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Uganda's Health Sector as a 'Hidden' Positive Outlier in Bribery Reduction

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Summary

This case study is part of a research project that used a novel mixed-methods approach to identify potentially unrecognised instances of development progress – specifically, of bribery reduction. Analysis of Transparency International's Global Corruption Barometer flagged Uganda's health sector as a potential 'positive outlier' because its bribery rate had halved between 2010 and 2015, which did not fit bribery patterns in other sectors of the country.

Qualitative fieldwork then examined whether and how bribery had been reduced in Uganda's health sector. It highlights the work of a relatively newly established Health Monitoring Unit (HMU). The HMU's corruption control strategy exemplifies a 'principal-agent theory-inspired approach'. Principal-agent theory suggests that it is possible to control corruption when potentially corrupt actors (agents) are made to be fearful of their respective principals holding them to account for engaging in corruption.

Principal-agent theory-inspired anticorruption efforts have attracted criticism recently for being largely ineffective. Nevertheless, this study finds that requests for bribes for health services had decreased as a likely consequence of the HMU's efforts, especially its high-profile publicised raids, which made health workers more fearful of being caught.

However, apparent unintended consequences mean that this may not be a simple success story. Principal-agent theory anticorruption approaches that target frontline service workers may bring unintended consequences that outweigh the benefits of bribery reduction. There is evidence that the HMU's activities may be harming morale among health workers and undermining citizens' trust in the sector. Moreover, the HMU's approach has not sought to address bribery's function as a mechanism through which health workers supplement extraordinarily low wages. The HMU's successes in reducing bribery may therefore be difficult to sustain.

Introduction

On 17 September 2017, Uganda's Minister of Health, Dr Sarah Opendi, went undercover, disguising herself in a *burqa*, and travelled by *boda boda*—a motorbike taxi and relatively cheap form of transportation—to Naguru Hospital in Kampala. Unrecognisable, the minister asked for routine laboratory tests. These should have been given to her free of charge but she was met instead with requests for bribes from two health workers. A camera crew rushed in to film the confrontation between the minister and the accused, with the police close behind. The two health workers were arrested shortly thereafter. The trap set by the minister and the quick response by the police captured national and international headlines (e.g. *The Independent*, 2017; Ng'ang'a, 2017).

We arrived in Kampala a day before this 'investigation' took place. While the minister's involvement in the plot was exceptional, we learnt that publicised anticorruption raids in the health sector were not unusual in Uganda. Rather, they were emblematic of a high-profile strategy devised by the government to crack down on bribery and other sources of corruption in the sector. We were in Uganda because our analysis of bribery data suggested that, against the odds, the strategy might be working.

Our attention was called to Uganda's health sector during our search for potential 'positive outliers' in bribery reduction. The term 'positive outlier' is used here to describe a sector within a country wherein the bribery rate has unexpectedly and significantly decreased. This case—bribery reduction in Uganda's health sector—fits within a wider project looking at positive outliers in bribery reduction across many countries. Our search for such exceptional examples contributes to a growing literature that examines how it is that different forms of positive developmental change can occur in otherwise poor governance environments (Leonard, 1991; Tendler, 1997; Donaldson, 2008; Roll, 2011; Melo et al., 2012; Andrews, 2013, 2015; Naazneen et al., 2014). In the literature, these cases have been called 'positive outliers', but also 'positive deviants', 'pockets of productivity', 'pockets of effectiveness', 'islands of excellence' and 'islands of integrity'. Within the 'positive outlier' literature, ours is the first, to our knowledge, to examine exceptional reductions in bribery.

Our project used a novel mixed-methods approach to identify and examine cases that may or may not have been previously recognised for their developmental progress (Peiffer & Armytage, 2018). Uganda's health sector was flagged as a potential positive outlier because, according to Transparency International's Global Corruption Barometer (GCB), the bribery rate for health services had halved for service users between 2010 and 2015. In addition, our own analysis of GCB data suggested that, given the bribery patterns to be found elsewhere in other sectors of the country, such a stark reduction in the health sector's bribery rate was almost entirely statistically improbable. The bribery reduction this methodology detected in Uganda's health sector has not, to the best of our knowledge, been previously identified.

Our research into how bribery has reduced in the sector highlights the work of a relatively newly established Health Monitoring Unit (HMU). A highly visible institution with an exceptional degree of support and direction from the president, the HMU developed a strategy to improve accountability in the sector. The high-profile raid described above is typical of this strategy. The HMU's corruption control strategy exemplifies a so-called 'principal-agent theory-inspired approach' to anticorruption. As it has been applied to anticorruption, principal-agent theory suggests that it is possible to effectively control corruption when potentially corrupt actors (agents) are made to be fearful of their respective principals holding them to account for engaging in corruption (e.g. Rose-Ackerman, 1978; Bardhan, 1997; Klitgaard, 1988). Principal-agent theory-inspired anticorruption efforts have attracted criticism recently for being largely ineffective (e.g. Mungiu-Pippidi, 2011, 2015; Persson et al., 2013). Nevertheless, our findings suggest that, through highly visible investigations, the HMU is likely to have been effective in making health workers in the country significantly more cautious, reducing their willingness to request bribes.

However, despite finding that requests for bribes for health services had decreased as a likely consequence of the HMU's efforts, we argue that the HMU and its policies should not be viewed as an uncomplicated 'success' story. This case high-lights the fact that, when certain principal-agent theory anticorruption approaches are implemented, and specifically those targeted at frontline service workers, there may be unintended consequences that outweigh the benefits derived from reduced bribery. Specifically, we argue there is evidence that the HMU's activities may be harming morale among the sector's frontline service providers and undermining citizens' trust in the sector. Moreover, the approach the Ugandan government has pursued to combat corruption has not sought to address the fact that bribery functions in the sector as a mechanism through which health workers supplement extraordinarily low wages. The functionality perspective on corruption suggests anticorruption efforts that do not address the functionality of corruption will likely falter in the long run (Marquette & Peiffer, 2017). Consistent with this notion, we argue that the successes the HMU has seen in reducing bribery in the sector are likely to be difficult to sustain.

Theoretical approaches to bribery reduction

Historically, one theoretical approach has dominated thinking about the factors likely to shape the success of an anticorruption intervention: principal-agent theory. Principal-agent theory is said to have inspired the design of most contemporary anticorruption initiatives (Andvig & Fjeldstad, 2001; Lawson, 2009; Mungiu-Pippidi, 2011; Persson et al., 2013). The theory has been used to describe corruption as occurring when agents—potentially corrupt actors—take advantage of the fact that principals—actors entrusted with enforcing anticorruption policies—cannot perfectly monitor agents' actions and therefore hold them accountable for engaging in corruption (Rose-Ackerman, 1978; Klitgaard, 1988; Bardhan, 1997; Ugur & Dasgupta, 2011; see Marquette & Peiffer, 2017, for a detailed discussion of the principal-agent literature as applied to anticorruption). Importantly, this perspective suggests an effective anticorruption intervention will be one that is able to hold actors accountable for engaging in corruption and/or that can be used to deter or prevent corruption by promoting a fear among prospective corrupt actors that they will be held to account for engaging in corruption.

Such thinking has inspired anticorruption efforts around the world that invest in measures that make it easier for citizens and public officials to monitor the actions of potentially corrupt actors (e.g. the movement to make governance more transparent); to strengthen legal infrastructure, making a host of (corrupt) activities illegal and therefore punishable; to introduce harsher punishments for offenders; and to raise awareness of corruption among citizens so they are more likely to report the corrupt acts they observe, or to use the power of the ballot to vote out corrupt offenders (Lawson, 2009; Johnson et al., 2012; Persson, et al. 2013). Despite the wide adoption of these practices, however, the evidence on their effectiveness has been disappointing. Meta-analyses of corruption studies provide limited evidence of the effectiveness of most principal-agent theory-inspired interventions, with public financial management being one notable exception (Jøhnson et al., 2012; DFID, 2015).

Making sense of this poor track record, several authors have argued recently that the problem with principal-agent theory-inspired interventions lies in the flawed assumption made on application to anticorruption. According to Persson, Rothstein and Teorell (2013), principal-agent theory wrongfully assumes the presence of 'principled principals'—in other words actors willing to implement and enforce anticorruption reforms (see also Mungiu-Pippidi, 2011, 2015; Rothstein, 2011; Rothstein & Teorell, 2015). Especially in systemically corrupt countries, (principled) stakeholders willing to implement and enforce principal-agent theory-inspired anticorruption reforms may be few.[1] Potential principals may shy away from implementing or enforcing anticorruption reforms because they think everyone else around them is engaging in corruption, so they do not want to be the only ones not to benefit. Similarly, they may feel wary of sticking their necks out to fight corruption, or overwhelmed by the enormity of the challenge, resigning themselves to 'going with the grain' (Mungiu-Pippidi, 2011, 2015; Persson et al., 2013; Peiffer & Alvarez, 2016).

