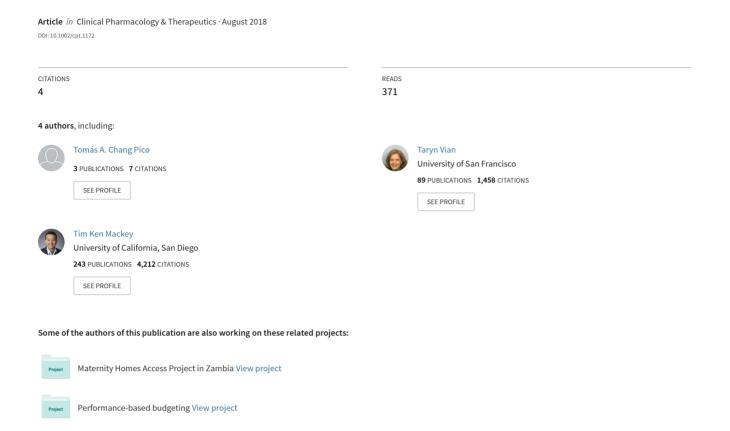
The Global Wicked Problem of Corruption and Its Risks for Access to HIV/AIDS Medicines



COMMENTARY

The Global Wicked Problem of Corruption and Its Risks for Access to HIV/AIDS Medicines

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We discuss how corruption affects access to antiretroviral therapies (ARVs) globally. Recent cases of theft of ARVs, collusion, and manipulation in procurement found in countries such as Central African Republic, Bangladesh, Malawi, and Guinea, show there is still much work to be done to reduce the risk of corruption. This includes addressing the structural weaknesses in procurement mechanisms and supply chain management systems of health commodities and medicines.

The global community increasingly faces difficult-to-solve "wicked problems" with multiple causes and complicated dynamics that are seemingly intractable, but where the risks of not acting are great. Corruption, defined by Transparency International as, "the abuse of entrusted power for private gain" is indisputably one of these global wicked problems. It can be grand, involving elites and the highest levels of government; or petty, involving transactions between front-line workers and citizens. Its reach is global.

The World Bank calls corruption the single greatest obstacle to economic and social development. Within the health system, corruption results in financial losses, adverse health consequences, and a loss of

public trust, all of which threaten health system sustainability.³ Corruption in the pharmaceutical system deserves special attention, given that medicines often represent the largest household health expenditure. Trends in the pharmaceutical system often illuminate those taking place in the health system at large, particularly in terms of corruption.

Within the many processes of the pharmaceutical system, corrupt behavior can be lucrative because suppliers may prioritize profit maximization over public health objectives and systems may lack proper institutional checks to prevent and/or identify problem areas. Deeply embedded institutional corruption in government regulatory or health agencies can compromise

leadership decisions and create conditions for corruption to thrive in service delivery. This specifically includes access to and quality of medicines to treat HIV/AIDS, with total international funding estimated at some US \$8.1 billion in 2016 and 17 million people receiving antiretroviral therapy (ARV) at the end of 2015. Corruption, which leads to diversion and infiltration of falsified and substandard ARVs, carries serious clinical and public health repercussions. This includes treatment failure, contributing to microbial resistance, risk of opportunistic infection/death, and possible risk of transmission.

The World Health Organization, the World Bank, and the Global Fund to Fight AIDS, Tuberculosis and Malaria, hereafter referred to as the Global Fund (https:// www.theglobalfund.org/en), have advanced operational and policy solutions that attempt to curb corruption, particularly in the procurement of medicines and other health commodities. Procurement is the principal interface between the public system and medicine suppliers, because public officials seek to acquire the right quantity of drugs in the most cost-effective manner. Estimates suggest that as much as 10-25% of global spending on public medicine procurement is lost to corruption.5 When procurement processes and supply chain management are compromised, it may inflate drug prices, lead to diversion, and create conditions for corruption, including the infiltration of falsified and substandard medicines.

Medicines purchased in high volumes, such as ARVs for the treatment of HIV/AIDS, are particularly vulnerable to corruption. In fact, studies have found that the vast majority of falsified and substandard medicines are anti-infective drugs, such

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as antimalarials, antibiotics, and ARVs.6 Global organizations that directly finance, procure, and distribute ARVs have been vulnerable to corruption schemes in countries where they operate. In response to public criticism related to such episodes, as but one example, the Global Fund has been proactively strengthening its anticorruption policies and practices. Efforts such as the "I Speak Out Now!" campaign to promote contractors to blow the whistle on corrupt practices are fostered by the Office of the Inspector General. This department works as an internal independent unit of the Global Fund mandated to monitor and audit operations activities and programs.

