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Organised Crime in Healthcare Systems

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Question

1. What is the role and impact of organised crime in healthcare systems and medical supply chains globally, and particularly in ODA eligible countries?
2. What countries/regions are identified in the literature as particularly vulnerable to organised crime exploiting the health response to Covid-19?
3. What lessons have been learned about how organised criminal groups/networks (including state embedded criminal actors) have responded to/interacted with past pandemics, or other humanitarian emergency responses?
4. Is there any key learning from successful experiences of international and local actors in countering these risks/problems?

Contents

1. Summary

‘‘HMG define serious and organised crime as **individuals planning,** co-ordinating and committing **serious offences**, whether individually, in groups and/or **as part of transnational networks**. The main categories of serious offences covered by the term are: child sexual exploitation and abuse; illegal drugs; illegal firearms; fraud; money laundering and other economic crime; bribery and corruption; organised immigration crime; modern slavery and human trafficking; and cybercrime.’’ Definition from (HMG, 2018).

Crime and malpractice within healthcare systems takes many forms, from front line corruption such as demanding cash payment for appointments or consultations, through to large scale misuse or misappropriation of funds in global health initiatives. Organised crime may seek to engage in healthcare systems in a number of ways and there is a fine line between maladministration and criminal activity – either of which has a negative health impact. For example, supply of overpriced or poor-quality counterfeit medicines endangers health; slow delivery of equipment delays treatments and interventions (such as testing) and thus also endangers public health. During outbreaks of disease the **pressures from peaks in demand highlight weak points within a health system and these are vulnerable to exploitation by organised crime.**

Organised crime engages in activities that are directly and specifically detrimental to public health. Typically, this involves the production and sale of substandard fake legal goods and illegal drugs. The market for these products has grown and diversified with the effects of globalisation; and now covers essential medical pharmaceuticals, lifestyle drugs and medical equipment supplies. (Reynolds & McKee, 2010). Cartwright and Baric, (2018) highlight the need to address the growing phenomenon of **counterfeit medicines, which disproportionately affects developing countries because of poor systems for registration and procurement.** When there are peaks of supply and demand such as during epidemics these present opportunities for already corrupt actors in healthcare systems to exploit further opportunities. (Rhodes, 2020)

Corruption is a serious threat to global health outcomes, leading to financial waste and adverse health consequences. Yet, forms of corruption impacting global health are endemic worldwide in public and private sectors, and in developed and resource-poor settings alike. Allegations of misuse of funds and fraud in global health initiatives also threaten future investment. (Mackey & Liang, 2012) To frame this more positively, if responses to epidemics and healthcare emergencies are efficiently managed in a transparent manner, public confidence builds into adaptive behaviours and help to stabilise the crisis. Current domestic and sectorial-level responses are often fragmented and have been criticized as ineffective (Mackey & Liang, 2012).

Corruption and criminal exploitation are global public-health challenges. Although they pose particular challenges for low-middle-income countries with weaker institutions and lower resources, **they manifest in every context** (Rhodes, ,2020).

Overall, the literature emphasised corruption and malpractice in healthcare systems and did not always make clear whether criminal activity is strictly organised by groups or by individuals seizing opportunities as these present. Given the nature of illicit activities, data on scale and value is limited. Much of the evidence available is often anecdotal, based on case studies where perpetrators have been caught and or prosecuted and may underestimate the scale of the challenges.

The line between omnipresent corruption and possibly more damaging organised crime seems indistinct. Rather few studies were identified that report on the impact from organised crime groups in past pandemics, or other humanitarian emergency responses. Some of the general principles and risks are found illustrated by case study examples in the writing about the current COVID-19 pandemic. Staff in the frontline remain at high risk and agencies or NGO employers have a duty of care to protect. Stakeholders need to be mindful of quality issues as high demand brings pressure for quantity of goods and services; and of those engaged in worker supply chains whose conditions may be illegal and uncertain. When criminal organisations or criminal practice is inserted or embedded within healthcare delivery systems, resources are diverted from providing healthcare; with the only possible outcome being that access to health services gets more costly, and problematic for families. This may be ongoing during routine life health events such as pregnancies, births, sickness, old age and health needs of persons with disabilities – but is especially challenging if already stretched health care systems are also responding to a medical emergency (such as a pandemic or other humanitarian urgency).

- **Organised-crime groups, especially where long embedded in the health sector, are quickly able to identify opportunities to exploit the sector**.
- **Cybercrime has emerged rapidly as a risk area**

Gøtzsche (2014) in particular shows that the official definition of organised crime closely matches big pharma. The activities of the largest drug companies have in their own way corrupted healthcare. New products may be rushed to market based only on small scale trials; there is a lack of transparency and manipulation of trial data; and promotion of drugs that are harmful to the population (pharmaceutical companies reassured the medical community that patients would not become addicted to prescription opioid pain relievers, subsequently this has caused a public health crisis in the US),

In the literature that was found the evidence rarely addressed gender issues specifically and was gender blind. There are some overarching statements about the impact of corruption and crime affecting disproportionately the poor (Kohler, 2011) which might therefore suggest that women are highly affected.

2. How does organised crime work within healthcare systems and medical supply chains, globally and particularly in ODA eligible countries?