Potential principals may also be discouraged from implementing or enforcing anticorruption reforms because, of course, the *status quo* benefits or is of use to them (Marquette & Peiffer, 2017). Finding its roots in a long historical pedigree, the functionality perspective on corruption suggests principals may choose not to implement or enforce anticorruption reforms because corruption may serve specific social, economic and/or political functions for them (Leff, 1964; Huntington, 1968; Khan, 2004, 2006; Navot, 2014; Marquette & Peiffer, 2017; Osrecki, 2017). In other words, corruption may persist because it works to solve the problems that many people face. Through this lens, a health worker may request bribes to supplement a low income, for example.[2] According to the functionality perspective, corruption can most effectively be controlled when anticorruption policies 'gain an understanding of what solutions corruption provides to those that engage in it, and then try to deal in the business of providing those solutions through other means' (Marquette & Peiffer, 2017: 11). That is, effective anticorruption interventions will fulfil the functions corruption serves, and, in doing so, will make sure actors will find little reason or incentive to engage in corruption.

A logical extension of the functionality perspective also questions the sustainability of principal-agent theory-inspired anticorruption approaches. In some experiences, such approaches have been implemented for only a short period of time. Examples include a concerted but temporary attempt to monitor and enforce anticorruption statutes, or momentarily disruptive events such as discrete anticorruption purges (Robert, 2003; Della Porta & Vannucci, 2007; Rothstein, 2011). This makes sense, from a functionality perspective. Especially in a context where it is widespread and systemic, deterring corruption in the long term, through accountability mechanisms alone, can be a daunting challenge. Through the functionality lens, long-term deterrence without addressing the functions of corruption requires sustaining anticorruption efforts that can convince many potentially corrupt actors that they are subject to monitoring, and if caught, would also be punished. In countries where anticorruption efforts are poorly funded, such a challenge may be insurmountable in the long run.

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1   While we argue elsewhere that this is actually a misinterpretation of principal-agent theory, which does not presuppose that principals are necessarily principled, this assumption is widely seen in the policy-oriented literature on corruption as well as in anticorruption practice (Marquette & Peiffer, 2017: 5).

2   For more examples of the functions that corruption can serve, see Gauri, Woolcock and Desai (2011), Hickey and du Toit (2013), Walton (2013) and Bauhr (2017).

Our examination of bribery reduction in Uganda's health sector was inductive in the sense that we first observed the change in the bribery patterns and then sought to uncover plausible explanations. We did not go into the field to test previous theoretical work on corruption and principal-agent theory or on functionality. The findings, however, engage directly with the literatures reviewed. We attribute the bribery reduction in Uganda's health sector to the effective implementation of an archetypical principal-agent theory-inspired anticorruption approach. However, the case also demonstrates that, when certain principal-agent theory-inspired tactics are implemented, especially those targeted at frontline service workers, they can result in negative unintended consequences when they do not address the underlying functions of corruption. The case therefore questions the pursuit of certain principal-agent theory-inspired interventions, not because they are unlikely to be implemented effectively but because, when they are implemented, they may have undesirable knock-on effects that outweigh any benefits.

Methodology: Identifying and examining 'hidden' positive outliers

We identified Uganda's health sector as a potential positive outlier in bribery reduction through the use of a novel identification methodology. Most studies aiming to examine exceptional developmental progress choose cases based on their reputations for being success stories (Leonard, 1991; Grindle, 1997; Owusu, 2006; Roll, 2011; Melo et al., 2012; Andrews, 2013, 2015; Naazneen et al., 2014). Reputational identification, however, risks overlooking 'hidden' positive outlying cases—cases that may be just as impressive as those that are celebrated but have yet to be recognised (Peiffer & Armytage, 2018). In contrast, the methodology we used to identify the Ugandan health sector promises to identify both types of cases—those that have and those that have not garnered a good reputation. The methodology uses statistical analysis of quantitative data on developmental outcomes to identify a pool of potential positive outlying cases in the first instance, and then vets those cases through statistical triangulation and close qualitative examination (see Peiffer & Armytage, 2018 for a full description of the methodology).

Our identification of Uganda's health sector was informed by simple regression analyses of sector-specific bribery rates in over 100 countries, which were constructed from Transparency International's GCB. The GCB is the largest governance-themed household-level survey conducted. Its latest wave (2015) asked over 160,000 people in 119 countries about their experiences of paying a bribe to multiple sectors (Transparency International, 2018). Our analyses identified several statistical outliers—that is, country sectors that had experienced a statistically unexpected change in bribery, given bribery patterns associated with other sectors in the same country over the same period of time. Uganda's health sector was one of the 18 potential positive outliers that emerged from the analyses.

According to the GCB, almost half of all people who had made contact with the health sector in Uganda in 2010 paid a bribe, but by 2015 the bribery rate among those who had made contact with the sector was just 25%. Our analysis suggested that such a reduction was especially remarkable given that the bribery rates for all other sectors within the country had increased over the same period. Specifically, based on how bribery rates for other sectors in the country had changed, the model predicted a less than 0.01% chance of health-related bribery reducing to the extent that it had in the sector (Peiffer & Armytage, 2018).

As statistical outliers are often suspected of representing measurement or other errors in the underlying quantitative data, we conducted desk research to vet the case further. We reviewed newspaper and journal articles and other grey literature on the sector; consulted with experts familiar with the sector; and triangulated the reduction in bribery for health services documented in the GCB with data from Afrobarometer. Afrobarometer also documents an impressive reduction in bribery for health services across the country over a similar timeframe as in the GCB.[3] The experts we consulted were identified using a snowball sampling technique that started with contacts drawn from the research teams' personal networks of colleagues and academic contacts, as well as emails to scholars that have published academic research on corruption in Uganda's health sector. Our review of the literature and discussions with experts did not uncover any evidence to suggest that bribery had not reduced in the sector. However, we also found very little to support the hypothesis that bribery had reduced. We also did not uncover any media coverage or research that mentioned the statistical reduction in health-related bribery documented by the GCB. As the identifying methodology promises to uncover 'hidden' cases of developmental progress, the lack of recognition surrounding the case did not deter further investigation.

We then undertook five weeks of qualitative in-country fieldwork in Uganda's Central, Eastern and Western provinces, using in-depth semi-structured interviews with service providers, users and experts. Snowball sampling produced a number of respondents, but the majority of medical professionals interviewed where identified through unscheduled visits to health facilities. In total, we conducted interviews with 48 respondents, who included doctors, nurses, clinicians and administrators currently employed in the public health system in Health Centres II, III and IV and at three regional referral hospitals; government officials from the health sector and other government departments; employees of donor agencies engaged in health service delivery; health care providers formerly employed in the public sector and now working in private practice; academics and researchers; and patients/public health care users identified at public health care facilities.

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3   Like the GCB, Afrobarometer routinely asks a nationally representative sample of Ugandans whether they have paid a bribe for health care. Afrobarometer data indicated that bribery for health services among the *total population* (not just those who had made contact with the sector, which is what we cite from the GCB) had reduced by 13% from its 2011 and 2015 survey waves, which supports the idea that bribery had reduced in the sector over a similar timeframe as indicated by the GCB.

Uganda's health sector

Like most health systems, health care in Uganda is a complex marketplace. It is divided into state and private hospitals and clinics, including medicine-sellers who operate from drug shops, grocery stores and market places, as well as non-governmental organisations, faith-based organisations and not-for-profit facilities (Hutchison et al., 2015). As is common in the health sectors of many developing countries, personnel, equipment and medication frequently move between the for-profit and not-for-profit sectors (Bloom et al., 2008). The public health care system operates in a six-tier referral system. It begins with basic medicine distribution led by volunteers at the village level and progresses to larger clinics with greater levels of staff specialisation and medical capabilities. It then culminates at the national referral hospital located in Kampala, served by the country's most advanced medical specialists (Kavuma, 2009).

Uganda's health sector is an unlikely positive outlier for bribery reduction for several reasons. First, the sector has witnessed several high-profile corruption scandals. The country's own Inspectorate of Government has described the sector as the most corrupt in the East African region (Mugisa, 2012). The Global Fund scandal of 2005, for instance, found senior Ministry of Health officials had used Global Fund resources for political and personal gains, severely damaging efforts to control malaria in the country (Kavuma, 2016). The Auditor General's annual reports note that there are often large gaps between what Parliament allocates for drugs and supplies and what is actually delivered (Among, 2011). For example, the 2006/07 Auditor General's Report noted a gap of USh 6.6 billion between Parliament's allocation and National Medical Stores' (NMS') delivery of drugs, with funds also reallocated to things like foreign travel for NMS senior staff (Ssewanyana et al., 2010). Other examples of corruption include lengthy delays in receiving the international Affordable Medicines Facility for Malaria subsidy in 2010, as a result of opposition from the local pharmaceutical industry; the creation of dozens of ghost health centres that receive medical supplies and equipment (Among, 2011); and tender fraud in the construction of 100 donor-funded non-functional operating theatres built between 1997 and 2003 (Croke, 2012). Following the 'fish rots from the head' hypothesis, we would expect such corruption at the top to work to encourage bribery in the sector's grassroots rather than to reduce it (e.g. Rose-Ackerman, 2015).

