million people? Dr. Tedros Adhanom Ghebreyesus, the director-general of the WHO, supported the waiver, asking poignantly: “If not now, when?” The argument that we need market-based incentives like patents to spur innovation also ignores the fact that billions of Euros of public money have funded research, development, and delivery of Covid-19 vaccines and other health technologies. For example, a recent study found that public money from government and philanthropic sources accounted for 97.1 to 99 percent of the funding toward research and development of the Oxford-AstraZeneca vaccine. Johnson & Johnson received an estimated US$1 billion (€820 million) in funding from the US government for development of its Covid-19 vaccine; Moderna’s vaccine was also significantly funded by public money from the US government. Even where public money was not directly given for research and development, experts say that governments’ advance market commitments significantly de-risked the investments of pharmaceutical companies, by providing them a guaranteed market even before their vaccines were proven to be safe and effective. Public money fueled the development of the health technologies needed for the Covid-19 response, and that public money should be used to maximize public good. The European Commission has not required pharmaceutical companies to disclose measures they have taken to refrain from using any public funds received from any government authority or through COVAX to support stock buybacks, executive bonuses, dividends and other practices that disproportionately benefit shareholders. Streamlining compulsory licensing systems are welcome, but not enough to rise to the challenge of the Covid-19 health response. One part of the EU’s planned “third way” proposal would aim to simplify the use of compulsory licenses under the TRIPS Agreement and the 2001 Doha Declaration, which affirmed that under global IP rules governments could issue licenses for patents during a public health crisis. Human Rights Watch supports governments’ use of existing flexibilities under the TRIPS Agreement, such as the Bolivian government’s decision to seek a compulsory license for the Canadian company Biolyse Pharma to produce 15 million doses of Johnson & Johnson’s Covid-19 vaccine. But there are significant barriers to making compulsory licenses a practical solution to the severe supply shortages the world is facing now. Scholars in the United Kingdom recently published an extensive legal analysis of the TRIPS waiver proposal and determined, “existing TRIPS flexibilities around compulsory licensing are incapable of addressing the present pandemic context adequately, both in terms of procedure and legal substance.” The MSF Access Campaign also published a new report explaining that compulsory licensing is burdensome and time-consuming because it must be applied on a product-by-product and country-by-country basis, and there are often significant regulatory obstacles to overcome. The Doha Declaration only addresses one form of IP: patents. The TRIPS waiver proposal, in contrast, would cover not just patents but other forms of IP, too. Experts have mapped the complex IP behind Covid-19 vaccines, highlighting the need for a TRIPS waiver that covers more than patents. A recent analysis of mRNA-based Covid-19 vaccines showed that each vaccine involves a complex web of patents owned by multiple companies, and found that “Webs of intellectual property claims underpin the marketing of many vaccines. For example, the underlying technology used to develop a vaccine can be protected by patents, while manufacturing methods and techniques (know-how) can be protected by trade secrets.” The landscaping study did not include patents and other forms of IP underlying bioreactor bags, filters, glass vials, and cold storage containers. Even where compulsory licenses are issued for patents, pharmaceutical companies may bring legal cases against them, and continue to lobby for trade-based measures against governments that use them. For example, Gilead recently sued the Russian government for issuing a compulsory license to manufacture remdesivir, a drug used to treat Covid-19. The Russian Supreme Court ruled against Gilead. Pharmaceutical industry associations lobbied against the Hungarian government’s compulsory license for remdesivir, as part of their submission to the United States Trade Representative’s “Special 301 Report.” Voluntary licensing is insufficient and industry-led efforts have left us with shortfalls and delays. Voluntary licensing is the practice where the developer of the vaccine or drug decides to whom and on what terms the IP can be licensed to enable manufacturing. The past year has shown that we cannot rely on the pharmaceutical industry to take voluntary action to scale up manufacturing of health products at the pace and scale needed to address the pandemic. Tedros Adhanom Ghebreyesus, director-general of the WHO, recently commented that voluntary licensing agreements “tend to be exclusive and nontransparent, compromising equitable access.” The supply delays and production challenges several pharmaceutical companies faced have been exacerbated by restrictive or exclusive licensing practices. Efforts to license vaccines have been slow. For example, Biolyse Pharma, a Canadian company, reported unsuccessfully requesting licenses to manufacture its Covid-19 vaccine from multiple companies. Numerous other manufacturers say they are willing to manufacture and are awaiting the right licenses, as explained above. Voluntary corporate commitment to open and nonexclusive licensing has been low, making government use of regulatory tools essential to ensure vaccines and health products are widely available and affordable for all. Numerous companies have signed the Open Covid Pledge issuing open and nonexclusive licenses, which experts say promote an “open innovation model.” But the Open Covid Pledge is dominated by technology companies. Only a handful of companies making health products are a part of it. To date, the EU has not brought any major pharmaceutical company operating within the EU to join the WHO’s Covid-19 Technology Access Pool (C-TAP), a platform launched over a year to ago to enable the voluntary sharing of IP, data, and knowledge with qualified manufacturers. No company has voluntarily joined this initiative either. Only a few EU member states have endorsed the C-TAP Solidarity Call to Action. While the Spanish National Research Council has reportedly promised that it will provide its diagnostic tests under a nonexclusive license to C-TAP, to date, no company marketing vaccines has agreed to join the WHO Covid-19 mRNA Technology Transfer Hub. Easing export restrictions will not eliminate the urgent need for an IP waiver to address acute supply shortages.

