POLICY BRIEF

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AGAINST TRANSNATIONAL ORGANIZED CRIME

CRISIS AND OPPORTUNITY

Impacts of the coronavirus pandemic on illicit drug markets

#COVIDCRIME WATCH

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Cover photo: Police and military respond to a drug-related murder in Juarez, Mexico. The COVID-19 pandemic will generate long-term implications for drug-market dynamics and law-enforcement tactics. © Sarah L. Voisin/*The Washington Post* via Getty Images

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SUMMARY

The implications of the coronavirus pandemic for governance and law enforcement will be profound and, from the perspective of illicit drug markets, the global disruption caused by COVID-19 can be seen as both a crisis and an opportunity. World drug markets have already weathered a number of historical market crises. In each of these situations, illicit drug organizations and their markets suffered significant short-term disruptions to demand or supply, or both. Also, in each of these situations, a majority of the affected organizations and markets adapted and evolved their business models to accommodate the new operating environments. Today, many domestic drug markets are reasonably stable, embedded in their economic landscapes. They are significant components of regional and national gross domestic product and, in many places, a significant or sole livelihood source. Key factors that have shaped drug markets in the past, and continue to shape them today, are exploitation of opportunity amid crisis and rapid adaptation to environmental change. COVID-19 will generate longer-term implications for drug-market dynamics, law-enforcement tactics and drug policy. This policy brief offers observations on the current and likely future drug market impacts of the coronavirus pandemic, with discussion of policy-response measures as we draw closer to the inevitable post-pandemic recovery period of stock taking and reflection.

INTRODUCTION

Cipinang Narcotics Prison, Jakarta, Indonesia, is a drugs correctional facility. Visitors are required to take COVID-19 protection measures.
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The coronavirus pandemic is a public health emergency of global importance, and the implications for governance, law enforcement, and the evolution of drug markets will be profound. As illness and economic hardship continue to proliferate rapidly, it is evident that this pandemic is affecting humanity on a scale not seen for a century and has the potential to become an entrenched, perennial health menace.

While the disease itself has brought horrifying rates of illness and death, it is also inflicting – through the lockdowns and social distancing imposed in an attempt to contain it – a double trauma on individuals and communities: isolation and confinement, and the lost livelihoods, overwhelming debt and broken futures of economic depression. As the pandemic evolves and disruption grows, a more fragmented world may be coming into being – one that, in some ways, may be more resilient and less forgiving than before. Nations are hardening their borders; reprioritizing citizenry, services and supply chains; and restricting movement, assembly and speech. The emergence of 'we first' sovereign models of governance is challenging the social cohesion and integration of communities, the economic drivers of markets and the philosophical foundations of an interconnected, globalized world.

From the perspective of illicit drug markets, the global disruption instigated by the coronavirus pandemic can be seen as both a crisis and an opportunity. Naturally, there are negative market implications to any disruptions in supply, distribution and demand for these illicit commodities. Access in some places may become restricted. Distribution channels may become exposed, blocked or eliminated. Supply may dwindle. However, in crisis there is also opportunity – in this case, the opportunity to access new marketplaces

and consumers, to pilot and secure new distribution channels, and to increase resilience in the means of production.

World drug markets have already weathered a number of historical market crises, even though these may not be directly comparable to the current pandemic in complexity or global impact. These have included disruption of the precursor chemical supply in the US in 1995 and the resulting methamphetamine (meth) shortage, the Taliban's opium ban in Afghanistan in 2000 and the resulting global heroin shortages in 2001, the first outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 and its impact on Hong Kong drug demand, the Great Recession of 2008 and its depression of drug demand across Western democracies, and the fungus outbreak that destroyed half of the Afghan opium poppy crop in 2010 and led to another global heroin shortage. In each of these situations, illicit drug organizations and their markets suffered significant short-term disruptions to demand or supply, or both. Also, in each of these situations, a majority of the affected illicit drug organizations and markets adapted and evolved their business models in order to accommodate the new operating environments.

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This historical, evolved learning response to disruption by drug organizations, however, can be contrasted somewhat with that demonstrated by drug-policy designers. Since 1998 and the inauguration of the UN's drug action plan and strategy, renewed for its third decennial in March 2019 by the member states of the UN Commission on Narcotic Drugs (CND), countries have struggled to find common enforcement solutions to what they have labelled 'the persistent and emerging challenges related to the world drug problem'.[1] Unfortunately, the legacy of these law enforcement-driven efforts can be seen in the networked globalization of illicit drug economies and the concomitant Darwinian evolution of the drug trade.[2] Many resilient, adaptive, and opportunistic organizations, networks and actors dominate illicit drug production and supply chains today.[3] Through decades of uncompromising global drug interdiction efforts, 'we have picked off their clumsy competition for them and opened up that lucrative economic trafficking space to the most efficient organizations. It is as though we have had a decades-long policy of selectively breeding super traffickers and ensuring the "survival of the fittest"'.[4] As a consequence, what remains in many places are some of '… the most innovative, adaptable and cunning' organizations.[5]

Nevertheless, and despite an unwavering global drug policy platform of prohibition, the relationship that exists between the capabilities of illicit drug organizations and law enforcement bodies is not purely asymmetrical. While a skewed characterisation can be a common basis for examination of this binary, one that views drug organizations as exclusively adaptable and their law enforcement counterparts as uniquely inflexible, this contradistinction is not absolute. Rather, these entities could be viewed as mutually influential participants in a dynamic socio-technical co-evolution of adaptations to market disruption, with each taking advantage of often-temporary competitive advantages as they respond to circumstance and to one another.[6] Yet, while the adaptive capacities of law enforcement and other interdiction bodies have evolved and adapted to minor and major disruptions that test the balance and durability of drug market environments and their actors, the policy in which law enforcement is grounded has failed to keep pace as markets – and societies – have grown. 'The spatial proliferation and resiliency of narco-trafficking is not a consequence of ineffective interdiction, but rather a part and natural consequence of interdiction itself.'[7]

Today many domestic drug markets are reasonably stable, embedded in their economic landscapes. They are significant components of regional and national gross domestic product and, in many places, a significant or sole livelihood source for the exploited labouring poor who continue to emerge from environments of poverty, weak and inequitably distributed domestic economies, and limited options for legitimate employment.[8] Key factors that have shaped drug markets in the past, and continue to shape them today, are exploitation of opportunity amid crisis and rapid adaptation to environmental change.

The current coronavirus pandemic continues to infect and kill thousands of people, while states still adjust and re-adjust the leniency or severity of their pandemic response mechanisms in often vain attempts to secure both public health and public perception goals. Trying to draw definitive conclusions about drug market disruption and change during the pandemic is like trying to predict landscape damage caused by a hurricane while the winds are still blowing. A number of factors – the paucity of primary data, the near-global restrictions on travel, including for research, and the dynamic and varied nature of drug market structures, systems and flows – make insights difficult. It is 'like looking through a kaleidoscope – you see one picture, but turn the dial and a new image comes into view'.[9]

COVID-19 will generate longer term implications for drug market dynamics, law enforcement tactics and drug policy. This policy brief attempts to overcome the limitations of the current 'kaleidoscope' view and provide a historically informed view of the crisis. It offers observations on the current and likely future drug market impacts of the coronavirus pandemic, with discussion of policy response measures as we draw closer to the inevitable post-pandemic recovery period of stock taking and reflection. To do this, it draws on experience from several historical market disruptions, secondary data on current conditions, information from the Global Initiative's networks and civil-society partners, from a globally diverse group of drug market participants and data from ongoing field research.

People stand six feet apart as they wait in line to buy marijuana products before the lockdown in Denver, Colorado, March 2020. *© Michael Ciaglo/Getty Images*

HISTORICAL DISRUPTIONS TO ILLICIT DRUG MARKETS

Afghan farmers prepare poppy bulbs for harvest near Kandahar, Afghanistan.
© Scott Nelson/Getty Images

The coronavirus pandemic is not the first significant global shock to hit illicit drug markets. It is not even the first coronavirus shock. In the past 25 years, there have been at least five instances of significant disruption to global illicit drug markets or their supply chains, with similarities in their short- and long-term impacts. In each case, drug markets and organizations adapted and grew.