Second, the sector is very underfunded, which means services, drugs, supplies and staff are relatively scarce. The 'scarcity hypothesis' suggests that, as resources for services become scarcer, citizens will be more willing to pay bribes and service providers will have more leverage to request them, not less (Rose & Peiffer, 2016). Health expenditures in Uganda have been on the decline since 2010, with per capita health expenditures dropping by 34% between 2010 and 2014 (World Bank, 2018).[4] By some estimates, Uganda spends half of what it needs to on health to provide minimum health care coverage for its citizens (Lukwago, 2016). Moreover, in theory all public services are free and cases are referred upwards by degree of severity and level of medical expertise required. However, in practice, many health workers report having to ask for 'off-the-books' payments to cover the cost of basic supplies, like surgical gloves that their facilities lack; the sector's experience of drug and supplies shortages has also been widely documented (Eyotaru, 2016; Namagembe, 2018). In fiscal year 2013/14, nearly 40% of health facilities reported shortages of essential medicines, failing to meet the limits stipulated by national guidelines (Ministry of Finance, Development and Planning, 2015).

With respect to staff shortages, Uganda has a very low health worker to population ratio: just 1.49 per 1,000 people, compared with a World Health Organization recommended minimum ratio of 2.3 per 1000 people (WHO, 2018). According to a human resources report for the sector published in 2015, over 30% of health posts remain unfilled (Ministry of Health, 2015: 13). Brain drain is said to have crippled the sector, with thousands of doctors having left Uganda for positions overseas (Mwesigwa, 2015; Kendall, 2017; Okiror, 2017a). Of 251 final year medical students surveyed in 2015, for instance, almost half indicated that they wanted to leave the country after receiving their degree (Kizito et al., 2015). In some parts of the country, it is estimated that health facilities experience a 50% absenteeism rate, with many health workers 'moonlighting' in private health facilities and in other sectors (Mwesigwa, 2015; Nyamweya et al., 2017; Tweheyo et al., 2017).

Third, salaries in the sector are very low, which is also thought to encourage bribery; low salaries are said to incentivise service providers to take bribes to supplement their low incomes (Rijckeghem & Weder, 2001; Armantier & Boly, 2011; van Veldhuizen, 2013). In the public health system, doctors are reported to earn on average USh 700,000 shillings ($245) a month (Mwesigwa, 2015), while nurses earn as little as USh 400,000 shillings ($100) a month (URN, 2017). In contrast, accountants in the country earn on average USh 2.4 million ($650) and civil servants on average USh 3.8 million ($1,000) (Mwesigwa, 2015).

As a consequence of all of these factors, the health sector struggles to adequately respond to very high rates of under-five mortality, high rates of maternal mortality, a high birth rate, high rates of malaria and a population with a 6.5% HIV prevalence rate (UNAIDS, 2016). In particular, the nation's drug shortages have resulted in citizens dying of treatable diseases (Auditor General, 2010; Ministry of Finance, Development and Planning, 2015). Civil society organisations in 2017 warned that almost a million Ugandans could develop resistance to first-line antiretroviral therapy because of the nation-wide stock-out of drugs (Lule, 2017a). Drugs and supply shortages have been pinned on poor government planning and forecasting, while doctors and health facility directors have pointed to their limited budgets, arguing they cannot stretch far enough to cover the needed medicines (Ministry of Finance, Development and Planning, 2015).

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4   2014 is the most recent year that health expenditure data is available for Uganda.

The government has oscillated between admitting problems with drugs and supplies shortages (e.g. Auditor General, 2010), claiming that the issue has been addressed significantly (Namuli, 2017), and denying there is a problem (e.g. Lule, 2017a), while blaming health workers for causing the drug stock-outs by hoarding and reselling public supplies. In practice, the last of these strategies has involved accusing health workers of stealing drugs and selling them illegally on the black market or in private health facilities and publicising the arrests of health workers caught for doing so (Asiimwe, 2016; Mbogo, 2016). In response, some health workers have argued that this strategy is a transparent political distraction, with the government using health workers as scapegoats for much larger weaknesses in the public system.

Bribery in the sector

Bribery has also long been a problem in the sector (Konde-Lule & Okello, 1998; Kyomuhendo, 2003; Deininger & Mpuga, 2005). Even with the improvements we observed in the GCB data, it is estimated that, as of 2015, one in every four Ugandans who come into contact with the sector were still asked to pay a bribe (a notable reduction, however, from one in every two in 2010). Our respondents noted that three types of interactions might be interpreted as bribery in the sector. The first is what is known as 'conventional bribery'. This is defined as an exchange between a service-seeker and a service-provider, in which the former obtains access to a service or better-than-fair treatment and in exchange the official is given a material benefit (Lindgren, 1993: 1699). Conventional bribery, according to several of our respondents, is largely a response to the low pay health workers receive, and therefore functions to supplement the very low government salaries. This conclusion is supported by the findings of a 2011 study that involved over 100 interviews with health workers across the country (Thornton, 2012), as well as other assessments of the sector (Ayebazibwe, 2013; Xu, et al., 2006).

Second, exchanges that result from a lack of resources may also be understood as requests for bribes. The inadequate provision of basic medical supplies, for example, means doctors and nurses routinely need to request that patients buy their own supplies or drugs and bring them to the clinic to be administered. These requests may at times be interpreted as a request for a bribe, even though in many instances they represent the attempt of health care workers to meet the needs of patients.

Finally, in both the Thornton (2012) study and in our own, health workers distinguished between accepting 'appreciation' from requests made from health workers for bribes. 'Appreciation' is a gift freely offered as thanks for good service. Former Permanent Secretary of Health and Founder of the HMU Dr Atwine explained this difference:

> There is a difference in bribes and 'appreciation'. If I came here, I saw a nurse, I am very happy, I go home, I am better, the following day I feel I need to show appreciation. You know in the village they bring a chicken, they bring matoke [bananas], bring money, whatever. That is one thing. It is another thing when a woman is about to rupture her uterus, to say, 'Bring 300, if not 300, sorry! I'm not touching you.' That is completely different (Dr Diana Atwine, Kampala, November 2017).

It is difficult to assess the extent to which survey data on bribery can capture some of the nuances noted here. The GCB asks its respondents whether they have 'paid a bribe' to various sectors in the previous 12 months. Citizens surveyed may over-report the payment of bribes in the health sector if they perceive that a genuine request from health care workers to provide medical supplies is a request for a bribe. However, supplies and drugs shortages have long been a problem in the sector, and by some accounts these problems are growing (Auditor General, 2010; Ministry of Finance, Development and Planning, 2015; Eyotaru, 2016; Namagembe, 2018). As such, we would expect such 'misunderstandings' to work to consistently inflate or even increasingly inflate the GCB's bribery rates, not to reduce them over time, as the GCB documents.

With respect to 'appreciation', Afrobarometer explicitly recognises gift-giving as potentially being part of the corruption complex; its respective survey partners ask citizens whether they have had to 'pay a bribe, give a gift or do a favour for government officials in order to' receive health services (Afrobarometer, 2018). Confronted with this phrasing, respondents are more likely to classify as bribery 'appreciation' that is intended to secure services, compared with 'appreciation' that is given without such an intention. It is worth reiterating here that Afrobarometer data also documents an impressive reduction in bribery in the sector.

Why has bribery in the health sector reduced in Uganda?

Given the immensity of the challenges facing Uganda's public health care sector, it is particularly striking, and indeed surprising, that both the GCB and Afrobarometer find bribery significantly reduced in the sector from 2010. Our research suggests one primary contributing factor emerged as critical in reducing bribery: the work of the HMU.

Established by President Museveni in 2009, the HMU's core mandate is to 'monitor national health service delivery with the intent to improve and address prevailing gaps' (HMU, 2018). Located directly in the Office of the President, and involving a small staff of approximately 20–30, the unit was established as a response to domestic and international calls for the government to address widespread drug stock-outs (Baez-Camargo, 2012). It has wide-ranging power to investigate, arrest[5] and

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5   HMU staff include police attached to the unit.

detain health workers suspected of embezzlement, fraud or bribery and has embarked on a nationwide series of financial, medical supply and performance auditing. With its focus on monitoring and enforcement, the HMU takes a quintessential principal-agent theory-inspired approach to tackling corruption in the sector.