### Framing

#### The standard is maximizing expected well-being, or hedonistic act utilitarianism.

#### 1] Neuroscience- pleasure and pain *are* intrinsic value and disvalue – everything else regresses.

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**Pleasure** is not only one of the three primary reward functions but it also **defines reward.** As homeostasis explains the functions of only a limited number of rewards, the principal reason why particular stimuli, objects, events, situations, and activities are rewarding may be due to pleasure. This applies first of all to sex and to the primary homeostatic rewards of food and liquid and extends to money, taste, beauty, social encounters and nonmaterial, internally set, and intrinsic rewards. Pleasure, as the primary effect of rewards, drives the prime reward functions of learning, approach behavior, and decision making and provides the **basis for hedonic theories** of reward function. We are attracted by most rewards and exert intense efforts to obtain them, just because they are enjoyable [10].

Pleasure is a passive reaction that derives from the experience or prediction of reward and may lead to a long-lasting state of happiness. The word happiness is difficult to define. In fact, just obtaining physical pleasure may not be enough. One key to happiness involves a network of good friends. However, it is not obvious how the higher forms of satisfaction and pleasure are related to an ice cream cone, or to your team winning a sporting event. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure [14].

Pleasure as a hallmark of reward is sufficient for defining a reward, but it may not be necessary. A reward may generate positive learning and approach behavior simply because it contains substances that are essential for body function. When we are hungry, we may eat bad and unpleasant meals. A monkey who receives hundreds of small drops of water every morning in the laboratory is unlikely to feel a rush of pleasure every time it gets the 0.1 ml. Nevertheless, with these precautions in mind, we may define any stimulus, object, event, activity, or situation that has the potential to produce pleasure as a reward. In the context of reward deficiency or for disorders of addiction, homeostasis pursues pharmacological treatments: drugs to treat drug addiction, obesity, and other compulsive behaviors. The theory of allostasis suggests broader approaches - such as re-expanding the range of possible pleasures and providing opportunities to expend effort in their pursuit. [15]. It is noteworthy, the first animal studies eliciting approach behavior by electrical brain stimulation interpreted their findings as a discovery of the brain’s pleasure centers [16] which were later partly associated with midbrain dopamine neurons [17–19] despite the notorious difficulties of identifying emotions in animals.

Evolutionary theories of pleasure: The love connection BO:D

Charles Darwin and other biological scientists that have examined the biological evolution and its basic principles found various mechanisms that steer behavior and biological development. Besides their theory on natural selection, it was particularly the sexual selection process that gained significance in the latter context over the last century, especially when it comes to the question of what makes us “what we are,” i.e., human. However, the capacity to sexually select and evolve is not at all a human accomplishment alone or a sign of our uniqueness; yet, we humans, as it seems, are ingenious in fooling ourselves and others–when we are in love or desperately search for it.