Despite these efforts, corruption continues to hamper access to ARVs. Recent cases of mismanagement, theft of ARVs, collusion, and manipulation in procurement and other forms of fraud, identified in countries such as Central African Republic, Bangladesh, Malawi, and Guinea, show that even when there is support and technical guidance of international actors, there is still much work to be done. This includes addressing the structural weaknesses in procurement mechanisms and supply chain management systems of health commodities and medicines around the world.

If medicines are only verified for authenticity at regional warehouses, diversion and infiltration of poor-quality medicines can occur downstream in the supply chain unless additional surveillance, testing, and verification (using technologies such as serialization, track and trace, and analytical testing) are in place. Yet, conducting these controls is challenging in countries with poor infrastructure and weak pharmaceutical system governance. More proactive solutions are needed, extending into risk-based assessments/audits, technology adoption, and quality testing of drugs at different points of vulnerability across the supply chain.

Weaknesses in the medicines supply chains of the Global Fund's recipient countries, as notable examples, include poor supply planning and management of drug inventory that can lead to expired medicines and stock-outs of ARVs and HIV test kits and inadequate in-country supply chain oversight of multimillion dollar Global Fund HIV grants. This challenge of the "last mile" in the health supply chain

is one that is increasingly recognized by many international development agencies and global health organizations. In addition, bilateral funding agencies funding the bulk of ARV treatment, such as the US President's Emergency Plan for AIDS Relief and United States Agency for International Development, have supported programs to strengthen surveillance, regulation, and laboratory capacity for drug quality testing to combat falsified medicines.

A growing body of research has focused on the negative impact of corruption on HIV/AIDS treatment access. Researchers have found that the quality of political governance can have a direct impact on the population's access to treatment. They have also shown that the presence of corruption is associated with a reduction in efficiency of imported antiretroviral drugs. One study also found an association between higher levels of perception of corruption and lower ARV coverage.⁹

Still, many questions remain: Are perpetrators of corruption being satisfactorily prosecuted by local authorities after being identified? Are interventions led by international organizations reinforcing or weakening the agency of local law enforcement authorities and/or the national justice system? Also, how can we improve monitoring and evaluation of drug procurement and distribution practices specific to ARVs and international HIV/AIDS funding? Answering these questions will help us understand the effectiveness of anticorruption initiatives vs. gaps that need to be addressed and also develop better mechanisms to improve anticorruption practices at the national and subnational levels. These improvements could have a broad impact on the billions of dollars spent annually in the procurement of quality ARVs in low- and middle-income countries.

The United Nations Special Rapporteur on the Right to Health has called for all states to consider anticorruption laws and policies when regulating the health system. Yet, the lack of internationally agreed on goals, targets, and indicators to measure the impact of corruption on essential medicines' access and quality (such as ARVs) hinders collective action. Specifically, the United Nations Sustainable Development Goals (SDGs) have global goals in place that separately address "good health" and

"corruption." However, they lack a set of cross-sectoral indicators that can specifically address corruption and fraud in HIV/AIDS medicines' procurement and delivery.

SDG Target 3.3 calls for the end of the epidemic of AIDS, whereas Target 3.8 calls for access to safe, effective, quality, and affordable essential medicines and vaccines for all (measured by individuals with health coverage). Neither of these targets specifically takes into account the impact of corruption, although the presence of corruption directly hinders progress toward reducing new HIV cases and achieving goals, such as the Joint United Nations Programme on HIV/AIDS 90-90-90 targets by 2020. Furthermore, SDG goal 16 addresses corruption in target 16.5 with the aim to "substantially reduce corruption and bribery in all their forms" but does not directly address forms of health or pharmaceutical corruption that go beyond bribery, such as collusion and trading in influence.¹⁰

Although the global community and institutions have begun to address health system corruption and its impact on the procurement and distribution of ARVs, current efforts are simply not enough. We need a more comprehensive strategy and corresponding tactics to reduce the risk of corruption. This requires the dismantling of silos within the development community and the advocacy and application of cross-system approaches that will have meaningful traction in the fight against corruption and ensure the end of the HIV epidemic.

FUNDING

No funding was received for this work.

CONFLICT OF INTEREST

The authors declared no competing interests for this work.

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