During outbreaks of disease the **pressures from peaks in demand highlight weak points within a health system,** such as workforce shortages, poor access to medicines and corruption. Crime and malpractice within healthcare systems takes many forms, from front line corruption such as demanding cash payment for appointments or consultations, through to large scale misuse or misappropriation of funds in global health initiatives. Supply of overpriced or poor-quality counterfeit medicines endangers public health, as does slow procurement and late delivery of equipment that delays treatment and interventions (such as testing). Organised crime in the form of gangs do not have to be implicitly inserted in a healthcare delivery system or supply chain for these to function inequitably and imperfectly since “forms of corruption impacting

global health are endemic worldwide, in public and private sectors, in developed and resource-poor settings alike." (Mackey & Liang, 2012).

Public health is compromised by organised crime in many ways. Tax evasion enables money laundering and shrinks tax revenues, which are essential for Universal Health Care to work (Nishtar, 2018). Crime undermines the rule of law and since many public health measures depend, for their effectiveness, on the enforcement of laws, regulations and taxes all activity that undermines this foundation will have a negative impact on public health (Reynolds & McKee, 2010). In any context where criminal gangs encourage a climate in which officials expect to be bribed, this undermines enforcement of safety regulations as well as slowing economic growth and prosperity. In some countries recruits to the police force pay an unofficial fee to join which they will subsequently recoup from bribes. As a result, activities to enforce the law shift from promoting safety to revenue generation. For example, it may be cheaper for food outlets to bribe public health officials rather than keep premises hygienic (Reynolds & McKee, 2010).

More importantly organised crime engages in activities that are directly and specifically detrimental to public health. Typically, this involves the production and sale of substandard fake legal goods and illegal drugs. The market for these products has grown and diversified with the effects of globalisation; and now covers essential medical pharmaceuticals, lifestyle drugs and medical equipment supplies. Supply chains from poorly regulated and impoverished source regions become better integrated to their distant markets. Disparate groups of organised criminals are linked across their traditional territories for mutual benefit and enhanced profit; sophisticated linkages between production, distribution and retail functions of cooperating criminal networks from different cultures have exploited traditional relationships and forged new and far reaching ones (Reynolds & McKee, 2010).

Corruption and criminal exploitation are global public-health challenges. Although they pose particular challenges for low-middle-income countries with weaker institutions and lower resources, they manifest in every context (Rhodes, ,2020). A comprehensive study covering all EU-28 Member States, with specific attention focused on Greece, Croatia, Hungary, Lithuania, Poland, and Romania, investigated corruption in the health sector first in 2012 and again in 2017 (to assess whether initial recommendations made had produced the desired changes) (Slot et al, 2017). A key finding is that in general, perceived corruption in healthcare is correlated with general levels of perceived corruption (thus Greece, Lithuania, Romania, Slovakia, and Cyprus are among the countries with both the highest levels of perceived general corruption and specific healthcare corruption, while at the other end of this continuum Scandinavian countries score well on both indicators) (Slot et al, 2017:10). The study identified six types of corruption: bribery in medical service delivery; procurement corruption; improper marketing relations; misuse of (high) level positions; undue reimbursement claims; fraud and embezzlement of medicines and medical devices. The main challenge is bribery in delivery of medical service. On average across Europe 19% of patients reported paying bribes for preferential health treatment; this figure rises as high as 41% for Slovakia and 38% for Slovenia.

In the US there has been a growing presence over the past 10 years of organised crime syndicates and street gangs engaging in healthcare fraud (Thomson Reuters, 2012). Between $60 billion to more than $230 billion (3% to 10% of the value of total healthcare spend) is stolen each year from the nation's healthcare system through healthcare fraud, according to the National Healthcare Anti-Fraud Association (NHCAA), citing FBI information. Criminal gangs will always follow the money but have engaged in healthcare fraud because it's easy to do and is

lucrative with a low risk of serving jail time (as healthcare fraud is often treated as a white-collar crime). The American Society of Business and Behavioural Sciences estimates that 80% of healthcare fraud is carried out by hospitals, clinics and medical professionals primarily through the manipulation of the Medicare and Medicaid coding system (ICD10Watch, Feb. 9, 2012 cited in Thomson Reuters, 2012). The remaining 20% operated by organised crime syndicates and gangs far exceeds in monetary value their operations in illegal drugs and prostitution (Thomson Reuters, 2012: 5).

Illicit trade in pharmaceuticals is a persistent problem in the organised crime landscape. The trade forms part of a wider shadow economy of unregistered activities and shrinks tax revenues, thus compromising national revenue generation and investment in public services including healthcare (Nishtar, 2018).

Across Europe, there is evidence that organised crime groups (OCGs) are moving away from trafficking in high-risk commodities, such as drugs, to engage in illicit trade in products such as tobacco, alcohol and pharmaceuticals. In a case study of Romania several drivers for this are identified (Haenlein & Eyal, 2017). Opportunity is presented by virtue of geographic positioning, extensive land borders (with EU states and the non-EU source countries of Ukraine, Moldova and Serbia) and with a principal port (Constanta on the Black Sea) providing a hub for incoming goods and onward transit towards richer EU countries. Government policy itself makes the country vulnerable to illicit trade in pharmaceuticals. Government has capped the rates paid for prescription drugs; legal supplies of pharmaceuticals have shrunk as pharmaceutical companies have retreated. The shortage of drugs to treat chronic illnesses in particular has created opportunities for organised crime groups. As legal stocks have dried up demand is sustained from patients without the drugs they need. OCGs have been quick to exploit these gaps in domestic supply (Haenlein & Eyal, 2017).