It is well established that modern biological theory conjectures that **organisms are** the **result of evolutionary competition.** In fact, Richard Dawkins stresses gene survival and propagation as the basic mechanism of life [20]. Only genes that lead to the fittest phenotype will make it. It is noteworthy that the phenotype is selected based on behavior that maximizes gene propagation. To do so, the phenotype must survive and generate offspring, and be bettear at it than its competitors. Thus, the ultimate, distal function of rewards is to increase evolutionary fitness by ensuring the survival of the organism and reproduction. It is agreed that learning, approach, economic decisions, and positive emotions are the proximal functions through which phenotypes obtain other necessary nutrients for survival, mating, and care for offspring.

Behavioral reward functions have evolved to help individuals to survive and propagate their genes. Apparently, people need to live well and long enough to reproduce. Most would agree that homo-sapiens do so by ingesting the substances that make their bodies function properly. For this reason, foods and drinks are rewards. Additional rewards, including those used for economic exchanges, ensure sufficient palatable food and drink supply. Mating and gene propagation is supported by powerful sexual attraction. Additional properties, like body form, augment the chance to mate and nourish and defend offspring and are therefore also rewards. Care for offspring until they can reproduce themselves helps gene propagation and is rewarding; otherwise, many believe mating is useless. According to David E Comings, as any small edge will ultimately result in evolutionary advantage [21], additional reward mechanisms like novelty seeking and exploration widen the spectrum of available rewards and thus enhance the chance for survival, reproduction, and ultimate gene propagation. These functions may help us to obtain the benefits of distant rewards that are determined by our own interests and not immediately available in the environment. Thus the distal reward function in gene propagation and evolutionary fitness defines the proximal reward functions that we see in everyday behavior. That is why foods, drinks, mates, and offspring are rewarding.

There have been theories linking pleasure as a required component of health benefits salutogenesis, (salugenesis). In essence, under these terms, pleasure is described as a state or feeling of happiness and satisfaction resulting from an experience that one enjoys. Regarding pleasure, it is a double-edged sword, on the one hand, it promotes positive feelings (like mindfulness) and even better cognition, possibly through the release of dopamine [22]. But on the other hand, pleasure simultaneously encourages addiction and other negative behaviors, i.e., motivational toxicity. It is a complex neurobiological phenomenon, relying on reward circuitry or limbic activity. It is important to realize that through the “Brain Reward Cascade” (BRC) endorphin and endogenous morphinergic mechanisms may play a role [23]. While natural rewards are essential for survival and appetitive motivation leading to beneficial biological behaviors like eating, sex, and reproduction, crucial social interactions seem to further facilitate the positive effects exerted by pleasurable experiences. Indeed, experimentation with addictive drugs is capable of directly acting on reward pathways and causing deterioration of these systems promoting hypodopaminergia [24]. Most would agree that pleasurable activities can stimulate personal growth and may help to induce healthy behavioral changes, including stress management [25]. The work of Esch and Stefano [26] concerning the link between compassion and love implicate the brain reward system, and pleasure induction suggests that social contact in general, i.e., love, attachment, and compassion, can be highly effective in stress reduction, survival, and overall health.

Understanding the role of neurotransmission and pleasurable states both positive and negative have been adequately studied over many decades [26–37], but comparative anatomical and neurobiological function between animals and homo sapiens appear to be required and seem to be in an infancy stage.

Finding happiness is different between apes and humans

As stated earlier in this expert opinion one key to happiness involves a network of good friends [38]. However, it is not entirely clear exactly how the higher forms of satisfaction and pleasure are related to a sugar rush, winning a sports event or even sky diving, all of which augment dopamine release at the reward brain site. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure.