- **The US meth shortage (1995):** In May 1995, the US Domestic Chemical Diversion Control Act empowered the US Drug Enforcement Agency (DEA) to revoke single entity ephedrine product distributors' registrations without proof of criminal intent. At the time, the US meth market was supplied by domestic producers who synthesized the drug from precursors harvested from ephedrine-based over-the-counter medicines. That month, the DEA revoked the licenses of the two largest distributors of ephedrine products, which accounted for more than half of all the precursors used nationally to produce meth.

  This created what has been called '… probably the largest "supply" shock that has occurred in any illegal drug market in the United States'.[10] Street prices of meth tripled and purity plunged from 90 per cent to less than 20 per cent as bulking agents were used to adulterate existing meth stocks in order to increase the available volume. The shock was short-lived, however. The rapid recovery of the market was attributed to the ability of domestic meth producers to identify and source suitable precursor substitutes. Prices returned to their 'normal' level within four months of the shock. The purity reduction was more permanent, however. It

took 18 months for it to recover, though it returned only to 85 per cent of its pre-shock level.[11]

- **The Taliban opium ban in Afghanistan (2000):** Afghanistan was and is the world's largest cultivator of opium poppy and producer of opium gum, the raw material necessary for the production of heroin. In the years leading up to 2000, the Taliban had accepted the cultivation of poppy and the production of opium as a staple agricultural commodity, a position they had held since the beginning of their control in Afghanistan. This changed abruptly in July 2000. In a surprise move, Taliban leader Mullah Mohammed Omar declared poppy cultivation and opium production to be *haram*, or forbidden under Islamic law. In the months followed, the Taliban succeeded in reducing poppy cultivation by 90 per cent and the production of opium gum by 96 per cent.[12]

  This abrupt elimination of opium supply had significant consequences for the global heroin supply chain.[13] Unlike chemically synthesized substances such as meth, where analogues can be used or produced to replace a substance that is in limited supply, heroin is derived from opium gum, and opium gum is sourced only from opium poppy capsules. The impact of this shortage on domestic heroin markets took several months to set in, as stockpiles of opium and heroin were used in an attempt to limit the impact of the disruption on market supply. As supply shortages began to affect local markets, a number of impacts were documented. In Kenya, heroin importers substituted their regular (now unavailable) supply of Afghan heroin with heroin sourced from Myanmar in the Golden Triangle, a substitution that has been identified as the primary reason behind a sudden and sustained transition among Kenyan people who use drugs (PWUD) from smoking heroin to injecting it.[14] In Australia, fatal and non-fatal heroin overdoses decreased by up to 85 per cent,[15] the price of heroin increased while its purity decreased,[16] organized-crime groups involved in drug distribution began to collaborate and street dealers shifted from heroin to other drugs, like cocaine.[17] Similar trends were identified in Canada.[18] Local markets did not recover until after the subsequent Afghan opium harvest, when the Taliban poppy ban became moot following the invasion of US forces in October 2001.

- **The Severe Acute Respiratory Syndrome epidemic (2003):** While the Severe Acute Respiratory Syndrome (SARS) outbreak of 2003 was not a global shock, its impact was significant enough to affect drug markets in Guangdong province in mainland China and in Hong Kong. (The virus that caused the 2003 epidemic, SARS-CoV, is related genetically to the virus that causes COVID-19, SARS-CoV-2.) While there remains little research available that examines the drug market impacts of this particular crisis, one Chinese-based study did identify that local drug demand and use decreased significantly during the brief period of the 2003 SARS crisis, but recovered in the months after it ended.[19]

- **The Great Recession (2008):** The severe economic crisis that gripped the world as the global economy entered a strong recessionary cycle in 2008, and affected European markets in particular, has come to be called the Great Recession. This crisis had a significant impact on the demand for and consumption of both licit and illicit drugs. In Spain, research indicated an escalation in cocaine and cannabis consumption as a result of the deteriorating local economic conditions.[20] In Ireland, the opposite

There have been several instances of significant disruption to global illicit drug markets or their supply chains in the past.

occurred, as levels of illicit drug use and distribution decreased with the economic decline.[21] A study of European drug markets found a general decrease in drug use, alongside an increase in vulnerability to harmful outcomes for those suffering from longer-term unemployment and high levels of debt.[22]

- **The Afghan opium blight (2010):** In 2010, Afghan opium poppy cultivation was devastated by a fungal infection that eliminated nearly half of that year's crop. As occurred in 2000, this led to a significant decline in the availability of opium gum for heroin production, the demand for which was rapidly growing worldwide. The impact of this disruption took some months to work its way through the supply chains servicing domestic heroin markets. When it did, the impacts were similar to those of 2001. Access to heroin in the drug markets of East Africa became restricted, with increased prices, unpredictable purity levels and the introduction of higher-risk injection practices, such as the sharing of a used needle syringe among multiple partners.[23] Adulteration of local heroin supplies and increased pricing was experienced also in the United Kingdom,[24] as well as across much of Europe.[25] The heroin market recovered in the following year, though this recovery period was met with an increase in fatal and non-fatal overdoses as the heroin began to increase in purity as it moved back toward its pre-shock equilibrium of price and purity.

In each of these crises, actors in the illicit drug market made structural and systemic adaptations in order to reduce its impact and maintain operations. These organizational and market-based changes continued following the disruptions. The organizations that survived a crisis had become more resilient and less vulnerable to the impacts of similar future crises, and the market and organizational adaptations they made became permanent.

CHARACTERISTICS OF DRUG MARKET DISRUPTIONS

Afghan policemen destroy poppy fields in Badakhshan province, one of Afghanistan's top opium-producing regions, August 2017.
© Mohammad Sharif Shayeq/ NurPhoto via Getty Images

Market impact *timing* depends on where in the supply chain the disruption has occurred. A disruption close to the marketplace, such as that which occurred in the US meth crisis in 1995, will be felt by consumers with some immediacy. A disruption that occurs further up the supply chain – for example, at the point of production – will have a latent impact on markets. As demonstrated in the two Afghan poppy crises, it could lay dormant for weeks or months before the inevitable shortage works its way through global supply chains and lands upon local markets. For the crop-dependent substances of heroin and cocaine, in particular – but also for meth – large-scale manufacturers retain stores, in some cases vast quantities of the product or its necessary precursors, as a means of mitigating a variety of potential supply-side risks. Yet, these are inadequate in the face of such a disastrous shock as the near elimination of all supply at a single point in time.

The *severity* and *duration* of the impact on drug markets depend also on the duration and severity of the disruption to the integrity of the production capacity and its related supply chains. In the case of the precursor shortage in the US, meth supply in local markets reduced significantly and access to quality meth became extremely difficult for most consumers. Prices increased as distributors attempted to capitalize on the disruption by exploiting consumers for profiteering purposes. Purity decreased as lower level distributors adulterated their meth in order to increase its volume, thereby providing them more product to sell. The market rebounded, however, after manufacturers were able quickly to identify chemical analogues to substitute for the eliminated precursors in their supply chain. In the space of a few months the market returned to equilibrium.

In the case of the Afghan poppy shocks, the duration of the disruption was much longer. This is because the production of heroin is dependent upon the synthesis of opium gum, which is harvested from mature poppies and for which there is no substitute. While producers of heroin were able to use stores of opium and heroin to try and bridge the period of the inevitable shortage, it would not be possible to produce heroin again at volume until the next poppy crop was harvested. These heroin droughts lasted several months. Street-based retail price points for heroin of higher purity increased to very high levels. Severely adulterated heroin of very low purity appeared. Use of heroin decreased. Demand for drug treatment services increased in many markets and overdose numbers fell alongside the declining purity. Market recovery took much longer to achieve equilibrium at pre-shock levels.