A legal but damaging practice within the pharmaceutical market known as parallel trade further aggravates shortages. ‘Parallel trade’ refers to the practice of trading products bought cheaply in one part of the EU and sold at higher prices in another. It is legal within the pharmaceutical market, but can have negative impacts: in Romania, one of Europe’s cheapest markets, many pharmaceutical companies send stocks abroad rather than supply the local market. The parallel export of vaccines is reported to have fuelled an immunisation crisis among children in Romania (Haenlein & Eyal, 2017:19).

The inconsistent application of sanctions for illicit trade is another driver. Although existing legislation offers relatively stringent penalties, these are often not fully applied. The result is that sanctions do not act as a consistent deterrent: in many cases, the same individuals return to illicit trade following the payment of fines, often with greater knowledge of law enforcement techniques (Haenlein & Eyal, 2017). Part of the problem in tackling this illegal trade is that reliable data on the volume of counterfeit and unlicensed pharmaceutical products sold through illegal distribution channels is lacking. In Romania and in other countries, an obstacle to the production of official statistics lies in disagreement over definitions, particularly over what constitutes ‘illicit’, and what constitutes a ‘pharmaceutical product’ or ‘medicine’. Most problematic is a lack of information concerning whether the threat is growing more or less severe, and the limited instruction this provides to those designing strategic responses. (Haenlein & Eyal, 2017:18)

Aside from problems of the volume of this trade that is not captured by national audit and taxation systems is the impact for those employed in production and the individuals using the

products. Producers of counterfeit drugs benefit financially by substituting for high-cost ingredients, ignoring quality control processes, and also through the non-observance of environmental and employee protection, and taxation requirements. Some counterfeit drugs contain inadequate amounts (or none) of active ingredient (Reynolds & McKee, 2010) leading to treatment failures or resistance. Counterfeit drugs are believed to play a key role in the emergence of resistance to anti-malarials in South East Asia (Delacollette, 2009 cited in Reynolds & McKee 2010). Other products can instead contain too much active ingredient, as has been reported with counterfeit corticosteroids and oestrogens, posing a risk of over-dosage (Delval et al 2008 cited in Reynolds & McKee 2010). Many counterfeit drugs are identical to the branded versions, in packaging and appearance with their provenance faked. The impotency of these counterfeit drugs has subsequently caused confusion and mistrust over the use of generic drug formulations – which should be a positive lower cost public health measure available to health ministries.

Cartwright and Baric, (2018) highlight the need to address the growing phenomenon of **counterfeit medicines, which disproportionately affects developing countries** with this worldwide market worth up to US$200 billion. Counterfeit medicines put people's lives at risk, finance criminal groups and cause profound public health challenges. Their existence and growth in supply necessarily undermines achieving Sustainable Development Goal 3 (SDG 3) which places significant emphasis on populations' health, and in sub-target 3.8 specifies access 'to safe, effective, quality and affordable essential medicines and vaccines for all'.

According to World Health Organization (WHO) statistics, 42% of detected cases of substandard or falsified pharmaceuticals occurred in Africa (Cartwright and Baric, 2018: 2). The continent is an easy target for counterfeiters. A higher level of reporting of medical counterfeiting crime in wealthier countries obscures that the penetration of counterfeit pharmaceuticals is actually much greater in the developing world. A report by the UN Office on Drugs and Crime (UNODC) estimates that poorer countries experience about 30% penetration, as opposed to less than 1% in the developed world (Cartwright and Baric, 2018: 2).

Pharmaceutical companies and drug/vaccine trials

In an interesting comparison, widely referenced, Gøtzsche (2014) shows that the official definition of organised crime closely matches the activities of the largest drug companies and demonstrates how big pharma has corrupted healthcare. He considers many of the large drug companies showing where they have all been convicted of marketing harmful – even fatal - drugs; substantial fraud; price manipulation; and concealment of evidence. Frequently drug and medical companies organise trials in the best populations and comparison groups to demonstrate their efficacy; they control the data, do the analyses in-house, and employ professional writers to write the papers. Outcomes are selected to suit the company's marketing needs and demonstrate the greatest differences, rather than the most important outcomes for patients. Trials with negative results are buried and not published. The billions of dollars in fines levied against companies for these offences are modest in comparison to the profits they continue to make, so these convictions are merely the cost of doing business. These changes have occurred primarily in the United States but are echoed in the rest of the world.

For example in response to COVID-19 the UK market has been quickly flooded with swab tests (to detect the virus) and antibody tests to confirm prior infection. These are cheaper and quicker

to produce than a vaccine and have been rushed to market despite serious concerns about their accuracy. Swab and antibody tests (produced by Roche and by Abbott) have been released on the back of corporate press releases (published in the media rather than scientific journals) and have used trials in extremely small samples on which to publicise 100% accuracy. (BBC: More or Less, 10 June, 2020).