Remarkably, there are pathways for ordinary liking and pleasure, which are limited in scope as described above in this commentary. However, there are **many brain regions**, often termed hot and cold spots, that significantly **modulate** (increase or decrease) our **pleasure or** even produce **the opposite** of pleasure— that is disgust and fear [39]. One specific region of the nucleus accumbens is organized like a computer keyboard, with particular stimulus triggers in rows— producing an increase and decrease of pleasure and disgust. Moreover, the cortex has unique roles in the cognitive evaluation of our feelings of pleasure [40]. Importantly, the interplay of these multiple triggers and the higher brain centers in the prefrontal cortex are very intricate and are just being uncovered.

Desire and reward centers

It is surprising that many different sources of pleasure activate the same circuits between the mesocorticolimbic regions (Figure 1). Reward and desire are two aspects pleasure induction and have a very widespread, large circuit. Some part of this circuit distinguishes between desire and dread. The so-called pleasure circuitry called “REWARD” involves a well-known dopamine pathway in the mesolimbic system that can influence both pleasure and motivation.

In simplest terms, the well-established mesolimbic system is a dopamine circuit for reward. It starts in the ventral tegmental area (VTA) of the midbrain and travels to the nucleus accumbens (Figure 2). It is the cornerstone target to all addictions. The VTA is encompassed with neurons using glutamate, GABA, and dopamine. The nucleus accumbens (NAc) is located within the ventral striatum and is divided into two sub-regions—the motor and limbic regions associated with its core and shell, respectively. The NAc has spiny neurons that receive dopamine from the VTA and glutamate (a dopamine driver) from the hippocampus, amygdala and medial prefrontal cortex. Subsequently, the NAc projects GABA signals to an area termed the ventral pallidum (VP). The region is a relay station in the limbic loop of the basal ganglia, critical for motivation, behavior, emotions and the “Feel Good” response. This defined system of the brain is involved in all addictions –substance, and non –substance related. In 1995, our laboratory coined the term “Reward Deficiency Syndrome” (RDS) to describe genetic and epigenetic induced hypodopaminergia in the “Brain Reward Cascade” that contribute to addiction and compulsive behaviors [3,6,41].

Furthermore, ordinary “liking” of something, or pure pleasure, is represented by small regions mainly in the limbic system (old reptilian part of the brain). These may be part of larger neural circuits. In Latin, hedus is the term for “sweet”; and in Greek, hodone is the term for “pleasure.” Thus, the word Hedonic is now referring to various subcomponents of pleasure: some associated with purely sensory and others with more complex emotions involving morals, aesthetics, and social interactions. The capacity to have pleasure is part of being healthy and may even extend life, especially if linked to optimism as a dopaminergic response [42].

Psychiatric illness often includes symptoms of an abnormal inability to experience pleasure, referred to as anhedonia. A negative feeling state is called dysphoria, which can consist of many emotions such as pain, depression, anxiety, fear, and disgust. Previously many scientists used animal research to uncover the complex mechanisms of pleasure, liking, motivation and even emotions like panic and fear, as discussed above [43]. However, as a significant amount of related research about the specific brain regions of pleasure/reward circuitry has been derived from invasive studies of animals, these cannot be directly compared with subjective states experienced by humans.

In an attempt to resolve the controversy regarding the causal contributions of mesolimbic dopamine systems to reward, we have previously evaluated the three-main competing explanatory categories: “liking,” “learning,” and “wanting” [3]. That is, dopamine may mediate (a) liking: the hedonic impact of reward, (b) learning: learned predictions about rewarding effects, or (c) wanting: the pursuit of rewards by attributing incentive salience to reward-related stimuli [44]. We have evaluated these hypotheses, especially as they relate to the RDS, and we find that the incentive salience or “wanting” hypothesis of dopaminergic functioning is supported by a majority of the scientific evidence. Various neuroimaging studies have shown that anticipated behaviors such as sex and gaming, delicious foods and drugs of abuse all affect brain regions associated with reward networks, and may not be unidirectional. Drugs of abuse enhance dopamine signaling which sensitizes mesolimbic brain mechanisms that apparently evolved explicitly to attribute incentive salience to various rewards [45].