The political landscape of the HMU

Since its inception, the HMU has enjoyed an inordinately high level of political backing from President Museveni. Corruption and anticorruption efforts in Uganda are said to be greatly influenced by the ruling regime's style of quasi-authoritarian rule (Tangri & Mwenda, 2006). The president is said to rule through a highly centralised approach commonly referred to in Uganda as 'Musevenism'—a strategy that describes President Museveni's preference for circumnavigating public policies and state institutions and interacting with individual interest groups personally and directly (Bukenya & Muhumuza, 2017).

The HMU's creation has been described by Maniple (2011: iii) as 'unilateral' and 'irregular', because the president established it 'without going through the usual channels and stages of cabinet and parliament debate, where even the opposition could also discuss its composition and functions'. When it was established, little information was shared with the media, Parliament or the public about its size, composition, scope of work or working methods (ibid.: iv). Initially led by Dr Diana Atwine, formerly one of the president's personal physicians at State House, the HMU was closely managed under her leadership and benefited politically from her mandate of direct presidential support.

Hailing from Museveni's home city of Mbarara in Western province, Dr Atwine has a close personal relationship with the president to the point of being dubbed one of Museveni's 'adopted daughters' in the Ugandan media (Maniple, 2011: iii). As part of her strategy to ensure the success of the HMU, Atwine sought to coordinate and align a number of the government agencies engaged in addressing corruption, including efforts to engage and ensure the support of the Inspectorate of General of Government (IGG). By having the IGG and a number of civil society organisations funnel all corruption cases relating to health directly to the HMU, she was able to raise the profile and authority of the unit as the key anticorruption agency working on health. The president's support in ensuring the support of these adjacent agencies was critical, as Dr Atwine acknowledged:

> My relationship with the president was very significant. Everyone knew that my office was in the Office of the President, and that I reported directly. So I would never get political interference. For instance, if I arrested someone who was the relative of someone big, no one would interfere, because they knew that the president was on my side. Because this Unit is at the centre, people knew that they must give it total support (Dr Diana Atwine, Kampala, November 2017).

As the next section explains in more detail, the HMU's activities largely target relatively low-level corruption in the sector. Given the significant problems with fraud and corruption in health, the HMU could be an example of what Stringer and Richardson (1979) termed 'a placebo effect'—in effect, an opportunity for the government to respond to popular concerns by addressing the relatively easy-to-address symptoms of the problem, such as low-level corruption by frontline workers, while avoiding the need to disrupt more deeply rooted underlying causes or grander levels of corruption. This analysis—that anticorruption in Uganda's health sector targets the 'small fish' but not the more politically influential players—was made of the government's response to the 2005 Global Fund scandal specifically, where millions of dollars' worth of donor funds were diverted:

> … despite investigations, none of the high-ranking government officials who managed the implicated offices have faced criminal sanction. Most often they have remained in office, untouched, while individuals working at the technical level have faced prosecution and, in some cases, jail time. Even when ministers have been forced to resign from office, such resignations have been temporary; they were eventually reappointed to key positions in government, in what one diplomatic representative calls a 'game of musical chairs (HRW, 2013: 2).

By serially focusing on small-scale corruption, in health and other sectors, and not punishing high-level corruption, the regime is able to leave intact the entrenched patronage networks of Museveni's supporters (HRW, 2013). Given the political and economic vulnerabilities of frontline health workers, targeting the corruption they engage in is a relatively low-risk political strategy. Moreover, to the extent that doing so is able to convince the public that it represents a sincere effort to tackle corruption in the sector, it is also a strategy that may pay off for the regime in political dividends.

What the HMU does

The HMU's specific monitoring directives are to 1) monitor and evaluate the performance of health facilities and health training facilities; 2) report and carry out investigations on all criminal matters that arise in the sector; 3) carry out forensic audits in health facilities where there is suspected fraud or misappropriation; and 4) liaise with drugs inspectors to ensure drugs shops and clinics adhere to procedures (HMU, 2014). In addition, the HMU actively works with the courts to prosecute health-care related crimes that it uncovers (ibid.).

The unit also provides consultation to the government on a range of health-related policies (see HMU, 2014b, 2014c for examples); advises medical workers on the effective management of medicine and on their rights as health workers; and lobbies the government for better health worker salaries (HMU, 2014a; Amia, 2017). The unit also seeks to mobilise Ugandan communities so they report their experience of bribes and tip-offs on drugs theft, using radio announcements and hotlines for the public to report via a 24-hour help centre. The HMU has sought to identify good practices and outstanding performers: presidential awards have been given to health centres and individuals seen to be performing exceptionally well, sometimes accompanied by invitations to dinner at State House (Dr Diana Atwine, Kampala, November 2017).

To carry out these varied tasks, the relatively small unit is said to staff a multidisciplinary team of medical doctors, pharmacists, public health and health system specialists, auditors, lawyers, policy analysts, communications and information and communication technology officers as well as administrative and technical support staff. It also boasts the attachment of senior investigative officers from the Uganda Police Force (HMU, 2018). Since its inception, the unit has monitored hundreds of health facilities (239 in 2012/13 alone, Lukwago & Fortunate, 2013: 7), carrying out monitoring visits in 95 out of 112 districts of Uganda and in all 14 regional referral hospitals located in the four regions of Uganda (HMU, 2018).

The HMU executes its most high-profile work of monitoring and investigating service delivery issues, complaints and potential crimes by carrying out unannounced, seemingly random, spot-checks of health facilities, as well as targeted investigations responding to specific complaints, such as health workers charging fees for nominally free services or drugs, drugs thefts or requests for bribes (HMU, 2014a: 15; Kajuba, 2017). In pursuing complaints, HMU teams are dispatched to investigate. Visits to health facilities assess the 'status of healthcare service delivery' by using 'approved data collection questionnaires and observation checklists' (HMU, 2014a: 15). Within the scope of a visit, financial audits of health financing and other investigations of complaints are conducted, and offenders are prosecuted (ibid.).

Founded based on the desire to catch health workers 'red handed', (Dr Diana Atwine, Kampala, November 2017), the tone of the HMU's investigations is distinctive and important for understanding their potential impact on bribery. Observers of the sector and others have described investigations as 'militaristic'-style raids (see Baez-Camargo & Kamujuni, 2011: 27; Baez-Camargo, 2012: 3). Maniple (2011: iv) similarly describes the HMU's operations as echoing that of security intelligence bodies. Associated arrests of health workers are also often high profile. Investigations are frequently accompanied by TV and radio coverage that captures national headlines. Dr Atwine described it as follows:

> The media was always everywhere, even sometimes if they just saw a car looking like mine, they thought it was me, [they called] 'Are you in town?, we were seen. Before you realise, when you are somewhere, they'd just go [camera snapping noise]. The next time you see [media] all over the place (Dr Diana Atwine, Kampala, November 2017).

This particular element in the HMU's approach integrates public shaming as a key strategy of deterrence for misconduct. Likely a reflection of this publicising, our field research indicated that the HMU was widely known among Ugandan health workers in both urban and rural areas.

Despite its small size, the unit boasts an impressive list of claimed achievements. Though this is not externally verified, Dr Jackson Ojera, the current head of the HMU, recently summarised the unit's main achievements, claiming that, since its inception, it had recovered stolen medicines worth more than USh 30 billion ($84 million), and many billion in stolen health supplies and equipment, including stolen hospital beds, an emergency medical boat, vehicles and an ambulance. He also claimed the unit had advocated for disenfranchised health workers in its direct intervention to put 7,600 health workers on the government payroll. Finally, he said the unit had registered the arrests of over 600 people (Musinguzi, 2017). Those arrested included doctors, nurses, medical intern students, pharmacists and individuals masquerading as health workers (Kajuba, 2017). Dr Ojera claimed that 250 of those arrested had been prosecuted, with 100 convictions, 14 acquittals and 42 cases dismissed, and hundreds of cases still pending in courts (Musinguzi, 2017).

The impact of the HMU on bribery levels in the health sector

As explained earlier, our methodology has been designed to uncover relatively 'hidden' positive outliers that are likely to be unknown. The HMU itself has not reported any impact it has had on reducing bribery rates. While our statistical analysis was able to uncover the reduction in reported bribes, our qualitative data—both textual and fieldwork data—suggests the reduction in bribery can likely largely be explained by the HMU's activities, which seem to have significantly influenced the willingness of health workers to request bribes.

Our health worker respondents indicated that fear of exposure and arrest by the HMU had made them more cautious of engaging in bribery. With a few exceptions, most of the doctors, nurses and clinicians interviewed for this research referred to what they believed was a significant reduction in the practice of bribery occurring since 2010. For instance, the sister-in-charge of a regional hospital maternity ward explained,

> [Over the last few years] bribery has gone down because the administration has very clearly demonstrated its position against this [bribery]. If you went to the staff room notice board you will clearly find a note reminding staff that bribery and extortion is not allowed in this hospital. If you look at just our entrance here [indicating the maternity ward entrance] you can see a sign for patients as well. It's in the local language as well as in English and is also pinned on the door of the hospital. It was a lot worse 10 years ago. Then, someone was asking for a bribe every day (sister-in-charge, Eastern province, November 2017).