Rhodes (2020) also argues that when there are peaks of supply and demand such as during epidemics these present opportunities for already corrupt actors in healthcare systems to exploit further opportunities. There are insufficiencies in the processes for vaccine development: publication rates of clinical study results is notoriously low, particularly for public funded research institutions (Mapping unreported drug trials, 2019 cited in Rhodes, 2020). Privately funded trials have a better publication rate but their reports are known to be full of redacted text to protect commercially sensitive data; and the data itself can be manipulated to produce favourable results (Moynihan et al, 2019 cited in Rhodes, 2020) Vaccine development suffers from a weak appetite from pharmaceutical companies due to low financial incentives, therefore it's imperative that clinical trials are published in their entirety to support scientific innovation. The development of a vaccine for COVID-19 must be a transparent and collaborative effort, not a secret competition (Rhodes, 2020).

In the absence of a means of prevention there is an interim need for a reliable treatment regime but avoiding needlessly expensive or 'snake oil' remedies. During the swine flu outbreak over $18 billion USD was spent in stockpiling Tamiflu. However, a scientifically rigorous review of all clinical data (which involved 4 years of protracted efforts to even get all the information from the pharmaceutical manufacturer, Roche) suggested that Tamiflu was no more useful than paracetamol in treating swine flu due to safety and efficacy concerns. Galvao et al (cited in Rhodes, 2020) concluded that the quality of the evidence combined with a lack of knowledge about the safety of amantadine and the limited benefits of rimantadine, do not indicate that amantadine and rimantadine compared to control (placebo or paracetamol) could be useful in preventing, treating and shortening the duration of influenza A (HINI swine flu) in children and the elderly. The rapid announcement of the withdrawal of Hydroxychloroquine from the UK Recovery Trial run by the University of Oxford, that was able to test the drug in large numbers of people in a thorough clinical trial, helped to re-correct global attention after being promoted by Donald Trump despite only weak evidence from small-scale studies in China and France. (BBC, June 2020).

The undeniable need for a treatment for COVID-19 should not override the need for total transparency in any studies and rigorous analysis to ensure a treatment is indeed effective and avoid further waste of taxpayers' money to the benefit of drug companies (Rhodes, 2020).

3. What countries/regions are identified in the literature as particularly vulnerable to organised crime exploiting the health response to Covid-19?

The analysis above shows that no country is exempt from the risks of low-level corruption or serious organised crime within its healthcare system. Corruption already weakens the daily functioning of health systems, and during an outbreak this only worsens in procurement, in

diversion of funds, allocation of resources, and individual-level corruption with bribes paid for preferential medical treatment or for the ability to flout quarantine restrictions (Rhodes, N.,2020). Chronic underfunding due to fraud, corruption and eroded capacity will make the struggles of any given healthcare sector even more significant, including its ability to respond effectively to a health crisis. With the COVID pandemic, rising demand and limited resources create the perfect conditions for corruption to worsen (GI-TOC, 2020: 7).

Kohler (2011) in a wide-ranging analysis commissioned by UNDP explains why the health sector is prone to corruption, provides examples of instances of corruption in the health sector, and discusses select diagnostics and anti-corruption interventions. Corruption is a threat in the health sector, with common corrupt practices in the health sector identified (Kohler, 2011) include absenteeism, theft of medical supplies, informal payments, fraud, weak regulatory procedures, opaque and improperly designed procurement procedures, diversion of supplies in the distribution system for private gains and embezzlement of health care funds. Each of these practices alone represents a major challenge in many developing countries.

Several quantitative and qualitative studies highlight the fact that the burden of corruption in the health sector impacts the poor most heavily, given their limited access to resources (Kohler, 2011:6). Poor women, for example, may not get critical health care services simply because they are unable to pay informal fees: a recent study by Amnesty International on maternal health in Burkina Faso found that one of the primary causes of the deaths of thousands of pregnant women annually (including during childbirth) is due to corruption by health professionals. Further evidence from the International Monetary Fund (IMF) shows that corruption has a significant, negative effect on health indicators such as infant and child mortality, even after adjusting for income, female education, health spending, and level of urbanization. Corruption lowers the immunization rate of children and discourages the use of public health clinics. In many countries, its pervasiveness impedes improvement in health outcomes and therefore is a serious barrier to the achievement of the Millennium Development Goals (MDGs) (Kohler, 2011:6)

Set upon this foundation of greater or lesser corruption, mismanagement, or poor accountability the opportunities for corruption and organised group crime within the health sector increase in the context of the current pandemic. A recent policy brief (GI-TOC, 2020) suggests that although the COVID 19 pandemic has reduced some organised crime activities (burglary, human trafficking for example) at the same time it is providing opportunities for new ones. Criminal groups have exploited confusion and uncertainty to take advantage of new demand for illicit goods and services and it is anticipated that this opportunism will emerge further as the crisis unfolds (GI-TOC, 2020: 2). In countries where organised-crime groups have infiltrated health systems, life-saving resources are diverted and abused for criminal gain, weakening the response of states to the health emergency when it is most needed.

Drawing from information provided by a transnational network of partners and from a review of press reporting, this policy brief determines major ways in which the pandemic will have implications for organised crime (and associated illegal market activity). Two trends relate to overall changes within the wider illicit market, but two others identify specific markets closely linked to changes in policy and behaviour related to the pandemic itself (GI-TOC, 2020). The key trends are:

- Some organised-crime activities have been constrained by social distancing measures and travel restrictions and will take time to reconstitute themselves.