Addictive substances are voluntarily self-administered, and they enhance (directly or indirectly) dopaminergic synaptic function in the NAc. This activation of the brain reward networks (producing the ecstatic “high” that users seek). Although these circuits were initially thought to encode a set point of hedonic tone, it is now being considered to be far more complicated in function, also encoding attention, reward expectancy, disconfirmation of reward expectancy, and incentive motivation [46]. The argument about addiction as a disease may be confused with a predisposition to substance and nonsubstance rewards relative to the extreme effect of drugs of abuse on brain neurochemistry. The former sets up an individual to be at high risk through both genetic polymorphisms in reward genes as well as harmful epigenetic insult. Some Psychologists, even with all the data, still infer that addiction is not a disease [47]. Elevated stress levels, together with polymorphisms (genetic variations) of various dopaminergic genes and the genes related to other neurotransmitters (and their genetic variants), and may have an additive effect on vulnerability to various addictions [48]. In this regard, Vanyukov, et al. [48] suggested based on review that whereas the gateway hypothesis does not specify mechanistic connections between “stages,” and does not extend to the risks for addictions the concept of common liability to addictions may be more parsimonious. The latter theory is grounded in genetic theory and supported by data identifying common sources of variation in the risk for specific addictions (e.g., RDS). This commonality has identifiable neurobiological substrate and plausible evolutionary explanations.

Over many years the controversy of dopamine involvement in especially “pleasure” has led to confusion concerning separating motivation from actual pleasure (wanting versus liking) [49]. We take the position that animal studies cannot provide real clinical information as described by self-reports in humans. As mentioned earlier and in the abstract, on November 23rd, 2017, evidence for our concerns was discovered [50]

In essence, although nonhuman primate brains are similar to our own, the disparity between other primates and those of human cognitive abilities tells us that surface similarity is not the whole story. Sousa et al. [50] small case found various differentially expressed genes, to associate with pleasure related systems. Furthermore, the dopaminergic interneurons located in the human neocortex were absent from the neocortex of nonhuman African apes. Such differences in neuronal transcriptional programs may underlie a variety of neurodevelopmental disorders.

In simpler terms, the system controls the production of dopamine, a chemical messenger that plays a significant role in pleasure and rewards. The senior author, Dr. Nenad Sestan from Yale, stated: “Humans have evolved a dopamine system that is different than the one in chimpanzees.” This may explain why the behavior of humans is so unique from that of non-human primates, even though our brains are so surprisingly similar, Sestan said: “It might also shed light on why people are vulnerable to mental disorders such as autism (possibly even addiction).” Remarkably, this research finding emerged from an extensive, multicenter collaboration to compare the brains across several species. These researchers examined 247 specimens of neural tissue from six humans, five chimpanzees, and five macaque monkeys. Moreover, these investigators analyzed which genes were turned on or off in 16 regions of the brain. While the differences among species were subtle, **there was** a **remarkable contrast in** the **neocortices**, specifically in an area of the brain that is much more developed in humans than in chimpanzees. In fact, these researchers found that a gene called tyrosine hydroxylase (TH) for the enzyme, responsible for the production of dopamine, was expressed in the neocortex of humans, but not chimpanzees. As discussed earlier, dopamine is best known for its essential role within the brain’s reward system; the very system that responds to everything from sex, to gambling, to food, and to addictive drugs. However, dopamine also assists in regulating emotional responses, memory, and movement. Notably, abnormal dopamine levels have been linked to disorders including Parkinson’s, schizophrenia and spectrum disorders such as autism and addiction or RDS.