Many health workers we spoke with discussed the direct influence the HMU had had on bribery. Most had worked in facilities that had received an HMU visit, with several having witnessed localised arrests. As just one example, a nurse lecturer described colleagues of hers who were caught for stealing drugs. She reported to us that the HMU had investigated the accused health workers after other health workers had complained to the unit:

> People were tracking those few over a long time. So there are some medical workers who were disgusted with their behaviour. So they tracked them and then they caught them. The unit came and caught them (nurse lecturer, Western province, October 2017).

Many health workers described staff as being more alert, cautious and scared to engage in bribery as a result of HMU visits. Contributing to this cautiousness, several health workers reported that it was common to hear rumours from colleagues of 'spies' from the HMU working among them. A municipal health officer described the perceived need to avoid bribery because of the risk of being publicly exposed by the HMU:

> The nurses they arrested, some were our friends, there are arrests, this is known. This is part of business, you become a victim [when] they arrest you, but you learn from that as well. Even here they were arresting some people. It was covered in the media, it is always covered in the media. You need to be careful, because to be exposed in the media [means the] children are watching you. Your relatives are watching you. You really need to take some measures to avoid such nasty habits (municipal health officer, Western province, October 2017).

Another doctor summarised the impact:

> Yes, when someone is caught they will probably show it—maybe in the television, papers, yes. So now you don't want to get caught (doctor, Kampala, November 2017).

Similarly, a local leader who worked with the HMU described the intended outcome of publicising an arrest of a nurse who had stolen a hospital bed in his region:

> You know when you embarrass some, the other ones fear. It's not to victimise her [nurse], but because there are other people, it teaches other people, it stops other people (chair, Western province, November 2017).

Moses Muluba, the Executive Director of the Centre for Health, Human Rights and Development (CEHURD), a health rights advocacy group, also described the current approach of the HMU, which focuses on enforcement, as being feared by health workers (Arinaitwe, 2017). Others, like Dr Obuku, the President of the Uganda Medical Association (UMA), a vocal critic of the HMU, has accused the unit of conducting a witch hunt among health workers and has been quoted as saying the HMU is 'unpopular and feared to the extent that health workers run away and enter their houses to hide under the bed [when HMU visits]' (Mwesigwa, 2017).

According to our findings, the HMU should be regarded as one example of a quintessential principal-agent theory-inspired approach to anticorruption that has worked to reduce certain patterns of corruption. Using its particular brand of principal-agent theory-inspired anticorruption tactics—a harsh, 'militaristic' approach to monitoring and enforcement, as well as its proclivity to publicise arrests (Baez-Camargo & Kamujuni, 2011: 27; Baez-Camargo, 2012: 3)—the HMU has succeeded in effectively reducing bribery by making health workers more worried about being caught and punished for engaging in corruption.

The HMU as a 'conflicted success' story[6]

Likely undermining morale and trust

While it is likely that the HMU has been effective in reducing bribery, the specific tactics the unit has used for targeting low-level corruption are understandably not uncontroversial. By aiming their principal-agent theory-inspired approach directly at frontline service workers, the HMU's fight against corruption has likely come at the expense of the morale of Uganda's already vulnerable health professionals and the trust citizens have in the frontline workers they engage with during times of need.

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6   This term is taken from McConnell (2010).

Members of the UMA—consisting of doctors and other health workers from across the country—recently went on an unprecedented nation-wide strike, which lasted over one month and was said to have crippled the country's medical services (Musinguzi, 2017; Okiror, 2017b). President of the UMA Dr Obuku announced that a precipitator of the strike was the 'wanton arrest of doctors by the State House Health Monitoring Unit' (Lule, 2017b). Along with better pay and working conditions (Ainebyoona, 2017a; Mpindi, 2017), the UMA demanded that the government disband the HMU and use the already established Medical Council to deal with complaints (Lule, 2017b). Dr Obuku argued that, in its 'naming and shaming' approach to tackling corruption in the sector, the HMU had unduly harassed many innocent health professionals, further demoralising and discouraging Uganda's already vulnerable health staff and, potentially, contributing to brain drain in the sector (ibid.).

Dr Obuku is not alone in arguing that the HMU's work has demoralised health staff. In 2010, just after the HMU was established, Apollo Nyangasi, then National Chairman of the Uganda Health and Allied Workers Union, argued that the negative publicity the HMU had orchestrated for isolated incidents of drugs thefts had prompted the use of 'humiliating' body checks of health workers at some health facilities, which had negatively affected staff morale (Kiapi, 2010). Agreeing with Nyangasi, Dr Sandra Kiapi, then Executive Director of the Action Group for Health, Human Rights and HIV/AIDS, stated:

> … a thief is a thief, but the challenge for the health workers in Uganda is that the negative publicity is creating a perception among communities, who are service customers, that all health workers are thieves and that all-stock outs are being caused by health workers… This is just wrong and has created an environment of distrust that is detrimental towards our collective goal of improving healthcare in this country (quoted in Kiapi, 2010).

Others researching the sector have also observed how the manner in which the HMU has carried out monitoring has had a negative impact on health workers' motivations to work (Baez-Camargo & Kamujuni, 2011; Baez-Camargo, 2012). As reported in Thornton (2012: 22)—who interviewed 122 health workers across Uganda about their working conditions—many health workers resent negative stories about drugs thefts and bribery appearing in the print media and on TV and the radio, which has increased since establishment of the HMU. Health workers reported that, following a publicised arrest, patients became less trusting and more suspicious of health workers, which negatively affected health workers' self-esteem (ibid.: 20). Health workers also reported being hurt and indignant when top public figures in the HMU and government publicly called them 'thieves' (ibid.: 22).

'Naming and shaming' as an anticorruption strategy is not particularly new or innovative. The Transparency International Corruption Perceptions Index, for example, is a form of naming and shaming (Larmour, 2006), as are high-level strategies on corporate corruption (*The Economist*, 2010)—and these strategies have increased in recent years (*The Economist*, 2010; Dawson, 2014). Other sectors in Uganda—such as Parliament (Ssali, 2017) and the justice, law and order sector (*The Judiciary*, 2017)—are looking at naming and shaming as a part of their own anticorruption strategies. However, to the best of our knowledge, no one has yet studied the impact of using such a strategy on individuals, rather than countries and corporations, particularly in combination with a very public, media and social media strategy. A study that looks at similar activities in Rwanda notes:

> In Rwanda, instances of petty corruption involving bribing or favouritism are harshly sanctioned, including by means of a policy of naming and shaming whereby individuals guilty of corruption are publically identified in published lists, not only with their names, but also with the names of their parents and community. The research indeed suggests that, because the sanctions against cases of corruption are widely perceived to be extremely harsh and effectively enforced, compliance is commonly associated with fear over possible negative performance reporting or criminal repercussions (Baez Camargo & Koechlin, 2018: 15).

Davis (2004: 67) warns that use of monitoring strategies, specifically, may frustrate and demoralise public employees, which she argues may also eventually encourage 'them to derail the systems designed to inspire them'. Given that these frontline service providers are already demoralised and, arguably, vulnerable, it is vital to examine the potential of such an untested approach to produce negative unintended consequences.

Sustainability and functionality

While our research suggests that fear of being caught and shamed by the HMU for engaging in corrupt practices may be making health workers more reluctant to engage in bribery, especially at sites where arrests have been made, many of our interviewees suggested that the impacts of the HMU's work may be only temporary. One female clinician working in Central province, for example, noted:

> There was a lot of bribery in the hospital I used to work in. Of course, when someone was arrested by the HMU, we all got scared, but eventually people forget, and it resumes. They forget all about it, or they remember and are extra careful when they do it (clinician, Central province, November 2017).

Similarly, a nurse from Eastern province observed:

> People think that the monitoring team is within, and anyone can be the monitoring team. So people become alert. Everyone is on their toes… I may be nabbed at any time so people are on alert, and then when they suspect that there is nothing on the ground, they go back [to engaging in bribery] (nurse, Eastern province, November 2017).

Even Dr Diana Atwine, the HMU's first head, called the HMU's strategies unsustainable, describing the unit as 'a stop gap measure' to solving corruption in the sector (Kampala, November 2017). Baez-Camargo and Kamujuni (2011) reach similar conclusions in their own research, which also questions the initiative's long-lasting impacts on corruption.