- As the attention of police forces and policymakers is diverted elsewhere, some criminal groups have quickly used this opportunity to scale up their activities.
- **Organised-crime groups, some long embedded in the health sector, have quickly identified opportunities to exploit the sector**.
- **Cybercrime has emerged rapidly as a risk area** that could have long-term implications for the growth of criminal markets (and there is early evidence of this in health supply chains and pharmaceuticals).

The health sector is an obvious target for organised crime; with the demand for information and medical supplies driven by the pandemic. Substandard and illegally diverted pharmaceuticals are already among the most pressing illegal trade problems across the world. The pre-existing public-health threat targets disproportionately the most vulnerable: those who are sick and poor. Selling vulnerable people substandard and ineffective drugs can worsen the condition of sick individuals, hinder accurate diagnoses, accelerate the spread of communicable diseases, increase drug resistance, reduce the confidence that people have in their health institutions, and ultimately kill people. (GI-TOC, 2020: 7). Since the start of the pandemic sales of counterfeit medical products have surged, as have incidents of smuggling and theft of medical supplies. In the online world, which – for those confined to their homes has become the major means of interacting with the outside world – scams have proliferated as criminals exploit fear, and trust in institutions, to defraud people (GI-TOC, 2020: 6). Organised groups also exploit levels of fear and ignorance such as those traders based in China and Laos that have been marketing rhino horn products as ‘cures’ for coronavirus. (GI-TOC, 2020: 6)

When demand is far more than official supplies, markets for substitutes expand and quality is often not controlled. Early in the pandemic the Kenyan police raided and closed down shops allegedly selling fake coronavirus testing kits (Aljazeera, March, 2020).

The Bosnia-Croat Federation government was prompted by the COVID-19 pandemic to relax public procurement statutes and allow purchases of medical equipment through direct bargaining with suppliers rather than via public tender. Consequently, a raspberry processing firm, with no license to import medical equipment was then recruited by the Federal Department of Civilian Protection (FUCZ) to procure 100 ventilators for care of COVID-19 patients. These came from China for $5.84 million. During the subsequent prosecution medical experts said the ventilators were of a type for use in medical transport rather than intensive care units; they found did not meet even a minimum of necessary characteristics for treatment of COVID-19 patients; it was not advisable to use them in intensive-care units and the price paid for the machines had been inflated (Reuters, 2020).

Access to medical care may be distorted with bribes paid for preferential medical treatment or to flout quarantine restrictions (Kohler 2011). In a context where corruption and influence are already a part of health systems, organised groups can build from established networks, establishing long-term influence /patronage. For example, in a series of interviews with four leading figures in Italy’s fight against the mafia, (Nazzarro, 2020) highlights key points from a virtual roundtable, about how the mafia is repositioning itself during the pandemic. Mafia pursuit of opportunity and finance from within the health sector is longstanding; the mafia have long captured contracts in the public-health sector. More recently, mafia groups have also turned their attention to the pharmaceutical industry. The lure is the sale of medical products, and also the potential opportunity to influence the appointment of medical practitioners. Over time any

‘dismantling’ of the idea of a state-guaranteed, universal public health system, matches the mafia’s desire to invest in private companies that work alongside, and substitute for public providers.

Subsequently Italy has suffered one of the highest numbers of COVID-19-related deaths, where the pandemic is having a significant impact on the country’s economy and social fabric. Business owners and workers alike have been deeply affected by the lockdown. An estimated 3.3 million workers engaged in the country’s vast informal economy – which has an estimated value of up to €211 billion – are effectively excluded from government financial support. Italy’s mafia groups have, in response, sought to consolidate their social support by distributing food for free in the community. at times where state authority is perceived to be weaker the mafia like to portray themselves as having reassuring qualities; to become almost like a benefactor – they behave like the Red Cross – for which a certain portion of society is grateful. And they will remember it at the ballot box. Money lending to local businesses, that fear they might not otherwise survive through legal credit channels alone, is less benevolent. Beginning with low interest rates and turning to interest at unreasonably high rates (usury) the mafia achieves their end goal that is to take over the business and use it to for money laundering (Nazzarro, 2020).

Peaks in demand may worsen labour conditions, impacting on the poorest. The coronavirus crisis has created huge demand for PPE (Personal Protective Equipment) and this has been to the detriment of migrant labour. For example, a major part of the world’s medical gloves are made in Malaysia and Thailand. In these upper middle-income countries, the work is done by migrants from poorer countries in Asia as local people are unwilling to take on jobs they consider to be dangerous, dirty or difficult. Companies exploit migrants from poorer countries (men from Nepal and Bangladesh and women from Myanmar, Indonesia and Vietnam) to work excessive hours for minimum reward. This despite share prices increasing as global demand for disposable gloves has rocketed so that shareholders and company executives will gain substantially from the crisis (Tribune, 2020).

The policy brief, developed by practitioners (GI-TOC, 2020) flags up clear risks of growth in cybercrime during epidemics, when the attention of responsible authorities is diverted, or new niche markets emerge. Janjeva (2020) highlights the risks from social isolation and heavy reliance on digital information, along with a desire for reassurance and support. There is a new and growing target population for on-line fraudsters who have adjusted scams to prey upon these peoples’ fears. One prominent category of scams concerns the offer of non-existent or faulty products. Action Fraud report receiving many reports related to online shopping scams where people have ordered protective gear that has not arrived. As demand continues to outstrip local supply in goods like masks, gloves and hand sanitiser, people are increasingly turning to the online marketplace to fulfil their needs. With this criminal activity amplifies. For example, the UK’s national reporting centre for fraud and cybercrime (Action Fraud) reported (20 March) figures which show that coronavirus-related fraud reports have increased fourfold in March compared to February (Janjeva, 2020).