Nora Volkow, the director of NIDA, pointed out that one alluring possibility is that the neurotransmitter dopamine plays a substantial role in humans’ ability to pursue various rewards that are perhaps months or even years away in the future. This same idea has been suggested by Dr. Robert Sapolsky, a professor of biology and neurology at Stanford University. Dr. Sapolsky cited evidence that dopamine levels rise dramatically in humans when we anticipate potential rewards that are uncertain and even far off in our futures, such as retirement or even the possible alterlife. This may explain what often motivates people to work for things that have no apparent short-term benefit [51]. In similar work, Volkow and Bale [52] proposed a model in which dopamine can favor NOW processes through phasic signaling in reward circuits or LATER processes through tonic signaling in control circuits. Specifically, they suggest that through its modulation of the orbitofrontal cortex, which processes salience attribution, dopamine also enables shilting from NOW to LATER, while its modulation of the insula, which processes interoceptive information, influences the probability of selecting NOW versus LATER actions based on an individual’s physiological state. This hypothesis further supports the concept that disruptions along these circuits contribute to diverse pathologies, including obesity and addiction or RDS.

#### 2] Actor spec—governments must use util because they don’t have intentions and are constantly dealing with tradeoffs—outweighs since different agents have different obligations—takes out calc indicts since they are empirically denied.

#### 3] Extinction first:

#### A] Future lives -- trillions of future lives are lost. They are just as valuable as current ones – anything else says some lives are worth less than others which is a slippery slope to genocide.

#### B] Reversibility -- extinction forecloses future improvement; prefer -- if we’re unsure about which interpretation of the world is true, we should preserve it to figure things out.

#### C] Process -- condemning the world to mass death causes suffering and psychological violence because people can’t get access to resources

### Underview

#### 1] 1AR theory is legit – anything else means infinite abuse – drop the debater – 1AR is too short to make up for the time trade-off – no RVIs – 6 min 2NR can brute force me every time.

#### 2] Use reasonability on the brightline of in-round abuse -- Competing interps ensures endless theory debates -- empirically proven by the overwhelming norm of competing interps and the strategic value it gives theory in LD. Reasonability is critical to ensure theory checks abusive practices that tangibly impact the debate rather than a strategic device to run from substance.

#### Substance outweighs:

#### It’s the most important source of portable skills---empirics prove.

**Iverson ’9** [Joel; 2009; Associate Professor of Communication at the University of Montana, Ph.D in Communication from Arizona State University Relations at the University of Sydney; Debate Central, “Can Cutting Cards Carve into Our Personal Lives: An Analysis of Debate Research on Personal Advocacy,” <https://debate.uvm.edu/dybvigiverson1000.html>] brett