In each of these cases, the supply-side disruptions led drug-market producers and distributors to make significant, permanent adaptations to their production and distribution models. Many of these adaptations tended to focus on the security, structure and flows of supply chains and their inputs. These included abandoning a significant precursor ingredient and its related supply chain; the identification of a suitable substitute chemical and the rapid development of a new supply chain and production process; the development of additional, pre-positioned stores of precursors and product; and the manipulation of market price, product and purity characteristics. While impact of actual shortages upon markets tends to depend on the relative position of the disruption within the market supply chain, in general, supply-side disruptions related to actual shortages in production or origin supply tended to have a delayed impact on *actual* marketplace supply. In such cases, commodity prices still were likely to increase as distributors exploited the perception of a shortage to maximize profit potential and ease income loss in advance of measures undertaken to adapt to the actual shortage when it arrived.

The demand-driven shortages caused by the SARS epidemic in southern China in 2003 and the global economic recession of 2008 affected drug markets in somewhat different ways. However, the reaction of the market to the disruptions was similar to that in advance of a supply shortage. As demand decreased – quite rapidly in the case of the SARS epidemic – local distributors had to make retail adjustments to accommodate the changing demand demography of the marketplace. Demand from recreational users – those who used intermittently – disappeared, along with demand for their substances of choice (e.g. cocaine). Demand from dependent users – those who were physically dependent on the drug and used every day – remained, but the purchasing power of this market demographic was poor. As income-generating opportunities evaporated alongside the expanding recessionary cycle, users moved to lower-quality doses, decreased their frequency of use and moved to use of other, cheaper substances. Local distributors responded with adulterated doses of smaller size and price, substitute substances (e.g. meth in place of cocaine), and expanded their distribution area to increase their consumer base.

The timing, severity and duration of such disruptions are determined by factors external to the drug market. As such, adaptations tended to be consumer-focused: introduction of cost-effective product alternatives; expansion of market geography; and manipulation of the product's price-purity balance and other retail characteristics.

In light of the lessons learned from historical precedents, and subsequent to the analysis of existing and acquired information as it relates to the structure, operation and participation by producers, distributors and consumers across a myriad array of drug marketplaces, the following observation points are made relative to the contexts of drug markets within the current coronavirus pandemic.

THE PANDEMIC'S EFFECT ON DRUG SUPPLY AND PRODUCTION

Global opium poppy harvests are unaffected

Heroin is derived from the gum of the opium poppy, and opium poppies are cultivated mostly in three areas of the world: Afghanistan, Myanmar and Mexico. Sources in Afghanistan have confirmed that the current crop of opium poppy, under harvest at the time of writing, has been unaffected by the current health crisis. Sources have confirmed also that eradication efforts have been insignificant in the wake of the coronavirus threat.[26] As a result, the amount of potential poppy cultivation lost to eradication efforts will be negligible, thus leading to a greater hectarage under harvest and perhaps bring cultivation closer to recent record levels. Whether this leads to an increase in anticipated opium production is yet to be seen; however, more importantly, this means that the availability of Afghan-based opium from production source remains viable and uninterrupted. The 2020 opium harvest in Myanmar has occurred without incident, and the perennial cultivation and harvest of opium poppy in Mexico has continued unimpeded as well.[27] Eradication in both countries has been insignificant.[28]

Marijuana plants grow at a medical marijuana dispensary in Los Angeles.
© David McNew/Getty Images

No significant restrictions on cocaine cultivation or production

Most available data indicates that the cultivation area of coca bush last year (2019) in Colombia – the world's largest cultivator – remains at its highest level (212 000 hectares) since measurements began.[29] Cultivation in the tightly regulated legal coca market of Peru, and also in Bolivia, appears to be unaffected as well. While some coca

eradication has occurred in Colombia, eradication efforts in Peru were suspended due to the pandemic and Bolivian eradication efforts were halted earlier owing to political reasons. Each country possesses a strong supply of coca leaves, with Peruvian production being so successful that farmers have begun complaining about the price depreciation for their leaves that has occurred.[30]

Cocaine production itself has continued unimpeded, thus decreasing the demand for coca leaves by illicit producers as stockpiles have continued to grow and unit wholesale prices have continued to drop. For example, official government data show that the wholesale price of a kilogram of Peruvian cocaine has fallen by more than half, from US$1 740 in January to US$734 in April.[31] Further, Colombian security forces have seized 112 metric tonnes of cocaine so far this year, including the interception on 31 March 2020 of a 12th narco-submarine ferrying a tonne of cocaine to the US, all in this same three-month period.[32] Substantial seizures of cocaine are still being made at the US–Mexico border[33] and in Europe[34] – evidence, perhaps, that drug supply in volume continues to flow to markets.

Illicit cannabis cultivation and production remain unimpeded

Global illicit cannabis cultivation occurs in a minimum of 159 countries worldwide,[35] with hectarage estimates unable to be made due to the sheer volume and breadth of its cultivation; however, sources in West Africa, North Africa, southern Africa, Canada, and several Asian production areas have indicated they anticipated no significant, unexpected disruption to existing cannabis cultivation, or in the correlated production of cannabis herb and cannabis resin, due to the pandemic.

Mixed impact on licit cannabis retail markets

In 2019, global licit cannabis sales totalled US$15 billion[36] – a smaller market than its illicit counterpart, but growing. The security of the licit market continues to be threatened by serious competition from illicit competitors, who often offer lower retail price points.[37] The closure of licit cannabis retail shops has the potential to undermine the market share of licit cannabis to the benefit of illicit suppliers. Canada, one of only two countries that has a national, legalized recreational use market for cannabis, took a different approach. It designated cannabis retailers to be 'essential services' under the terms of the emergency orders issued by provinces as they moved to close all non-essential businesses in advance of a nationwide lockdown. This designation, accompanied with a movement exemption for consumers who were travelling to access any essential services' retailers, strengthened the licit supply chain ability to compete with its less expensive illicit competitors, and led to a significant increase in the sale and distribution of licit cannabis products during the period of the coronavirus crisis to date.[38] Fully one-third of licit cannabis orders are from new clients, as the market extends its reach.[39] In North America during the pandemic, market growth has been most pronounced for the consumption of cannabis edibles.[40] This essential service designation has led to increased licit cannabis sales and decreased market share lost by licit suppliers to their illicit market competitors. In the words of Cheri Mara, the Chief Commercial Officer for the Ontario Cannabis Store, which is the government's sole supplier of licit cannabis to retail outlets, 'restricting access [to cannabis] would have created an opportunity for the illicit market'.[41]

The security of the licit market is threatened by competition from illicit competitors, who often offer lower retail price points.

Positive impacts in North America are counter-balanced by negative outlooks in licit markets elsewhere. In Spain, over 200 000 residents have lost access to their medical cannabis supply during the country's lockdown.[42] The German Cannabis Industry Association warned of a similar supply shortage for medical cannabis in that country as a result of lockdown measures.[43] These government-enforced shortages in licit supply would appear to be an opportunity for illicit suppliers to fill the demand gap, thereby penetrating the licit marketplace even further. It seems that the designation of cannabis as an essential product in some markets, and the correlated assurance of a continued supply, has significantly lessened the flow of illicit cannabis into the market share captured already by licit producers.

Chemical precursor production and supply chain integrity remain largely uninterrupted

Two of the world's largest meth-producing regions are in East and Southeast Asian nations close to China; and in Mexico. Asian-based meth chemists tend toward the use of either caffeine or ephedrine as the principal ingredient of choice. In Mexico there is greater use of either ephedrine or pseudoephedrine. Both methods produce large volumes of high-quality meth available in powder, tablet, or crystalline form, and in both regions their meth production depends on the supply of these and other precursor chemicals, most of which originate in chemical and pharmaceutical manufacturing plants in mainland China.

Debate continues around the impact of the corona-virus pandemic on capacity for production and distribution of precursor chemicals and active-pharmaceutical-ingredient (API) products used in the illicit drug industry. After all, China, the alleged origin of the COVID-19 coronavirus strain, is one of the two largest hubs for chemical, API and pharmaceutical production in the world. (The other is India.)