In contexts and countries where the healthcare system is already weak this undermines responses to epidemics and health crises. Healthcare delivery systems may already be chronically underfunded; poorly staffed; ineffectually managed with ample opportunities for corruption and influence. In such cases the weak healthcare system is likely to aggravate the impact of an epidemic. Often factors as basic as the lack of clear water and adequate sanitation already compromise the health situation. By their own process of self-assessment that is driven

by the African Peer Review Mechanism and Country Review Reports some countries are well positioned to illustrate and understand how problems in their health sectors, coupled with poor governance and corruption, can exacerbate outbreaks like the coronavirus and Ebola (allAfrica, 2020).

For example, Sierra Leone peer reviewed in 2012 before the Ebola epidemic of 2014 already reported shortage of clean water and poor sanitation as major factors contributing to the poor health situation. And the Ministry of Health and Sanitation was identified by a National Public Perception Survey (2010) as the most corrupt ministry in the country.

For the case of Tanzania, peer reviewed in 2013 although the Government aims to restore free health services, health reforms are overly dependent on donor funding with access still a major challenge. The situation is aggravated by high costs and poor health services. There are medical staff shortages, inadequate facilities, and a lack of medicines, especially in rural areas (allAfrica, 2020). In such contexts there is legitimate concern that these pre-existing conditions will only make the impact of any epidemic greater than it need become; corruption and criminal practices further amplify this risk.

4. Lessons from past pandemics

Rather few studies were identified on the impact from organised crime groups in past pandemics, or other humanitarian emergency responses. In one paper published as part of the ALNAP[1] Lessons Paper series, Grünewald & Maury (2020) review the lessons from a number of health crises and epidemics. Corruption is only mentioned once in relation to pressures around organising mass vaccination programmes, where there are many stakeholders and interests. The situation on the ground sometimes makes achieving proper management and accountability difficult (Grünewald & Maury, 2020:23). This review identifies 11 key lessons for epidemic preparedness and responses – none touch on corruption or involvement of criminal groups.

In contrast procurement underpins the World Bank's response to the pandemic (Sharma, 2020) and the Bank focuses clearly on procurement issues – both goods and services. The state of the market for supplies and the workforce that are vital to contain and combat the epidemic in questions are always a challenge. Goods and services are not readily available, and as demand across the globe far exceeds the supply there is price inflation. The opportunities for price manipulation, poor quality or ineffective equipment and other fraud are illustrated above (Section 3). The rationale for this focus is therefore clear.

Under normal circumstances, the global market regulates itself. In such an unprecedented situation, there is neither an automatic correction of the markets nor any global regulation in place to address market failures and this creates openings for corruption or illicit practices. The same goes for procurement of consultancy services to raise public awareness and to develop laboratory and medical protocols, especially if many hospitals lack capacity to manage the number of cases and the internal organisation needed to prevent intra-hospital infection. Technical support services are equally open to maladministration or corruption. A failure of oversight, that may lapse during a crisis, is a major risk to protection and effective treatments.

[1] A global network of NGOs, UN agencies, members of the Red Cross/Crescent Movement, donors, academics, networks and consultants dedicated to learning how to improve response to humanitarian crises

Kohler's analysis (2011) of the corruption risks in the health sector also remain valid during an epidemic and may become amplified. Weak points around which recommendations and case study good practice examples are given in this Methods and Tools Guidance are:

- **Corruption among health care providers** such as physicians, nurses and pharmacists. Petty corruption associated with health providers includes absenteeism (not showing up for work yet claiming a salary), theft (of medical supplies or pharmaceuticals), and demand for informal payments for services that are supposed to be free. Petty corruption of this sort has a direct impact on the poor by denying them access to services and thereby jeopardising their health.
- **Role of government in the regulation of the pharmaceutical market** and selection of drugs. A transparent selection process involves the registration and market authorisation of drugs also deciding which drugs are included in a state sector healthcare service and are therefore eligible for reimbursement policies. This drug registration and market authorisation are the responsibility of national drug agencies. In contexts where these agencies are poorly funded and have limited staff and institutional capacity; and if the legislative and regulatory environments are weak then there is room for a lack of transparency and accountability in the processes. Government officials may deliberately delay the registration process to solicit an illegal payment or favour another supplier; suppliers may bribe government officials to register their drugs without the requisite information; prices may be unfairly fixed. Any of these situations can create openings in the market for counterfeit and substandard medicines (Kohler, 2011: 27). There is no clear evidence about whether procurement at the national level of government is less prone to corruption than a decentralised approach; but in either case how the procurement process is set up matters. (Kohler, 2011: 28).
- **Distribution and Storage systems** that limit diversion of drugs are vital. since drugs are a substantial part of healthcare budgets so all losses increases health care costs. In an epidemic response this is also the case.
- **Health budgets** may be subject to corruption if oversight is lacking.
- **Anti-corruption interventions** include procurement audits, community oversight and monitoring, community social cards and social audits, online publication of all procurement processes, more rigorous terms for NGO and contract awards, and procurement audits. (Kohler, 2011:31). Others also stress that combating corruption and crime in healthcare systems should necessarily implicate civil society actors (see below).