Mitchell (1998) provides a thorough examination of the pedagogical implication for academic debate. Although Mitchell acknowledges that debate provides preparation for participation in democracy, limiting debate to a laboratory where students practice their skill for future participation is criticized. Mitchell contends: For students and teachers of argumentation, the heightened salience of this question should signal the danger that critical thinking and oral advocacy skills alone may not be sufficient for citizens to assert their voices in public deliberation. (p. 45) Mitchell contends that the laboratory style setting creates barriers to other spheres, creates a "sense of detachment" and causes debaters to see research from the role of spectators. Mitchell further calls for "argumentative agency [which] involves the capacity to contextualize and employ the skills and strategies of argumentative discourse in fields of social action, especially wider spheres of public deliberation" (p. 45). Although we agree with Mitchell that debate can be an even greater instrument of empowerment for students, we are more interested in examining the impact of the intermediary step of research. In each of Mitchell's examples of debaters finding creative avenues for agency, there had to be a motivation to act. It is our contention that the research conducted for competition is a major catalyst to propel their action, change their opinions, and to provide a greater depth of understanding of the issues involved. The level of research involved in debate creates an in-depth understanding of issues. The level of research conducted during a year of debate is quite extensive. Goodman (1993) references a Chronicle of Higher Education article that estimated "the level and extent of research required of the average college debater for each topic is equivalent to the amount of research required for a Master's Thesis (cited in Mitchell, 1998, p. 55). With this extensive quantity of research, debaters attain a high level of investigation and (presumably) understanding of a topic. As a result of this level of understanding, debaters become knowledgeable citizens who are further empowered to make informed opinions and energized to take action. Research helps to educate students (and coaches) about the state of the world. Without the guidance of a debate topic, how many students would do in-depth research on female genital mutilation in Africa, or United Nations sanctions on Iraq? The competitive nature of policy debate provides an impetus for students to research the topics that they are going to debate. This in turn fuels students’ awareness of issues that go beyond their front doors. Advocacy flows from this increased awareness. Reading books and articles about the suffering of people thousands of miles away or right in our own communities drives people to become involved in the community at large. Research has also focused on how debate prepares us for life in the public sphere. Issues that we discuss in debate have found their way onto the national policy stage, and training in intercollegiate debate makes us good public advocates. The public sphere is the arena in which we all must participate to be active citizens. Even after we leave debate, the skills that we have gained should help us to be better advocates and citizens. Research has looked at how debate impacts education (Matlon and Keele 1984), legal training (Parkinson, Gisler and Pelias 1983, Nobles 19850 and behavioral traits (McGlone 1974, Colbert 1994). These works illustrate the impact that public debate has on students as they prepare to enter the public sphere. The debaters who take active roles such as protesting sanctions were probably not actively engaged in the issue until their research drew them into the topic. Furthermore, the process of intense research for debate may actually change the positions debaters hold. Since debaters typically enter into a topic with only cursory (if any) knowledge of the issue, the research process provides exposure to issues that were previously unknown. Exposure to the literature on a topic can create, reinforce or alter an individual's opinions. Before learning of the School for the America's, having an opinion of the place is impossible. After hearing about the systematic training of torturers and oppressors in a debate round and reading the research, an opinion of the "school" was developed. In this manner, exposure to debate research as the person finding the evidence, hearing it as the opponent in a debate round (or as judge) acts as an initial spark of awareness on an issue. This process of discovery seems to have a similar impact to watching an investigative news report. Mitchell claimed that debate could be more than it was traditionally seen as, that it could be a catalyst to empower people to act in the social arena. We surmise that there is a step in between the debate and the action. The intermediary step where people are inspired to agency is based on the research that they do. If students are compelled to act, research is a main factor in compelling them to do so. Even if students are not compelled to take direct action, research still changes opinions and attitudes. Research often compels students to take action in the social arena. Debate topics guide students in a direction that allows them to explore what is going on in the world. Last year the college policy debate topic was, Resolved: That the United States Federal Government should adopt a policy of constructive engagement, including the immediate removal of all or nearly all economic sanctions, with the government(s) of one or more of the following nation-states: Cuba, Iran, Iraq, Syria, North Korea. This topic spurred quite a bit of activism on the college debate circuit. Many students become actively involved in protesting for the removal of sanctions from at least one of the topic countries. The college listserve was used to rally people in support ofvarious movements to remove sanctions on both Iraq and Cuba. These messages were posted after the research on the topic began. While this topic did not lend itself to activism beyond rallying the government, other topics have allowed students to take their beliefs outside of the laboratory and into action. In addition to creating awareness, the research process can also reinforce or alter opinions. By discovering new information in the research process, people can question their current assumptions and perhaps formulate a more informed opinion. One example comes from a summer debate class for children of Migrant workers in North Dakota (Iverson, 1999). The Junior High aged students chose to debate the adoption of Spanish as an official language in the U.S. Many students expressed their concern that they could not argue effectively against the proposed change because it was a "truism." They were wholly in favor of Spanish as an official language. After researching the topic throughout their six week course, many realized much more was involved in adopting an official language and that they did not "speak 'pure' Spanish or English, but speak a unique dialect and hybrid" (Iverson, p. 3). At the end of the class many students became opposed to adopting Spanish as an official language, but found other ways Spanish should be integrated into American culture. Without research, these students would have maintained their opinions and not enhanced their knowledge of the issue. The students who maintained support of Spanish as an official language were better informed and thus also more capable of articulating support for their beliefs. The examples of debate and research impacting the opinions and actions of debaters indicate the strong potential for a direct relationship between debate research and personal advocacy. However, the debate community has not created a new sea of activists immersing this planet in waves of protest and political action. The level of influence debater search has on people needs further exploration. Also, the process of research needs to be more fully explored in order to understand if and why researching for the competitive activity of debate generates more interest than research for other purposes such as classroom projects. Since parliamentary debate does not involve research into a single topic, it can provide an important reference point for examining the impact of research in other forms of debate. Based upon limited conversations with competitors and coaches as well as some direct coaching and judging experience in parliamentary debate, parliamentary forms of debate has not seen an increase in activism on the part of debaters in the United States. Although some coaches require research in order to find examples and to stay updated on current events, the basic principle of this research is to have a commonsense level of understanding(Venette, 1998). As the NPDA website explains, "the reader is encouraged to be well-read in current events, as well as history, philosophy, etc. Remember: the realm of knowledge is that of a 'well-read college student'" (NPDA Homepage,<http://www.bethel.edu/Majors/Communication/npda/faq2.html>). The focus of research is breadth, not depth. In fact, in-depth research into one topic for parliamentary debate would seem to be counterproductive. Every round has a different resolution and for APDA, at least, those resolutions are generally written so they are open to a wide array of case examples, So, developing too narrow of a focus could be competitively fatal. However, research is apparently increasing for parliamentary teams as reports of "stock cases" used by teams for numerous rounds have recently appeared. One coach did state that a perceived "stock case" by one team pushed his debaters to research the topic of AIDS in Africa in order to be equally knowledgeable in that case. Interestingly, the coach also stated that some of their research in preparation for parliamentary debate was affecting the opinions and attitudes of the debaters on the team. Not all debate research appears to generate personal advocacy and challenge peoples' assumptions. Debaters must switch sides, so they must inevitably debate against various cases. While this may seem to be inconsistent with advocacy, supporting and researching both sides of an argument actually created stronger advocates. Not only did debaters learn both sides of an argument, so that they could defend their positions against attack, they also learned the nuances of each position. Learning and the intricate nature of various policy proposals helps debaters to strengthen their own stance on issues.