The observation and expectation that the HMU's impact on corruption patterns may be localised and somewhat short-lived is consistent with a functionality critique of disruptive principal-agent theory-inspired approaches. The argument goes that disruptive events alone will not change the perceived need actors have to engage in corruption. Once the fear of a disrupting event subsides, as the perceived need to engage in corruption persists, actors are expected—from a functionality perspective—to continue to find corruption a useful mechanism to solve problems they face (Marquette & Peiffer, 2017). In the case of Uganda's financially vulnerable health workers, where bribery functions, in large part, to supplement low incomes (McPake et al., 1999; Xu et al., 2006; Thornton, 2012; Ayebazibwe, 2013), the threat of arrests may reduce willingness to request bribes in the short term. However, if the fear of being arrested and shamed diminishes, it should be expected that health workers will continue to perceive bribery as a viable option to help fulfil their financial needs (see also Maniple, 2011: vi).

The long-term sustainability of the HMU's effectiveness in deterring bribery is something that is ultimately to be determined; it is still relatively early days. More resources could be invested in building the HMU's capacity to pursue its very resource-intensive anticorruption strategy, ensuring its effects are more than temporarily disruptive. However, if such a strategy is not coupled with a strategy to addresses low wages in the sector, it will also indefinitely limit the options available to health workers to meet their financial needs. Health workers, hurt by the loss of the supplementary income bribes provide, would be left trying to survive on what they earn in wages; leaving the sector completely to find more gainful employment; engaging in absenteeism so they can work somewhere else during working hours; and/or working additional jobs around the hours they currently work. All of these seem already to be occurring in the current context. As noted before, health workers are already in extremely short supply. Moreover, most of those who express wanting to leave the sector or country cite low wages as a driving factor (Hagopian et al., 2009; Luboga et al., 2011); many work multiple jobs to try to make ends meet (Mwesigwa, 2015; Nyamweya et al., 2017; Tweheyo et al., 2017); and many report the need to be serially absent from work because of their reported need to supplement their income through other work (Nyamweya et al., 2017).

While our research is not able to assess the extent to which the HMU's activities have contributed to, or further exacerbated, these problems, the functionality perspective on corruption suggests that, by reducing bribery patterns, the impact may have been significant. It further suggests that expanding the scale and scope of the work could exacerbate these problems even further in the future. A functionality lens does not excuse frontline health workers accepting or demanding bribes, recognising the vulnerability of patients who may not receive vital services as a result of being unable or unwilling to pay, but it does help explain why it happens and why unintended consequences and problems for sustainability are almost inevitable—unless we also address the underlying functions that corruption is being used to fulfil. Rather than making excuses for bribery, ensuring that anticorruption approaches—especially those focused on service delivery—also address the underlying functions that often drive bribery is almost certainly the only way to achieve sustainable results that enhance, rather than hinder, service delivery goals.

Conclusion

We began by telling the highly publicised story of Uganda's minister of health going undercover to bust two health workers who asked for payment for nominally free services at a hospital in Kampala. It therefore seems fitting that we conclude by explaining how that story was resolved.

Deputy Hospital Director Dr Stephen Kyebambe congratulated the minister for effectively exposing the corrupt health workers; he reportedly thanked her 'for unearthing this racket of extortionists at our hospital' (as cited in Ng'ang'a, 2017). The HMU investigated the claims made against both workers.

One of them was found to be practising without a license; he was subsequently dismissed (Ainebyoona, 2017a). The other, however, a nursing assistant, who reportedly had recently returned to work from maternity leave, told journalists that all she had asked for was USh 5,000 (less than $1.50), which she needed to charge because she wanted to test the minister for diabetes and the hospital had run out of its government-provided stock of diabetes testing strips (ibid.). Nevertheless, Minister Opendi stated that both suspects would be taken to the Anti-Corruption Court (ibid.).

With reporters close by, a colleague was quick to come to the health workers' defence after the incident, arguing that money was asked from patients only because health workers needed to survive (Ainebyoona, 2017b); she is quoted as saying 'The nurse who has been arrested has a three-month-old baby and earns about 270,000 shillings per month. As I talk to you, it is lunch time but we are not given anything to eat' (quoted in ibid.).

With declining health expenditures, low salaries and many health facilities lacking basic supplies, Uganda's health sector makes for an especially unlikely positive outlier in bribery reduction. Using a novel mixed-methods approach, which started with the scrutiny of sectoral bribery rates in dozens of countries, our attention was called to the curious case of health-related bribery reduction in Uganda.

Our research into why bribery had reduced in the sector highlighted the implementation of a quintessential principal-agent theory-inspired approach to anticorruption spearheaded by Uganda's HMU. Our discussions with health workers and many others suggested that the HMU's activities, especially its use of high-profile and publicised raids, had likely reduced bribery in the sector by making health workers fearful and as a result more cautious of engaging in bribery. These reflections suggest that the experience of the HMU stands as an exception to the observation that principal-agent theory-inspired anticorruption efforts are largely ineffective at reducing corruption.

However, the success of the HMU's fight against corruption in the sector should not be assessed narrowly by focusing on its likely impact on reducing bribery alone. It is also important to consider the unintended consequences the HMU's work may have had on the sector, and its likely sustainability. The experience of the HMU shows that, when certain principal-agent theory-driven anticorruption approaches are implemented and targeted at frontline service workers, there can be unintended consequences that may overshadow the benefits of reducing corruption.

We have argued that it is likely that the HMU's activities are harming morale among the sector's frontline service providers and may be undermining citizens' trust in the sector. Moreover, the approach pursued has not sought to address the fact that bribery functions in the sector, at least in part, as a mechanism through which health workers supplement extraordinarily low wages. We therefore suggest that the HMU's success in reducing bribery will be difficult to sustain and may even inadvertently push more health workers out of an already poorly-staffed health sector.

References

Afrobarometer. (2018, 14 March). Afrobarometer survey. Retrieved from: http://afrobarometer.org/

Ainebyoona, E. (2017, 17 September). Arrested health worker a quack - State House. Retrieved from *Daily Monitor*: www.monitor.co.ug/News/National/-health-worker-quack--State-House-Sarah-Opendi-/688334-4099108-dgn7t9z/index.html

Ainebyoona, E. (2017b, September 16). Naguru Hospital workers arrested for soliciting Shs155,000 bribe from health minister. Retrieved from *Daily Monitor*: www.monitor.co.ug/News/National/Naguru-Hospital-workers-soliciting-arrested-bribe-minister/688334-4097686-o1xn27/index.html

Amia, P. (2017, 17 October). State House's Health Monitoring Unit fires back at Uganda Medical Association. Retrieved from *ChimpReports*: http://chimpreports.com/state-houses-health-monitoring-unit-fires-back-at-uganda-medical-association/

Among, B. (2011, 1 October). Who will heal Uganda's sick health sector? Retrieved from *Daily Monitor*: www.monitor.co.ug/News/National/688334-1245686-a4qxuhz/index.html

Andrews, M. (2013). *Explaining positive deviance in public sector reforms in development*. Helsinki: UNU-WIDER.

Andrews, M. (2015). Explaining positive deviance in public sector reforms in development. *World Development, 74*(74), 197–208.

Andvig, J., & Fjeldstad, O. (2001). *Corruption: A review of contemporary research*. Bergen: U4.

Arinaitwe, S. (2017, 3 December). Drug thefts mar hospitals as patients bear the brunt. Retrieved from *Daily Monitor*: www.monitor.co.ug/SpecialReports/Drug-thefts-mar-hospitals-as-patients-bear-the-brunt/688342-4211180-2o6l4pz/index.html

Armantier, O., & Boly, A. (2011). A controlled field experiment on corruption. *European Economic Review, 55*(8), 1072–1082.

Asiimwe, P. (2016, 14 March). Drug thefts: The cancer crippling health sector. Retrieved from *Daily Monitor*: www.monitor.co.ug/Magazines/HealthLiving/Drug-thefts-cancer-crippling-health-sector/689846-3115586-g85vur/index.html

Auditor General. (2010). Value for money audit report on procurement and storage of drugs by National Medical Stores (NMS). Kampala: Auditor General.

Ayebazibwe, A. (2013, 6 August). 2,000 doctors leave country in 10 years. Retrieved from *Daily Monitor*: www.monitor.co.ug/News/National/2-000-doctors-leave-country-in-10-years/688334-1938196-76saruz/index.html

Baez-Camargo, C. (2012). *Using power and influence analysis to address corruption risks: The case of the Ugandan drug supply chain*. Bergen: U4.

Baez-Camargo, C., & Kamujuni, P. (2011). *Governance assessment of the public sector drug management system*: Uganda. Basel: Basel Institute of Governance.

Baez-Camargo, C. & Koechlin, L. (2018). Informal governance: Comparative perspectives on co-optation, control and camouflage in Rwanda, Tanzania and Uganda. Unpublished manuscript.

Bardhan, P. (1997). Corruption and development: A review of issues. *Journal of Economic Literature, 35*(3), 1320.