5. Lessons for countering crime in healthcare systems

Fighting corruption requires action at many levels (Nishtar, 2018). "Treasuries, finance ministries and dedicated anti-corruption agencies alike, must focus on prevention, detection and enforcement. Good governance needs to be better incentivised. Making financial systems more transparent will be critical to curbing health corruption. It is not just government and business that have roles to play in achieving this; civil society, the media and patients must also demand accountability."

Cockayne (2017) cautions that socioeconomic, environmental and technological changes will create new challenges for developing states. With some risk of a significantly expanded role for organised crime in governance and the rise of 'crooked states' and crooked governance more broadly. Amongst others cyber-threats, unsafe supply-chains and unregulated financial systems will create new risks and vulnerabilities. States may increasingly struggle to provide protection

and services for their population and without the protection of the state in spaces such as cyberspace or new financial markets, people will look elsewhere. In some cases, businesses, private actors or civil society may emerge to address risk and provide insurance against insecurity. But in others, criminal actors will step in and they may corrupt formal and legitimate institutions, businesses and markets, bending them away from their stated purpose.

Preventing and reducing the role of criminal groups in governance will require development policies that help states, working with civil society and legitimate businesses, provide protection and reduce vulnerabilities. Key policy implications include:

- Using social protection policies to address vulnerabilities and reduce demand for criminal protection. This may include economic livelihood programming, interventions designed to ensure the equitable distribution of resources, and investment in social service provision or infrastructure development.
- Minimizing the demand for criminal protection created by shifts in the labour market, through programming that encourages economic resilience, job training initiatives and alternative forms of livelihood provision.
- Exploring how anti-corruption interventions can be used to protect state institutions against organised crime, for example through strategic interventions to address the links between corruption and political finance and working out which interventions shift social norms to promote resilience to organised crime.
- Strengthening the counter-organised crime role played by global finance in development outcomes, improving financial transparency and global coordination to reduce opportunities for corruption and illicit financial flows

This review was able to identify longstanding debate about addressing problems of long-term systemic issues in healthcare delivery and procurement systems. There is a variety of approaches and recommendations about improving health systems (public sector finance programmes; access to free equitable systems of care; governance and anti-corruption programmes) for example. In the context of the COVID pandemic the Global Initiative Against Transnational Organised Crime recommends that health stakeholders: ‘Focus strongly now on organised criminal activity in the wider health sector, in particular in relation to procurement and the provision of counterfeit medical supplies. Publicly counter attempts by criminal entrepreneurs to develop new markets linked to the pandemic, such as the advertising of wildlife products and other cures. The media and civil-society groups have an important role to play here in raising awareness.’ (GI-TOC, 2020:20)

Reitano & Hunter (2018) similarly allocate responsibility to development actors for understanding how organised crime affects their objectives. It is not reasonable to assume that law enforcement alone will solve the problems of crime. Where this is visible and presents challenges that mitigate the impact of development, development assessments now must include organised crime analysis. This should be the case whether they focus on public health and social services or other domains such as conflict, democracy, governance and economic growth (Reitano & Hunter 2018: 29). Noting that it may become challenging for external actors to raise development threats posed by organised crime as a local priority, or to gain traction at a community level, when considering the extent to which local communities are involved in the trade; that it is not stigmatised as a crime domestically; or that it is a longstanding practice that has been amplified and accelerated by globalisation. Even in instances where individuals or the community may look unfavourably on organised crime, they may see little incentive and much risk in speaking out.

Activists and journalists have paid high prices for fighting organised crime or a culture of impunity that is sanctioned or reinforced by the state. If the community response is to mobilise, efforts must be made to protect those with the courage to make their voices heard and to be visible sources of resistance. Certain safety nets must be put in place, such as asylum when activists are targeted by criminals, or business or political elites (Reitano & Hunter 2018: 30).

Limited research that covers only two cases and two sectors, suggests that anti-corruption approaches which disrupt corruption patterns and networks can work up to a point (Marquette, 2018). In Uganda, a targeted anti-bribery intervention seems to have reduced bribery in the health sector with bribery patterns directly affected by the Health Monitoring Unit's push to name and shame offenders. In contrast to this focused targeting, in South Africa an impressive reduction (15%) in police-related bribery appears to have been localised to Limpopo province as a 'benign side effect' of a wider anti-corruption intervention and work to improve service delivery. In other provinces the maximum reduction in police-related bribery was only 4% from the same interventions. The interpretation of this data suggests that Limpopo police were unsure if they were among the targets of the high-profile anti-corruption activities, so avoided asking for bribes for fear of being caught. In both cases, interventions disrupted corruption patterns by making it more difficult, unacceptable or undesirable for front-line workers to seek bribes. Although neither of these cases seems to have been a complete 'success', and it is unclear how long the lower bribery rates will last. In Uganda, there were unintended negative consequences with lower morale among health workers, lower citizen trust in the sector. Informal payments at times to provide ways to work around structural flaws in the health system like chronic lack of supplies or low salaries.