The first cases of the SARS-CoV-2 virus occurred in December 2019 in Wuhan, the capital of Hubei province in China, which is the location also of several large chemical and API manufacturing complexes. The first death attributed to the virus occurred there also, on 11 January. By 23 January, the city of Wuhan had been placed under quarantine, the first case of SARS-CoV-2 had been identified in the US,[44] and cases had been identified in several other nations. In February and March, as the virus spread across the globe and the health crisis formerly was designated a pandemic, China embarked on a national campaign of lockdowns aimed at viral transmission prevention and control.[45] This lockdown approach was described in global media outlets as being among the 'most aggressive',[46] 'brutal'[47] and 'extreme' undertaken.[48]

Forecasts have been made – particularly in the law-enforcement and security sectors – that the pandemic has had a negative impact on the chemical supply chains of illicit drug production.[49] These forecasts assert that Chinese chemical and API production and supply chains have been disrupted significantly – or even eliminated – during this lockdown period, and as a consequence, this has created a significant disruption in the supply of chemical precursors to organized crime and the world's illicit meth producers. Yet further investigation finds a collection of points that do not correspond with this forecast of sudden and significant disruption.

First, the chief executive officers for Dow Chemical and Chevron Philipps Chemical affirmed on separate occasions in February 2020 that the coronavirus situation was having only limited impact on their Chinese operations.[50] Secondly, latest production figures available for the chemical and pharmaceutical industries in China indicate that the March 2020 output was up 4.5 per cent compared year-on-year with March 2019 output.[51] External figures show a March 2020 year-on-year increase of 0.7 per cent and 10.4 per cent for the chemical and pharmaceutical industries, following a combined year-on-year decline of 12.3 per cent in the January–February 2020 period.[52] Thirdly, and more to the point on the production of drug market-related chemicals and APIs, Asian meth syndicates have indicated that they experienced no significant disruption to their supply of precursor chemicals manufactured and shipped from China during the period of the Chinese lockdown following Chinese New Year.[53] Furthermore, and assuming that the Chinese production of precursors continued without significant interruption, the likelihood of supply chain disruption to maritime

traffic routing chemical supplies from compromised factories and ports in China toward destination ports on the Mexican, Asian and European coasts must be considered.

The state of East Asian maritime cargo departures is not as irreparably disrupted as some speculation may insist. In examining shipping data for the period there is clear evidence that global container shipping capacity has been reduced due to an increase in 'blanked sailings',[54] temporarily suspended shipping services, and those shipping services that have ceased operation. In the first six months of 2020, 11 per cent (n = 1 675) of all planned sailings have been cancelled.[55] More to the point, cargo capacity across global maritime shipping routes has reduced as a result. For example, the rise in blank sailings has seen the actual deployed cargo capacity versus the proforma capacity ratio for the Far East to North America (including Mexico) head haul cargo routes operate at estimated reduced capacities of 72 per cent (February), 91 per cent (March), 86 per cent (April) and 80 per cent (May).[56] For the Far East to Europe head haul routings, these reduced capacity figures are an estimated 64 per cent (February), 79 per cent (March), 88 per cent (April) and 81 per cent (May).[57] If we discount February, when normal levels of industrial production and transport are impacted by the Chinese New Year holiday, container ship sailings were still running at rates of at least 80 per cent for all routes out of Asia in March and April.

Thus, while these figures demonstrate a reduction in container shipping volume from the ports of the Far East, and China in particular, they illustrate also that the reduction was far less than the wholesale collapse that some forecasts suggested. Large shipping container vessels continued to sail large numbers of containers from East Asian ports to North American and European ports. Hence, smuggling opportunities within this container traffic remained still a viable and available transport option for illicit goods like chemical synthetics and precursors.

Furthermore, and as an alternative to maritime cargo transit during this same period, Chinese rail freight realised a significant year-on-year growth increase in February of 4.5 per cent.[58] This increase saw the country shipping 310 million tonnes of freight by rail, with China Railway confirming it loaded 171 000 railway cars per day on average throughout February 2020, bringing the country's January – February rail freight cargo tonnage to an all-time high.[59] Perhaps appearing to be counter-intuitive, this significant increase in rail freight may be due to two factors: firstly, Chinese rail freight shipments tend to be immune to disruption due to the existence of long-term industrial shipping agreements; and, secondly, Chinese rail freight shipments are not subject to pandemic restriction or blockage by local government authorities.[60]

In addition, Chinese rail freight networks are connected now to European markets following the initiation of formal overland rail freight linkages between China and Europe in March 2019.[61] This saw the completion of the first freight train voyage from Xian (China) to Prague (Czech Republic) in a time of 11 days, a reduction of three weeks when compared to the duration of traditional maritime container vessel shipments.[62] Of additional note is that rail freight has continued to flow without disruption (and with alleged increased freight traffic from Asian suppliers over the pandemic period) across the Central Asian rail networks of Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan; as well as in Georgia and Turkey.[63] Finally, there are no additional pandemic-related restrictions or blockages on any external rail freight crossing borders into the twenty-five member countries of the Schengen zone, with rail freight companies reporting all rail freight operations to be occurring 'as usual'.[64]

In consideration of the above data, there remains insufficient evidence to support the assertion that chemical supply chains between Chinese precursor supply points and global synthetic drug producers have been significantly disrupted to the point that meth production capacity has been seriously compromised as a result. Certainly, the precursor requirements of the South Asian heroin producers and Southeast Asian meth producers have continued to be met as needed. Perhaps the capacity of smaller meth manufacturers, such as those located in the production points of Serbia and northern Macedonia, may well be disrupted in the short-term due to overland transport delays resulting from a reduction in truck cargo transiting

borders in their region. Smaller-volume domestic producers in the US and Canada may face a temporary lapse in their supply chains as well. Many source their precursors via suppliers (often domestically) on the dark web, or source by post from compromised suppliers in China directly. Their smaller volume requirements and general absence of a precursor stockpile, such as is done by larger volume producers, means that their production is vulnerable to even the shortest of supply chain disruptions, but that their limited production can recommence fairly quickly once precursor flow is remedied. Synthetic production in the Russian Federation is unlikely to be impeded, largely because production is done using domestically sourced chemicals.

Of course, some manufacturers could transition to a business model predicated upon the synthesis of their own pseudoephedrine or analogue, thereby shortening the supply chain, severing their dependency on foreign suppliers and reducing the risk of precursor supply chain detection common with postal or courier-based shipments.[65] As a tactic, however, this is unlikely to be pursued unless lockdown durations continue for a significantly longer period of time.

INTERNATIONAL DISTRIBUTION

A cocaine bust in Philadelphia, 2019. Globally, law-enforcement capacity to combat illicit drug flows will decrease as agencies focus on containing the pandemic. *© Bastiaan Slabbers/NurPhoto via Getty Images*

Mexican cartels likely to be expanding volume and frequency of drug flows through their supply chains

During the week of 16 March 2020, as the US surpassed 5 000 confirmed COVID-19 infections, several of its states began enacting 'social distance' policies and a visceral fear was beginning to emerge that the growing pandemic had the potential to overcome the country's existing healthcare infrastructure, a secret 'agreement between families'[66] allegedly was being reached among the leaders of Mexico's major drug cartels.[67] The primary conduits of cocaine, heroin and meth to what is the world's largest consumer market for these drugs, together these cartels allegedly made the decision to reduce immediately and dramatically their drug trafficking volume to the US market.[68] They decided also to standardize the prices for these commodities at significantly higher levels.[69] Any suppliers who did not follow these instructions were told to 'pay attention to the consequences', a threat that would carry with it an immediate understanding.[70]

Whether or not this meeting took place as described, or if the cartels' leadership simply arrived at this mutual practice organically, what is important to note is both the timing of the action, and its financial and organizational implications. The artificial restriction on supply can be viewed, perhaps, as a precautionary approach to the perceived deterioration of their largest marketplace and, in particular, to the increasing unknowns around the security of existing product flows in the face of a rapidly changing border security environment and marketplace. The increase in price is a measure taken to exploit the immediate uncertainty of the retail environment among consumers, thereby allowing the organization to increase its profit margin on a commodity (crystal meth)

that, under normal market circumstances, has a low profit threshold due to the presence of several competitive suppliers. An agreement among these competitors, collectively to exploit the marketplace during what may be a temporary disruption, however, is a prudent adaptation to the crisis.