Bauhr, M. (2017). Need or greed? Conditions for collective action against corruption. *Governance, 30*(4), 561–581.

Bloom, G., Standing, H., & Lloyd, R. (2008). Markets, information asymmetry and health care: Towards new social contracts. *Future Health Systems, 66*(10), 2076–2087.

Bukenya, B., & Muhumuza, W. (2017). *The politics of core public sector reform in Uganda: Behind the facade.* Manchester: Effective States and Inclusive Development.

Croke, K. (2012). The political economy of child mortality decline in Tanzania and Uganda, 1995-2007. *Studies in Comparative International Development, 47*(4), 441–463.

Davis, J. (2004). Corruption in public service delivery: Experience from South Asia's water and sanitation sector. *World Development, 32*(1), 53–71.

Dawson, S. (2014, 14 November). Name, shame and sue leaders stealing from state coffers. Retrieved from *Reuters*: https://af.reuters.com/article/topNews/idAFKCN0IY0D420141114

Deininger, K., & Mpuga, P. (2005). Does greater accountability improve the quality of public service delivery? Evidence from Uganda. *World Development, 33*(1), 171–191.

Della Porta, D., & Vannucci, A. (2007). Corruption and anti-corruption: The political defeat of 'clean hands' in Italy. *West European Politics, 30*(4), 830–853.

DFID (Department for International Development). (2015). *Why corruption matters: Understanding causes, effects and how to address them.* London: DFID.

Donaldson, J. A. (2008). Growth is good for whom, when, how? Economic growth and poverty reduction in exceptional cases. *World Development, 36*(11), 2127–2143.

Eyotaru, O. (2016, 10 December). NMS faces malaria, hepatitis B drug stock out. Retrieved from *Uganda Radio Network*: https://ugandaradionetwork.com/story/nms-faces-malaria-hepatitis-b-drug-stock-out

Gauri, V., Woolcock, M., & Desai, D. (2011). *Intersubjective meaning and collective action in 'fragile' societies: Theory, evidence and policy implications.* Washington, DC: World Bank.

Grindle, M. (1997). *Getting good government: Capacity building in the public sectors of developing countries.* Cambridge, MA: Harvard University Press.

Hagopian, A., Zuyderduin, A., Kyobutungi, N., & Yumkella, F. (2009). Job satisfaction and morale in the Ugandan health workforce. *Health Affairs, 28*(5), 863–875.

Hickey, S., & du Toit, A. (2013). Adverse incorporation, social exclusion, and chronic poverty. In A. Shepard, & J. Brunt (Eds), *Chronic poverty: Concepts, causes, and policy.* Basingstoke: Palgrave.

HMU (Health Monitoring Unit). (2014a). Annual report FY 2013/14. Kampala: HMU.

HMU. (2014b). Report on the long lasting insecticide treated mosquito nets campaign. Kampala: HMU.

HMU. (2014c). Report on the Phase I implementation of mTrac at HMU. Kampala: HMU.

HMU. (2018, 13 March). History. Retrieved from: http://hmu.go.ug/index.php/about-us/history

HRW (Human Rights Watch). (2013). *'Letting the big fish swim'. Failures to prosecute high-level corruption in Uganda.* New York: HRW.

Huntington, S. (1968). *Political order in changing societies.* New Haven, CT: Yale University Press.

Hutchinson, E., Chandler, C., Clarke, S. et al. (2013). 'It puts life in us and we feel big': Shifts in the local health care system during the introduction of rapid diagnostic tests for malaria into drug shops in Uganda. *Critical Public Health, 25*(1), 48–62.

Jøhnson, J., Taxell, N., & Zaum, D. (2012). Mapping evidence gaps in anti-corruption: Assessing the state of the operationally relevant evidence on donors' actions and approaches to reducing corruption. U4 Issue 7.

Kajuba, E. (2017, 6 April). More than 300 arrested since inception of Health Monitoring Unit. Retrieved from *Uganda Radio Network*: http://ugandaradionetwork.com.dedi3883.your-server.de/story/more-than-300-arrested-since-inception-of-health-monitoring-unit

Kavuma, R. (2016, 2 March). Uganda's failure to spend Global Fund grants denies thousands HIV treatment. Retrieved from *The Guardian*: www.theguardian.com/global-development/2016/mar/02/uganda-failure-to-spend-global-fund-grants-denies-thousands-hiv-treatment

Kendall, D. P. (2017). Medical brain drain in Uganda: Causes and potential remedies. *Annals of Global Health, 83*(1), 50.

Khan, M. (2004). State failure in developing countries and strategies of institutional reform. In B. Tungodden, N. Stern, & I. Kolstad (Eds), *Toward pro-poor policies: Aid institutions and globalization.* Oxford: Oxford University Press.

Khan, M. (2006). Determinants of corruption in developing countries: The limits of conventional economic analysis. In S. Rose-Ackerman (Ed.), *International handbook on the economics of corruption.* Cheltenham: Edward Elgar.

Kiapi, E. M. (2010, 20 May). Govt under fire over health workers arrests. Retrieved from *The Observer:* www.observer.ug/component/content/article?id=8584:govt-under-fire-over-health-workers-arrests

Kizito, S., Mukunya, D., Nakitende, J. et al. (2015). Career intentions of final year medical students in Uganda after graduating: The burden of brain drain. *BMC Medical Education, 15,* 122–129.

Klitgaard, R. (1988). *Controlling corruption.* Berkeley, CA: University of California Press.

Konde-Lule, J., & Okello, D. (1998). *User fees in government health units in Uganda: Implementation, impact and scope. Partnership for health reform.* Bethesda, MD: Abt Associated Inc.

Kyomuhendo, G. B. (2003). Low use of rural maternity services in Uganda: Impact of women's status, traditional beliefs and limited resources. *Reproductive Health Matters, 11*(21), 16–26.

Larmour, P. (2006). Civilizing techniques: Transparency International and the spread of anticorruption. In B. Bowden, & L. Seabrooke (Eds), *Global standards of market civilization.* London: Routledge.

Lawson, L. (2009). The politics of anti-corruption reform in Africa. *Journal of Modern African Studies, 47*(1), 73–100.

Leff, N. (1964). Economic development through bureaucratic corruption. *American Behavioral Scientist, 8*(3), 8–14.

Leonard, D. (1991). *African successes: Four public managers of Kenyan rural development*. Berkeley, CA: University of California Press.

Lindgren, J. (1993). The theory, history and practice of the bribery-extortion distinction. *University of Pennsylvania Law Review, 141*, 1695–1740.

Luboga, S., Hagopian, A., Ndiku, J. et al. (2011). Satisfaction, motivation, and intent to stay among Ugandan physicians: A survey from 18 national hospitals. *The International Journal of Health Planning and Management, 26*(1), 2–17.

Lukwago, D. (2016). *Health spending in Uganda: Implications on the National Minimum Health Care Package*. Policy Briefing Paper 32. Kampala: ACODE.

Lukwago, M., & Fortunate, A. (2013). *Strengthening the monitoring and evaluation system of the Medicines and Health Services Delivery Monitoring Unit*. Kampala: Makerere University School of Public Health.

Lule, B. B. (2017a, 1 November). ARV stock-out sparks fear of mass drug resistance. Retrieved from *The Observer*: http://observer.ug/news/headlines/55709-arvs-stock-out-sparks-fear-of-mass-drug-resistance.html

Lule, B. B. (2017b, 15 November). Dr Obuku: You can abolish MPs but not health workers. Retrieved from *The Observer*: http://observer.ug/news/headlines/55971-dr-obuku-you-can-abolish-mps-but-not-health-workers.html

Maniple, E. (2011). Fighting health sector corruption in Uganda: The deliverables must change. *Health Policy and Development, 9*(1), iii–vi.

Marquette, H., & Peiffer, C. (2017). Grappling with the 'real politics' of systemic corruption: Theoretical debates versus 'real-world' functions. *Governance*. doi: 10.1111/gove.12311

Mbogo, S. (2016, 27 October). Medics probed for drug theft. Retrieved from *Daily Monitor*: www.monitor.co.ug/News/National/Medics-probed-for-drug-theft/688334-3431372-cdbvs2/index.html

McConnell, A. (2010). Policy success, policy failure and grey areas in-between. *Journal of Public Policy, 30*(3), 345–362.

McPake, B., Asimmwe, D., Mwesigye, F. et al. (1999). Informal economic activities of public health workers in Uganda: Implications for quality and accessibility of care. *Social Science and Medicine, 49*(7), 849–865.

Melo, M. A., Ng'ethe, N., & Manor, J. (2012). *Against the odds: Politicians, institutions, and the struggle against poverty*. London: Hurst Publishers.

Ministry of Finance, Planning and Economic Development. (2015). *Continuous stock-outs of medical supplies in Uganda: What are the root causes?* Kampala: Ministry of Finance, Planning and Economic Development.