#### Even the most extreme forms of securitization don’t result in military interventions

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Perhaps the best reason to hesitate in characterizing HIV/AIDS as a security threat is that this could portray the disease as an extreme threat requiring an extreme response. Such reasoning is behind the warning issued by Elbe and others that if HIV/AIDS is securitized this might jeopardize the rights of people living with HIV. Desperate times do not, however, always require resort to desperate measures. Furthermore, those who have been most visible in advocating recognition of HIV/AIDS as a security threat have tended to offer health- and development-oriented recommendations about how the threat should be dealt with. Examples include: increasing access to medication; preventing HIV transmission by promoting safe sex, (marital) fidelity or abstinence; vaccine development; poverty relief and capacity building; and education and awareness-raising. Virtually none of the recent high-profile advocacy for the securitization of HIV/AIDS has included suggestions that responding to the threat requires infringements of the rights of people living with HIV/AIDS, privacy violations, (military) imposition of isolation and quarantine, mandatory HIV testing, and so forth. The UN (1998), for example, has (through the Security Council) officially declared HIV/AIDS to be a security threat, and at the same time has consistently advocated (through its health and human development agencies, such as UNAIDS) that a human rights approach must be central to HIV/AIDS prevention and control. The UN is thus an important counterexample to the notion that framing an issue in security terms involves endorsement of extreme response measures. It is widely acknowledged within public health circles that a human rights approach to HIV/AIDS is necessary because more restrictive/intrusive responses would likely be ineffective or counterproductive—for example, by driving the epidemic underground and thus exacerbating the threat. From an ethical perspective, furthermore, it is widely believed that the least restrictive means should be employed in the pursuit of public health goals. An extreme threat would not justify extreme response measures if the threat could be reduced without resort to such measures. The claim of those who warn against characterizing HIV/AIDS as a security threat is that such characterization may eventually lead to extreme response measures even if that was not the intention of the initial securitizing actors (such as the UN) whose aim was to highlight an extreme threat justifying extra spending (which does not count as an extreme response measure for the purpose of this discussion). Our conclusion, however, is that such a claim is at best questionable and in need of (additional) empirical justification.