Equally, however, and looking at the continuation of drug seizures at and near the border throughout the crisis as an indication that the volume of trafficking from Mexico to the US has not decreased, this account of a supply restriction (both in terms of product going out and precursors coming in) also may be interpreted as a political ploy to direct attention away from an alternate goal – for example, the expansion of supply flows through alternative channels that avoid formal border points and cross over, under and around the frontier. Media stories of cartel 'suffering' and supply chain 'insufficiency', alongside the development of an artificial narrative promoting market scarcity, would be consistent with an attempt to promote and financially exploit a pandemic-based period of drug market disequilibrium. Given the analysis presented on the likelihood that the production and supply chain integrity of Chinese-sourced precursors has remained viable and largely uninterrupted, there remains a strong possibility that cartels are exploiting the current pandemic crisis instead through a campaign of disinformation alongside a concerted supply expansion.

Globally, law-enforcement operational capacities against illicit drug flows are likely to decrease during the pandemic

The interdiction capacity of law enforcement has the potential to be incapacitated due to illness and death of frontline police personnel resulting from viral infection, or due to being re-tasked from interdiction duties to pandemic-related duties and responsibilities. For example, the New York City police force has been decimated by the pandemic. On just one day in early April, they had 6 698 uniformed members (18.5 per cent of the uniformed force) on sick leave, with 1 775 uniformed members and 260 civilian members of the force having already tested positive for the coronavirus.[71] At least 29 New York City police officers have died so far from COVID-19.[72] Law enforcement officers have been killed by coronavirus also in Peru and the United Kingdom.[73] In China, twice as many police officers were killed by COVID-19 than were medical staff.[74] Large numbers of law enforcement personnel remain incapacitated by COVID-19 illness or self-isolation across many other countries.

Law enforcement assets are being tasked with public security duties related to the enforcement of social distance and home-based isolation requirements mandated by governments. In South Africa, police and army personnel are enforcing isolation conditions, sometimes with force.[75] In Kenya, Nigeria, Tanzania and Somalia, police have been accused of using extreme force or extorting bribes from people who are outside during the official lockdown curfew. In Guinea-Bissau, law enforcement assets are being corrupted under the guise of maintaining lockdown security to enable expansion of illicit drug market access.[76] In India police have been accused of torturing lockdown violators.[77]

In each of these cases, and across numerous other jurisdictions, illness and death has impacted the ability of many police services to undertake their normal enforcement duties. The diversion of large numbers of remaining law enforcement personnel – and, in many cases, the re-prioritization of their daily tasks - from more traditional policing enforcement activities to pandemic security duties has further exacerbated the interdiction potential for many services across the world.

The illusion of hard or closed borders and exploitation of essential goods shipments

As many countries raced to close their borders in an attempt to slow the domestic transmission of the coronavirus (and to gain political capital with a fearful citizenry), a problem arose. To avoid damage to the domestic economy and maintain essential supply chains and stockpiles (e.g. food, medicines and toiletries), it became clear that a balance had to be struck. In many cases, this resulted in a negotiated settlement that saw national borders closed to travelers but open for essential goods and service providers. This created a reality very different from the image of sealed borders that garnered political capital and dominated news headlines.

Despite the rhetoric, most ports and boundary crossing points have been closed with the policy equivalent of a curtain – easily drawn back for designated individuals and goods – rather than sealed with an imagined, temporarily impenetrable wall. Individuals and commodities designated as essential continue to cross regularly.[78] Ships and planes still arrive and depart, repatriating citizens and residents from around the globe and maintain a lifeline of essential cargo. In addition, border screening has changed to focus on identifying COVID-19-infected individuals and preventing their entry, relegating the prevention of smuggling to a peripheral concern in many countries. In other cases, the pandemic has created the perfect means through which political power and corruption can be used to exploit market opportunity.

In Guinea-Bissau, corruption within the National Guard, intimidation of Judicial Police inspectors, and complicity among senior government leaders, has led to the use of government lockdown measures to restrict visibility and mobility by regime opponents, and drug market actors are moving with increased impunity.[79] Maritime and airport cargo oversight measures have been relaxed.[80] Large-volume shipments of cocaine continue to enter the country by sea and air from Latin American origins for stockpiling locally, as well as distribution in smaller loads to transit waypoints and markets throughout the west and north of the continent. Traditionally these shipments would be expected to move through the Sahara, crossing Niger on their way to exit points in Libya; however, as a result of the ongoing conflict in Libya, this flow pattern has ceased and these illicit drug shipments are moving now up the West African coast, via Senegal, Mali and Mauritania, to exit points in Morocco.[81]

It has been alleged also that as a result of pandemic response measures, cross-border trafficking has been made easier also in El Salvador, Honduras and Guatemala, with some local gangs moving away from extortion and into drug trafficking, a relatively easy transition, in order to make up for lost extortion revenue resulting from the closure of local shops.[82] Despite restrictions in Uganda, a principal overland drug trafficking node for eastern African markets, the borders there remain open and cross-border traffic remains 'uninterrupted'.[83] In Peru, police seized a kilogram of cocaine that was co-mingled in a shipment of Peruvian-made surgical masks destined for Hong Kong; and, a week later, a second shipment of surgical masks bound for China was found also to contain a further 2.4 kilograms of cocaine.[84] The same month, in Brazil, 1.1 metric tonnes of cocaine was found hidden in a truckload of surgical gloves.[85] Shortly thereafter, UK border officers seized 14 kilograms of cocaine hidden within a consignment of surgical facemasks being transported in a Polish-registered van attempting to enter the country via the Channel Tunnel.[86]

Such exploitation of perceived marketplace opportunities likely is to continue through traditional overland channels; and in some places, possibly through the increasingly common engineered delivery solutions of narcodrones;[87] 'sophisticated' narcotunnels;[88] and narcosubs, employed in a transoceanic capacity.[89] The ephemeral application of small maritime craft is apt to increase across Latin America and the seas of the Caribbean, and along the littoral states of the Indian Ocean. The use of lesser known maritime and overland border ports and stations will expand; and a return to use of small fixed-wing aircraft likely will increase in synchronicity with organizational attempts to circumvent potential disruptors and seek greater supply chain flow diversification.

Drug distribution volume and frequency may decrease in the short-term, but will recover sharply

Further to the point, and as it relates particularly to the cross-border distribution of illicit drugs and other smuggled contraband, there are few nations in the world that have the capacity to monitor and police the entirety of their borders and coastlines. In such places, the imposition of restrictions on (or closure of) formal border crossing points will not disrupt significantly the supply chain of many illicit goods as alternative, informal entry points are equally as likely to be employed by such market actors. Rather, the impact is felt more directly, and more significantly, by licit traders – who rely on formal crossing and goods entry points – rather than by illicit-goods traders, whose operational capacities allow for more flexibility in switching between alternative distribution modes,

geographic flows and timings. With the new and urgent focus on COVID-19 prevention, many countries lack the means simultaneously to inspect essential cargo, screen travellers, and enforce air, overland and coastal borderline restrictions.

Furthermore, many less developed countries need to keep their borders open as their domestic economies rely on the continuation of formal and informal trade in order to survive. Traditional cross-border smuggling routes will likely remain viable in the short term, until losses increase to the extent that their risk outweighs their value. For example, Spain, a common entry point for Andean cocaine into the EU before the pandemic, seized 3 412 kilograms of cocaine and 27 kilograms of heroin within a three-week period in March 2020.[90] In such cases, it is likely that alternative import and distribution channels are being identified already.