Ministry of Health. (2015). Human resources for health bi-annual report. Kampala: Ministry of Health.

Mpindi, J. (2017, 17 October). Call off your strike, the health monitoring unit has urged doctors. Retrieved from *Press Uganda*: http://pressug.com/call-off-strike-health-monitoring-unit-urged-doctors/

Mugisa, A. (2012, 11 December). Uganda's health sector tops corruption index. Retrieved from *New Vision*: www.newvision.co.ug/new_vision/news/1311253/ugandas-health-sector-tops-corruption-index

Mungui-Pippidi, A. (2011). *Contextual choices in fighting corruption: Lessons learned*. Oslo: Norad.

Mungiu-Pippidi, A. (2015). *The quest for good governance: How societies develop control of corruption*. Cambridge: Cambridge University Press.

Musinguzi, B. (2017, 17 October). Health Monitoring Unit has recovered medicine worth UGX 30 B - Dr Ojera. Retrieved from *Uganda Radio Network*: https://ugandaradionetwork.com/story/health-monitoring-unit-has-recovered-medicine-worth-ugx-30b-dr-ojera

Mwesigwa, A. (2015, 10 February). Uganda crippled by medical brain drain. Retrieved from *The Guardian*: www.theguardian.com/global-development/2015/feb/10/uganda-crippled-medical-brain-drain-doctors

Mwesigwa, A. (2017, 10 November). Uganda: Doctors set three terms to end strike. Retrieved from *All Africa*: http://allafrica.com/stories/201711100177.html

Naazneen, B., Huybens, E., & Vinuela, L. (2014). *Institutions taking root: Building state capacity in challenging contexts*. Washington, DC: World Bank.

Namagembe, L. (2018, 7 February). Uganda: Medical interns on strike again over allowance, drug stock outs. Retrieved from *All Africa*: http://allafrica.com/stories/201802080165.html

Namuli, Z. (2017, 13 December). Doctors divided over Museveni offer, State house health unit as second strike stares at failure. Retrieved from *Nile Post*: http://nilepost.co.ug/2017/12/13/doctors-divided-over-museveni-offer-state-house-health-unit-as-second-strike-stares-at-failure/

Navot, D. (2014). The concept of political corruption: Lessons from a lost epoch. *Public Integrity, 16*(4), 357–373.

Ng'ang'a, D. (2017, 18 September). Uganda's health minister went undercover in a hospital to investigate corruption allegations. Retrieved from *Business Insider UK*: http://uk.businessinsider.com/ugandas-health-minister-went-undercover-in-a-hospital-2017-9

Nyamweya, N. N., Yekka, P., Mubutu, R. D. et al. (2017). Staff absenteeism in public health facilities of Uganda: A study in Bushenyi district on contributing factors. *Open Journal of Nursing, 7*, 1115-1130.

Okiror, S. (2017a, 25 September). Hospitals in crisis in Uganda as Middle Eastern countries poach medical staff. Retrieved from *The Guardian*: www.theguardian.com/global-development/2017/sep/25/hospitals-in-crisis-in-uganda-as-middle-eastern-countries-poach-medical-staff

Okiror, S. (2017b, 16 November). Uganda brought to its knees as doctors' strike paralyses health service. Retrieved from *The Guardian*: www.theguardian.com/global-development/2017/nov/16/costing-lives-doctors-strike-health-service-uganda

Osrecki, F. (2017). A short history of the sociology of corruption: The demise of counter-inductivity and the rise of numerical comparisons. *American Sociologist, 48*(1), 103–125.

Owusu, F. (2006). Differences in the performance of public organisations in Ghana: Implications for public-sector reform policy. *Development Policy Review, 24*(6), 693–705.

Peiffer, C., & Alvarez, L. (2016). Who will be the 'principled principals'? Perceptions of corruption and willingness to engage in anticorruption activism. *Governance, 29*(3), 351–369.

Peiffer, C., & Armytage, R. (2018). *Searching for success: A mixed methods approach to identifying and examining positive outliers in development outcomes*. Birmingham: Developmental Leadership Program.

Persson, A., Rothstein, B., & Teorell, J. (2013). Why anticorruption reforms fail—systemic corruption as a collective action problem. *Governance, 26*(3), 449–471.

Rijckegham, C., & Weder, B. (2001). Bureaucratic corruption and the rate of temptation: Do wages in the civil service affect corruption, and by how much? *Journal of Development Economics, 65*(2), 307–331.

Robert, H. (2003). *Political corruption in and beyond the nation state.* London: Routledge.

Roll, M. (2011). *The state that works: 'Pockets of effectivness' as a perspective on stateness in developing countries*. Mainz: Johannes Gutenberg University.

Rose, R., & Peiffer, C. (2016). Integrating institutional and behavioural measures of bribery. European *Journal of Crime Policy Research, 22*(3), 525–542.

Rose-Ackerman, S. (1978). *Corruption: A study in political economy.* New York: Academic Press.

Rose-Ackerman, S. (2015). Are corrupt elites necessary for corrupt countries? In C. Dahlstrom, & L. Wangnerud (Eds), *Elites, institutions and the quality of government*. London: Palgrave Macmillan.

Rothstein, B. (2011). *The quality of government: Corruption, social trust, and inequality in international perspective*. Chicago, IL: University of Chicago Press.

Rothstein, B., & Teorell, J. (2015). Causes of corruption. In P. Heywood (Ed.), *Routledge handbook of political corruption.* London: Routledge.

Ssali, G. (2017, 25 March). PAC to start biting with a name and shame anti-corruption campaign. Retrieved from *The Independent:* www.independent.co.ug/pac-start-biting-name-shame-anti-corruption-campaign/

Ssewanyana, S., Bategeka, L., Mugisha, F., & Muwanika, F. (2010). *Governing health service delivery in Uganda: A tracking study of drug delivery mechanisms*. Kampala: Economic Policy Research Centre.

Stringer, J., & Richardson, J. (1979). 'Managing the political agenda: Problem definition and policy making in Britain'. *Parliamentary Affairs, 33*(1), 23–39.

Tangri, R., & Mwenda, A. (2006). Politics, donors and the ineffectiveness of anti-corruption institutions in Uganda. *Journal of Modern African Studies, 44*(1), 101–124.

Tendler, J. (1997). *Good government in the tropics*. Baltimore, MD: Johns Hopkins University Press.

The Economist. (2010, October 28). The fight against corruption. Naming and shaming. Retrieved from www.economist.com/node/17361580

The Independent. (2017, 17 September). Disguised Uganda minister catches corrupt hospital workers. Retrieved from www.independent.co.ug/disguised-uganda-minister-opendi-catches-corrupt-hospital-workers/

The Judiciary. (2017, November 30). Name and shame corrupt officials, Hon. Justice Katureebe tells JLOS stakeholders. Retrieved from: www.judiciary.go.ug/data/news/456/Name%20and%20Shame%20Corrupt%20Officials,%20Hon.%20Justice%20Katureebe%20Tells%20JLOS%20Stakeholders.html

Thornton, P. (2012). *Our side of the story: Ugandan health workers speak up.* London: Voluntary Services Overseas.

Transparency International. (2018, 14 March). Global Corruption Barometer. Retrieved from www.transparency.org/research/gcb/overview

Tweheyo, R., Daker-White, G., Reed, C. et al. (2017). 'Nobody is after you; its your initiative to start work': A qualitative study of health workforce absenteeism in rural Uganda. *BMJ Global Health, 2,* e000455.

Ugur, M. D., & Dasgupta, N. (2011). *Evidence on the economic growth impacts of corruption in low-income countries and beyond: A systematic review.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

UNAIDS (Joint UN Programme on HIV & AIDS). (2016). Country factsheet: Uganda. Retrieved from: www.unaids.org/en/regionscountries/countries/uganda

URN. (2017, 28 November). Nurses demand 400% salary increment within 7 days. Retrieved from *The Observer:* http://observer.ug/news/headlines/56188-nurses-demand-400-salary-increment-within-7-days.html

Van Veldhuizen, R. (2013). The influence of wages on public officials' corruptability: A laboratory investigation. *Journal of Economic Psychology, 39*(C), 341–356.

Walton, G. (2013). Is all corruption dysfunctional? Perceptions of corruption and its consequences in Papua New Guinea. *Public Administration and Development, 33,* 175–190.

WHO (World Health Organization). (2018, 1 April). Health workforce. Retrieved from African Health Observatory: www.aho.afro.who.int/profiles_information/index.php/Uganda:Health_workforce_-_The_Health_System

World Bank. (2018, 14 March). World Development Indicators. Retrieved from http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators

Xu, K., Evans, D., Kadama, P. et al. (2006). Understanding the impact of eliminating user fees: Utilization and catastrophic health expenditures in Uganda. *Social Science & Medicine, 62,* 866–876.

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