In Europe corruption in the healthcare system is also a challenge (Slot, 2017) and there have been documented differences between Member States in terms of their efforts as well as their successes, in fighting this type of corruption. For example, much progress was made in Poland as the result of a combination of awareness raising campaigns, active prosecution of physicians, and media coverage of these cases. In Greece, on the other hand, the situation has worsened due to the economic downturn. This study on repetition draws 13 key conclusions about avenues to combat corruption in healthcare. These are:

1. Convictions of (high-profile) corruption cases have a deterrent and norm setting effect especially when a good number of cases are brought to court and are followed by sustained political action.

2. Centralisation of procurement is a method to lower the risks of corruption. may also be important to have public registries in place and to introduce transparency increasing measures, otherwise centralised procurement may face more risks

3. Central procurement systems can become vulnerable as targets for lobbyists and more politically inspired types of corruption although it was noted that decentralised systems may also be prone to lobbying and politically inspired corruption.

4. Bribery in medical service delivery cannot be contested with only targeted policies against the phenomenon as such, but need to be supplemented with a variety of accompanying (structural) measures such as changes in the healthcare system, and changes in attitudes towards corrupt practices.

5. Raising salaries does not have a significant preventive effect on reducing bribery in medical service delivery. Although low salaries are a problem, raising salaries cannot be a standalone measure. For example, active prosecution and public awareness of the unethical aspects are also needed.

6. There is more than one root cause of corruption in healthcare. Most frequently mentioned are: general acceptance of corruption, ineffective managerial structures, inappropriate financing mechanisms, and unequal allocation of resources. Insufficient healthcare capacity and insufficient funding for independent medical research also causes for corruption.

7. The introduction of transparent waiting lists has a positive effect on reducing healthcare bribery, though the lists should be frequently updated, ensuring up to date information about and for patients.

8. Prescription of generics instead of branded pharmaceutical products has a positive effect on reducing healthcare bribery.

9. Self-regulation between the industry and healthcare providers is needed to fight corruption in healthcare. On its own this may be insufficient such that it would be beneficial if initiatives between the industry and the healthcare provider were embedded in legislation to strengthen enforcement mechanisms.

10. Self-regulation among stakeholders (such as within the pharmaceutical industry or among physicians) is needed to fight corruption in healthcare and incentives for cooperation are important for self-regulation to be effective.

11. Awareness raising campaigns and fraud and corruption reporting hotlines are an effective instrument to fight corruption in healthcare. On their own hotlines cannot be effective in reducing corruption but need to be combined with other measures and legislation.

12. Government should play an active role in creating transparency in the relations between the industry and healthcare providers. When governments do not show sufficient willingness to fight corruption in general this undermines their stance and causes scepticism.

13. Active – independent – media involvement and pressure from civil society watchdogs are essential to fight corruption in healthcare.

Kohler (2011) has earlier also highlighted a set of lessons that may assist any stakeholder (policy makers, development practitioners, citizens, etc.) to design anti-corruption interventions in the health sector.

Lesson one. There is no ‘one size fits all’ approach to mitigating corruption in the health sector. Practitioners need to give careful attention as to what potential strategy or strategies would work most effectively in view of the specific risks identified by use of diagnostics.

Lesson two. More than one anti-corruption intervention should be employed to deal with one risk. For example, wage increases may help to curb the likelihood of absenteeism, but they are likely to be more effective when there are systems in place to document absentee rates and when sanctions for absence are imposed.

Lesson three. Prioritization is key: governments and others involved in health projects and programming should prioritize areas of the health system that are most susceptible to corruption and implement appropriate interventions. Often even ‘low hanging fruit’ can produce significant anti-corruption impacts. For example, the act of posting medical supply and pharmaceutical product pricing can help deter price gouging. The identification of priority areas is particularly important when resources are scare.

Lesson four. It is important to work with other sectors. Corruption cannot be curbed in the health sector without the involvement of other critical sectors, such as infrastructure and finance.

Lesson five. Health policy goals should include anti-corruption considerations. Investments in health may be wasted unless anti-corruption strategies are built into all health projects. Preventative interventions can protect investments made.

Lesson six. Prevention is the best strategy: therefore, it is best not to wait for corruption to happen before beginning to deal with it. One of the biggest failings in the health sector is the implementation of anti-corruption interventions only after corruption is suspected or confirmed. Regular monitoring of the health sector for discrepancies in standards is vital.

Lesson seven. Numerous empirical diagnostic tools should be employed. Given the complexity of the health sector, more than one diagnostic tool may be of value to ensure accurate information. This also requires proper measuring and re-measuring. Regular ‘check-ups’ can measure how effectively anti-corruption strategies are working in a given point in the health care system.

Lesson eight. Partners with experience in implementing anti-corruption strategies and tactics should be identified and contacted for technical support. This study has identified a number of NGOs, international development institutions, research groups and experts involved in implementing anticorruption strategies and tactics in the health sector.

Lesson nine. Broad participation in health policy and planning helps. Involving NGOs, citizens and designated experts in health budgeting, monitoring, and consulting, as a few examples, can help heighten transparency and lessen the likelihood of corruption.

Lesson ten. Good behaviour should be rewarded, and bad behaviour punished. This can be done by setting up appropriate incentive structures that help promote adherence to good behaviour, such as performance-based financing. It is also important to sanction those individuals who are engaged in corrupt activities where possible. This sends an important message that corruption is not tolerated.

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