Diversification of supply chain transit routes will emerge, particularly in southern Africa and Asia

As trade levels decrease, the opportunity for corrupt officials to profit decreases correspondingly. This creates an opportunity for traffickers to make new relationships with enforcement officials who are vulnerable to exploitation and use them to assist in facilitating new border trade entry points and instances. As one expert assessed the situation as it related to Asian drug syndicates, he noted: 'It is more than likely that traffickers will benefit in significant and tangible ways … their business is fundamentally built around capitalizing on governance dysfunction and vulnerabilities.'[91]

Some countries have embraced the lockdown approach, whereas others have decided to delay invocation of any such restriction.

While speculation remains as to which new routings will be found to be exploited as the world comes out of the current crisis, we are beginning to see possible instances of purposed supply chain displacement. For example, in southern Asia in March 2020, the Sri Lankan navy seized 605 kilograms of crystal meth, 579 kilograms of ketamine and a crew of nine Pakistanis from a flagless vessel in the waters south of Sri Lanka, having originated in the Gulf of Oman. Earlier in the month, the navy had seized two additional

Two men caught with large amounts of cannabis are arrested during an operation in Johannesburg, South Africa, during the COVID-19 lockdown.
© Emmanuel Croset/AFP via Getty Images

trawlers with a heroin and crystal meth load worth US$33 million.[92] Cigarette-smuggling networks from Paraguay to Brazil are diversifying to include cannabis in their supply chain.[93] El Salvadoran, Guatemalan and Honduran gangs are shifting into the trafficking of cocaine and cannabis as a secondary business.[94] Alcohol bans during COVID-19 lockdown in South Africa (which also banned retailing of tobacco) and the Mexican states of Sonora, Nuevo León and Tabasco present an obvious opportunity for illicit drug market actors to move into the illicit supply of alcohol (and cigarettes) as a result of these prohibitions. Further, borders remain poorly patrolled across eastern and southern Africa. Many borders lack even basic fencing or other type of obstruction designed as an entry barrier. Some countries have embraced the lockdown approach, whereas others have decided to delay invocation of any such restriction. Heroin and cocaine continues to flow through the region, both servicing the needs of the growing local marketplaces as well as seeking new points of onward departure towards European ports.

Temporary disruption of banking oversight measures may increase global illicit financial flows

The ongoing pandemic is an opportunistic environment for the exploitation of capacity deficiencies that arise in international financial institutions and markets. This is particularly relevant when one considers the high volume of 'rescue' or relief funding schemes launched by governments as a means to ease the financial burden of the crisis on its citizenry. These schemes, derived from both state government coffers as well as from foreign assistance initiatives, are ripe for exploitation in an environment where many regulators are unable to exercise their oversight functions appropriately, law enforcement assets are reducing essential work in favour of pandemic duties, and some governments see the pandemic as an opportunity to lift or ignore banking oversight regulations that they find 'inconvenient'.[95] Examples of this exploitation are arising already in Albania and Kenya. With international schemes inevitably to be founded with the alleged intention of targeting the needs of the 'most vulnerable' of countries, manipulation and exploitation of these funding mechanisms by organized criminal interests – particularly those also involved in the illicit drug trade and those that have infiltrated state governance structures at high levels – should be expected.

Laundering of drug market profits will become more prevalent during the post-pandemic's recovery phase

While some opportunities may arise during the pandemic crisis for the expansion of financial flows through formal financial institutions, a significant amount of traditional money laundering outlets (e.g. restaurants, bars, salons) are classified as non-essential businesses and have remained closed during national lockdowns. Many locations that have remained open are operating on a cashless basis, using bank debit and credit cards for payment in order to avoid exposure to coronavirus transmission through the exchange of cash. These developments have restricted the ability of trafficking organizations, which are cash-rich enterprises, to launder their criminal proceeds.

As economies begin to move into the post-pandemic recovery phase, there will be a need to launder large amounts of stockpiled cash quickly and an opportunity-rich environment in which to undertake this task. In many countries, real estate values have become depressed by the COVID-19 crisis and many small businesses have been abandoned during the lengthy containment and lockdown phase. As the recovery phase emerges there will be numerous opportunities for the laundering of illicit drug monies through real estate and small business purchases across depressed economies. A secondary consideration is the movement by large drug organizations to a cashless existence.

In the same manner in which the Great Depression of 2008 demonstrated the importance of cash possession in a time of deep economic crisis, the current pandemic has demonstrated the inessential nature of cash in a society that has popular and accessible cashless substitutes for financial transactions. The volume, weight and risk elements of having to launder large volumes of cash have been exacerbated by the current crisis. The movement of major financial transactions to crypto-currency exchanges would reduce organizational vulnerability and should remain a post-pandemic law enforcement concern.[96]

A local administration worker fumigates a neighbourhood in Yemen's Huthi rebel-held capital, Sanaa, on 23 March 2020. *© Mohammed Huwais/AFP via Getty Images*

DOMESTIC DISTRIBUTION

Drugs supplies remain available in most marketplaces

Despite news stories indicating otherwise, drug supplies remain available in most marketplaces. While acknowledging that some smaller markets may encounter some level of supply shortage depending on how long movement restrictions are in place, in most countries it is PWUD access to existing supplies that may be restricted, rather than a situation of real scarcity of supply. These access challenges are due to mobility restrictions affecting some users and dealers, and supply conservation measures undertaken by some dealers, including in some rare cases the adulteration of supplies to increase volume and decrease purity. History demonstrates that these initial domestic marketplace shocks will be temporary in nature, with prices expected to return to pre-crisis levels reasonably quickly after self-isolation measures and local mobility restrictions are lifted. Purity will take a much longer time to rebound.

Rise in use of alternative local distribution means

In the wake of market disruption, local drug distributors often employ a variety of different means to deliver their product to their consumers. While some PWUD (largely, those who are recreational users) will shift their purchase requirements to the relative anonymity of online dark web fora as they adhere to self-isolation and social distance requirements; research demonstrates that dealers will employ less overt and more mobile methods of distribution.[97] Examples include the use of Uber-type rides or taxis to subvert transportation restrictions in cities of El Salvador, Germany, Guatemala, Honduras and South Africa; the employment of disguises to meet exemption requirements to be outdoors (e.g. dressing as a jogger, or an 'essential worker'); and the exploitation of essential services as transaction points for discrete distribution (e.g. grocery stores) during periods of lockdown.[98]

In areas where states are incapable of discharging their protective duties and responsibilities, illicit drug organizations will leverage their influence and co-opt local communities

In several places, drug trafficking and distribution organizations are taking on the social service and public enforcement role of the state. They are organizing and delivering food and care packages, providing community security patrols and enforcing state lockdown measures. Some describe themselves as 'the true providers of law and order',[99] while others profess to have the best interests of their compatriots as motivation. Examples of this extend from the Cartel of the South and the Sinaloa Cartel in Mexico; to the favela gangs of Brazil; the gangs of the Cape Town flats in South Africa; and some non-state ethnic armed groups of eastern Myanmar. One gang leader described such community maneuvering in the following way: 'Why does that lady go to that drug merchant asking for help? Ask her, because the politicians and government officials come when they want the votes, and when they've got their votes it's all over.'[100]

In several places, drug trafficking and distribution organizations are taking on the social service and public enforcement role of the state.

Expect increased adulteration of drug supply in some markets

From the initiation of the actual or perceived market disruption, it should be expected that the purity of local drug supplies will decrease over time. This is because local dealers add bulking agents to their supplies as a means of increasing available volume for sale in order to continue to meet existing market demand in the event that a supply chain disruption may interrupt their access to new stocks. Adulteration of local drug supplies is a common mitigation measure, and one that lasts beyond the life of the disruption. While in many cases the adulterants used are benign substances such as lactose powder and crushed acetaminophen tablets, which add volume and decrease purity, but pose little risk to consumers; there remain instances where adulterants have been employed as a means to artificially increase the perceived purity of already highly impure substances. The most common of these is fentanyl and its many analogues. In some markets – particularly in North America – it is possible that adulteration of drug market substances may lead to instances of overdose and death.[101]

EFFECTS OF COVID-19 ON PEOPLE WHO USE DRUGS

Health services available for PWUD are insufficient in most affected countries

As always seems to be the case, the consequences of any serious socio-economic disruption, such as the coronavirus pandemic and its prevention measures, tend to be more strongly felt by communities of PWUD consumers who exist within the structural confines of local drug economies. PWUD are some of the most vulnerable societal members. A population that is already largely immuno-compromised, poor, homeless and likely in withdrawal as local drug supplies contract and increase in price; many suffer also from a series of preventable comorbidities for which treatment is available but not accessible to them. These include tuberculosis, other acute respiratory infections, hepatitis B and C viruses, and HIV. As the pandemic progresses, it is likely that existing health services and programmes will be defunded - and these services will be shelved – during the inevitable post-lockdown recession to come. Thus, large swathes of the world's drug using population will see their health risk profiles increase even further as they become even more marginalized from basic state social assistance and health support structures and systems.

It is expected that behaviours of people who use drugs will alter during the pandemic.
© Jonathan Torgovnik/ Getty Images

State-sponsored violence has increased within some drug marketplaces as states expand their domestic security and surveillance capacities

The coronavirus pandemic has provided states with a rationale for expanding their domestic security and surveillance capacities, and for introducing measures to expand

their influence and political control. In many cases, this has led to increases in state-sponsored violence as the pandemic has continued to unfold. In most countries, the initiation of drug market violence generally has been a side-effect of state-sponsored efforts at population mobility constraint and the enforcement of lockdown measures, particularly through the judicious use of law enforcement and military assets. Initial examples abound across Africa (Guinea-Bissau, Kenya, Nigeria, South Africa and Tanzania), Asia (India, Indonesia, Iran and Philippines) and Latin America (Colombia, Ecuador, Guatemala and Venezuela). In more extreme cases, President Rodrigo Duterte of the Philippines has ordered officials to 'shoot dead' anyone who is seen to be 'intimidating' or 'defying' the government.[102] Rwandan police allegedly shot two people who were seen to be defying the government's lockdown order.[103] South African police and military forces have shot at and arrested hundreds who are seen to be defying the government's lockdown order.[104] Other killings have occurred in Somalia,[105] Kenya[106] and Nigeria.[107]

South African police and military forces have shot at and arrested hundreds who are seen to be defying the government's lockdown order.

The increased prevalence of such authoritarianism is likely to be maintained as a post-pandemic environmental challenge, particularly as it relates to abuse by security forces. After all, it is unlikely that those countries that have employed dynamic, unilateral security responses under the guise of pandemic prevention measures will lift such restrictions and deployments in the immediate future, particularly given timelines for continued viral transmission extend to a year or more, the development and distribution timeframe for a vaccine remains distant, and the likelihood of many of these vulnerable nations entering into significant and politically unstable recessionary cycles is high. The International Monetary Fund (IMF) has announced revised global economic recovery projections predicting a three per cent contraction in 2020. This is expected to be followed by a positive recovery in 2021, yet in even the best case this recovery will increase global GDP to a level that will be less than the pre-pandemic GDP trend.[108] The recovery outlook for already vulnerable and fragile states is much more pessimistic.

Local drug use consumption patterns and behaviours will change

Based on precedent, there are a number of patterns and behaviours that are likely to be altered within local drug use environments, as a direct result of the coronavirus crisis and the various prevention measures employed by community governance structures and designed to restrict human contact. These include the following pattern changes.

- Changes in frequency of drug use are likely in periods of market disruption,[109] such as by the pandemic, and in particular, those affected by state lockdown orders. PWUD intermittently, or for recreational purposes, but who are not dependent upon the substances, may use less frequently – or stop using altogether. As lockdowns are enforced, consumers are no longer able to freely access their local dealer and, more importantly, many of those who had employment are struggling under lockdown layoff or employment termination. Small numbers of those who are financially able may stockpile their drug of choice in the beginning of the crisis. Dependent users will continue to try and access their substance of choice, inevitably making them vulnerable both to the transmission of the coronavirus, and to the predatory pricing behaviour of local drug distributors as they use the pandemic crisis to exploit those who are unable to quit using.

- PWUD may turn to different drugs, although research findings are mixed on this issue. Some research results have indicated that during periods of market disruption - when access to one substance is restricted or cut off – PWUD *do not* migrate to a substitute substance to meet their need to use.[110] However, there remain several studies that dispute this claim,[111] and initial findings from Global Initiative drug price monitoring in several African drug markets indicate the existence of a subset of polydrug users who do transition between drugs depending on availability.[112]
- Fatal and non-fatal overdoses are likely to decrease. With a decrease in frequency of use and drug purity, a corresponding decrease is likely in emergency room visits by PWUD, [113] and in fatal and non-fatal overdoses.[114]
- Means of use may change. Some research indicates that increased economic vulnerability,[115] changes in the composition of the substance of use,[116] either by substitution[117] or adulteration, may influence increased transitions to injection drug use.[118]
- Demand for treatment may increase. Several studies have found that demand for drug treatment increases in periods of drug market disequilibrium.[119] However, in most countries, the availability and accessibility of evidence-based drug treatment services is limited at best. In some jurisdictions, these services involve nothing more than coerced detoxification; in others, high cost and entry restrictions (e.g. mandatory waiting periods, inability to access opioid substitution therapy directly) that deter PWUD.
- The risk of illness and death may increase for PWUD. There is a significant association between drug injection and transmission of hepatitis C virus and HIV, particularly during periods of reduced drug availability.[120] Given the impossibility of practicing social distancing in the places where drugs are consumed, the risk of coronavirus transmission among PWUD, most of whom are already severely immuno-compromised, is high, as is the risk of death from COVID-19.

Drug-dependent livelihoods: to hustle is to survive

Most PWUD are unable to self-isolate, particularly those with any level of drug dependence. Most must hustle on the street for enough money to meet their daily drug consumption needs and stave off the illness of withdrawal. This becomes much more dangerous in the presence of a deadly, highly infectious, community-transmitted disease.

Many PWUD also have a delicate double-dependence on their drug market environments. The market provides them an illicit livelihood – as a runner, dealer, concealer, or in one of many other varied roles – as well as a source of drugs. They are the 'drug working class'.[121] Most are unlikely to be able to self-quarantine, nor would the nature of their livelihood enable them to do so. They are the drug market's essential workers, occupying the neglected yet necessary spaces on the front line of drug markets' retail operations, acutely vulnerable to every disruptive flux in demand and supply. It is this vulnerability that drives many into the streets when they are required to remain inside, and that exposes them disproportionally to violence, disease and harm. Deaths in drug-using communities are already at pandemic level due to causes such as tuberculosis, HIV, hepatitis C virus, overdose and violence. PWUD have been dying for years from communicable health conditions exacerbated by conditions of structural violence. For them, COVID-19 will become an added risk to what already is a risky existence.

Spanish policemen seized 4 000 kilograms of cocaine in Vigo in April 2020 amid the national lockdown to fight the spread of the coronavirus.
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CONCLUSION

The following points form the foundation of the paper's observations and policy concerns as they relate to the impact of COVID-19 on the structure and integrity of the world's illicit drug markets.

1. Production and trafficking will expand. Drug production, trafficking and distribution organizations and networks are historically experienced with market disruption incidences, and how to adapt their systems and structures to accommodate these changes in order to ensure the integrity of their product and profit margins. Their political connectedness and resilience will likely enable them to navigate this pandemic's economic and social challenges. In many cases, drug markets will strengthen as a result of COVID-19 adjustments and post-lockdown supply trends will continue to increase while distribution networks absorb this increased traffic, particularly within newly identified channels.

2. Drug markets will stabilize and prosper. The chaos of a pandemic presents innumerable opportunities for illicit drug organizations to pursue long-term geographic market expansion and commodity diversification, alongside a shorter-term of exploitative retail pricing for the purposes of immediate profit-taking. Markets will return quickly to their pre-pandemic price, purity and sales equilibrium as demand increases significantly in the post-lockdown period.

3. Many drug organizations – large and small – will strengthen and new ones will appear. The global drug market will be changed forever because of the COVID-19 crisis. Illicit drug organizations will evolve, while many governments will struggle to balance their exit from this crisis, perhaps in the regressive pursuit of pre-crisis 'normalcy'. In contrast, illicit drug markets and their actors have a historically proven

ability to adapt to environmental disruption and change – particularly as it relates to law enforcement measures. As a consequence of this COVID-19 crisis, the versatility of these organizations – in contrast to most law enforcement and government security institutions – will become more resilient, more widely geographically embedded, more financially diverse in their revenue-generation portfolio, and less reliant on the capacities of external infrastructures, institutions and systems.

4. Money-laundering efforts will increase significantly in the post-lockdown recovery period. New and expanded opportunities for the laundering of drug trade profits will be exploited in the post-pandemic recovery phase.

5. New countries will emerge as illicit drug distribution points. States with weak, vulnerable, fragile or significantly inequitable economies will be susceptible to drug organization infiltration of their governance systems and institutional structures. Emphasis on authoritarian localism is likely to be maintained as a post-virus environmental challenge. Better world cooperation is not going to be among the side effects of the coronavirus pandemic.[122] Authoritarianism is expanding around the globe as state governance structures have begun to uncouple from the long dominant, neoliberal pursuit of a globalized commons, the political orientation that spawned networks of widely connected marketplaces, open borders, distant 'in time' supply chains and Faustian promises of ever-increasing material living standards. The coronavirus pandemic has provided states with a rationale for expanding their domestic security and surveillance capacities, and for introducing measures to expand their influence and political control.[123] In remarks to the European Parliament, French MEP Aurélia Beigneux declared that 'the free circulation of goods and people, immigration policies and weak controls at the borders obviously allow the exponential spread of this type of virus'.[124] In the UK, emergency legislation was passed which provided law enforcement agents the right to detain people and place them in isolation, contrary to fundamental human-rights provisions, and solely on public-health grounds.[125] It is unlikely that those countries that have employed dynamic, unilateral security responses under the guise of pandemic prevention measures will lift such restrictions and deployments in the immediate future, particularly given timelines for continued viral transmission extend to a year or more, and the development and distribution timeframe for a vaccine remains distant. As a consequence, the likelihood of some of these nations entering into acute politically unstable recessionary cycles is high in the absence of significant long-term external financial assistance.

6. Morbidity and mortality rates for PWUD are likely to increase in many countries. The greatest impact of the current crisis will be on the poorest PWUD. Health, poverty, increased vulnerability to infection, many are marginalized and forgotten members of society when it comes to the drafting of prevention and treatment response and recovery plans. Further, as some states (e.g. the US) pursue more protective trade measures in the wake of the pandemic, their already fragile medical supply chains are likely to be made less resilient in a new nationalist procurement environment as the number of available suppliers become reduced.[126] PWUD already receive substandard health prevention, care and treatment services. In environments with more fragile and less resilient healthcare systems, the motivation and resources necessary to expand service coverage to this population will be further restricted. Countries must make a concerted effort to meet the health and welfare needs of PWUD. This includes restoring and investing in health services, like effective treatment delivery (e.g. opioid substitution therapy).

7. Law enforcement will find drug organizations have become further entrenched participants in many local communities and their constituent economies. Drug organizations are investing in the construction of social capital through acts of goodwill with populations negatively affected by the pandemic prevention measures – in particular, poor and marginalized working-class populations.

In some places, these illicit groups are vying for social legitimacy by replacing the role of the state by providing support and protection to local communities in regard to enforcing quarantine requirements, providing groceries and other necessities, and providing protection to the community as a whole. These co-opting efforts should be viewed as social capital accumulation exercises, as these groups use such opportunities to further entrench their community presence and the co-dependence of the community on the group itself. In this way, formal governance structures are undermined and, in many cases, cast aside in place of place-specific governance by the drug organizations and their proxies. Law enforcement bodies are going to find it even more difficult to penetrate drug organisations and their domestic networks in many places due to the symbiotic relationships that manifest in population areas traditionally marginalized by state governance and security structures. Looking longer term, alternative modes of engagement between law enforcement and drug market actors will need to be researched and developed, particularly as they relate to working within environments that are home to marginalized communities and populations.

The future of global drug policy

The coronavirus pandemic will continue to be a public health emergency of global importance for an indefinite period of time, as well as one of the greatest disruptors to society as we used to know it. While historical shocks have hit illicit drug markets in the past, affecting supply chains, reducing demand, or both; none has had the holistic, disruptive strength of impact on social and economic structures that continues to be seen with the coronavirus pandemic. Not only is it inevitable that this crisis will change the way that we examine organized criminal markets and their myriad responses to the structural marginalization of social institutions and economic tenets, but perhaps it will encourage a reexamination of the architectural adaptations that reinforce, in many places, the primacy and embeddedness of drug markets and their stewards. After all, the global disruption caused by the coronavirus pandemic is both a crisis and an opportunity, for drug policy as well as for drug markets.

The global disruption caused by the coronavirus pandemic is both a crisis and an opportunity, for drug policy as well as for drug markets.

As such, it can be argued that the era of global drug prohibition, grounded in the consensual foundation of traditional global drug policy institutions and instruments, is approaching its terminus. What policymakers need to recognize is that the crisis that has grown with the coronavirus pandemic has created both a disruption of market equilibrium and an opportunity for adaptive change. Continuing to honor the legacy of status quo prohibition-based strategic responses to illicit drugs, designed to fit what we see now is an anachronistic problem narrative defined by its historical geopolitics instead of the principles of science, succeeds only in continuing to validate the construct of an existential 'external enemy' – drugs and their promulgators. Yet, it is inevitable that such political maneuverings of states will continue to misdiagnose their domestic limit of tolerance for societal disruption, and consequently misunderstand the threshold of change necessary to be overcome in order for them to adapt adequately and appropriately to the opportunity that has emerged in this crisis.[127]

Unfortunately, the growing balkanization of international drug policy discussion across regional institutions and blocs, evident most particularly at the global level in the divisions arisen from the angst-ridden pathos of the CND's recent struggle around the reclassification of cannabis, is a harbinger for the growing role of state sovereignty in such uncompromising policy spaces.

The greatest adaptations in drug policy today are being driven by nation states, and not international bodies like the UN. Global conventions and agreements increasingly are being reinterpreted from the perspective of sovereign interest rather than traditional collective consensus.[128] Thus, the continuation of this legacy of drug policy failure by a subset of global states is but a symptom of a greater failing, that of intellectual hubris. The intractability of such political positioning, as it relates to the adoption and implementation of a relevant policy response to the structural dynamics of the embedded drug market economies of today, and the adaptation and resilience of the economies' constituent actors, perhaps portends the declining fitness of such fervently wielded policy dogma within the contexts of today's ever-evolving drug trade environments.

As a consequence, it is increasingly likely that as we exit this latest crisis, global drug policy debate and innovation will increasingly take place outside of intergovernmental institutions – and, perhaps eventually within the domain of an evolved architecture of drug policy governance, one that is beholden neither to the instruments of consensual legacy nor to the fallacy of existential wars.

NOTES

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128 After failing to convince member state partners to revise the Convention, Bolivia's decision in 2011 to withdraw from the 1961 Single Convention, and then re-enter it in 2012, with a reservation allowing the domestic cultivation and use of coca on the basis of national tradition, is one such example. Canada's decision to legalize the cultivation, production, possession and recreational use of cannabis in 2018, based on a unilaterally liberal interpretation of the Convention terms, and against vociferous opposition from the UNODC Executive Director and the INCB, is another example.

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