

Corruption in the health sector in Anglophone West Africa: Common forms of corruption and mitigation strategies

September 2018

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Acknowledgments

This report forms part of a larger multi-country anti-corruption evidence (ACE) study in Bangladesh, Nigeria and Tanzania by SOAS University of London, United Kingdom (UK), in partnership with the London School of Hygiene and Tropical Medicine (LSHTM), UK, and the University of Nigeria, Nsukka (Enugu-campus). The ACE research consortium is funded by the UK Department for International Development (DFID). The University of Nigeria (Enugu-Campus) is grateful to Dr Pallavi Roy (SOAS), co-principal investigator for her valuable comments and ideation in preparing the report and to Joanna Fottrell, editor.

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List of Acronyms

ACC	Anti-Corruption Commission
ACE	Anti-Corruption Evidence
MeTA	Medicines Transparency Alliance
GDP	Gross domestic product
NHIS	National Health Information Scheme
SOAS	School of Oriental and African Studies,
TI	Transparency International
UNDP	United Nations Development Programme
WHO	World Health Organization

Executive summary

Background

Corruption is commonly defined as the misuse of entrusted power for private gain. In West Africa, corruption features across sectors, including health, where it can undermine the delivery of care, exacerbate health inequities and can mean the difference between life and death. This review sets out to understand the patterns of health-sector corruption in Anglophone West Africa by reviewing the literature on health and corruption in Ghana, Liberia, Nigeria, Sierra Leone and The Gambia. A total of 283 relevant publications were identified and retrieved, of which 61 met the inclusion criteria for detailed review.

The review describes the incentive structures identified in the literature that give rise to corruption, the impact of corruption for health workers and patients, and interventions that have successfully curbed particular behaviours. In so doing, the paper synthesises existing evidence to inform the planning, design and implementation of feasible anti-corruption strategies in the region.

Key findings

Five types of corruption in the health sector are commonly identified in the literature, namely: (1) absenteeism; (2) diversion of patients from the public to the private sector; (3) inappropriate prescribing; (4) informal payments/bribery; and (5) theft of drugs and supplies. Other more subtle manifestations of corruption are also discussed in the literature.

Generally, most studies discuss many different types of corruption, rather than analyse one behaviour or practice. While this is beneficial in identifying the diverse concerns and types of corruption in the region, a narrower focus on a particular form of corruption would provide the detailed understanding needed to design effective interventions or programmes to counter each behaviour.

Some studies identify governance structures as the origin of corruption. However the evidence suggests that corruption is then driven through informal social networks as patients seek out providers that they know socially, alongside economic drivers such as unpaid salaries, lack of credible opportunities to increase salaries, and stalled or slow promotion of health workers, which together encourage a culture of bribes where informal payments are often considered to be the norm.

Recommendations

The literature describes interventions that hold potential for curbing corruption in the health sector, but better monitoring and evaluation is needed to ascertain how cost-effective the different strategies are and suitability for different contexts. The main anti-corruption interventions and strategies evidenced to date include: 1) incentives for health workers, 2)

greater monitoring and evaluation of regulatory compliance, 3) improved transparency and accountability in health systems, and 4) education and awareness campaigns for patients and health workers.

Overall, the review demonstrates that corruption is increasingly recognised across Anglophone West Africa as a problem that restricts access to essential care and limits the effective functioning of health systems. To be effective, anti-corruption strategies must be comprehensive in nature and integrate coordinated reforms across the sector so that vertical approaches such as leadership initiatives, the setting up of regulatory bodies and auditors and improved incentives are complemented by horizontal strategies that engage frontline health workers and patients. Such reforms and anti-corruption strategies must also be sensitive to the broader social, legal, political and economic structures within specific countries in Anglophone West Africa.

1. Introduction

1.1. Background

Corruption, often defined as the abuse of entrusted power for private gain, cuts across all components of health systems (Transparency International (TI), 2016), and is perceived to be responsible for the failures within the health sector to translate the wealth of nations into wellbeing for citizens and health service users (World Bank, 2015). Manifestation of corruption in, low and middle-income countries undermine the delivery of care and exacerbate health inequities, and can mean the difference between life and death (Dovlo, 2012). According to the World Bank (2015), there are widespread failings within health infrastructure and service delivery in developing countries. Corruption in the health sector is associated with higher percentage of incidences of mortality and morbidity than in higher income countries (Akokuwebe and Adekanmbi, 2017). There are also financial consequences of corruption, with the high cost of combating it depleting government revenue (Hanna et al, 2011; Human Rights Watch, 2007; Holeman et al., 2016; Enakhimion, 2011).

West Africa is a low-resource region where all countries are classified by the World Bank as developing (World Bank, n.d.). Table 1 describes some critical socio-economic indices of Anglophone countries in West Africa).¹ The Gambia is the least populated country and Liberia is the poorest in the group. Nigeria is the most populous and richest country in the region, and ranks last in terms of its Corruption Perception Index score and TI ranking out of 180 countries for 2017 (TI, 2018). Sierra Leone has the lowest health expenditure of the countries studied, while Ghana spends the most on the health of its citizens and ranks highest in the 2017 Corruption Perception Index.

Table 1: Socio-economic indicators of West African Anglophone countries

Countries	Population	GDP/capita (US\$) (2016)	Health expenditure (US\$)	Corruption Perception Index score (2017)	Transparency International ranking (2017)
Ghana	28,206,728	1,513.5	31 (2017)	40	81
Liberia	4,613,823	455.4	23 (2014)	31	122
Nigeria	185,989,640	2,175.7	30 (2014)	27	148
Sierra Leone	7,248,000	505.2	14 (2014)	30	130
The Gambia	2,039,000	473.2	22 (2014)	30	130

Note: GDP = gross domestic product

Sources: Countryeconomy.com; TI (2018), World Bank (n.d.).

The five Anglophone West African countries under review have poor corruption index scores, which warrants detailed analysis in order to inform remedial measures and policies designed to combat corrupt practices within the health sector.

¹ Ghana, Liberia, Nigeria, Sierra Leone, The Gambia

1.2. Scope of the review

The current study seeks to identify evidence gaps across Anglophone West African countries so as to inform more detailed research into corruption in the region's health sector. To this end, it aims to identify the motivations behind specific rule violations, and to investigate whether [feasible changes in incentives and institutions](#) could result in behaviour change on the part of frontline staff and ultimately the delivery of better health outcomes (Khan, 2018; World Bank, 2015).

While some interventions have already been implemented in the region to curb corruption, the efficacy and effectiveness of these approaches remains unknown. Subsequently, there is a need for i) detailed analysis of the different manifestations of corruption, individuals and the processes that support it within health systems, and ii) a review of the studies that may have monitored and/or evaluated the impacts of different anti-corruption strategies. Such a synthesis is essential for the planning, design, re-modelling and implementation of future context-specific anti-corruption strategies, frameworks and policies.

As an overarching research question, the paper asks: what patterns of corruption exist in health sectors of Anglophone West Africa; what are the incentives that give rise to corrupt, inappropriate and ineffective care by frontline healthcare providers (i.e. those that interact with patients), as well as their managers; and how can these be eliminated?

The study examines evidence on: 1) different types and practices of corruption; 2) the (dis)incentives for corrupt behaviour among frontline healthcare providers and their managers; 3) the impact of corruption on health service users (e.g. patients); 4) existing policy, legal and regulatory frameworks that incentivise or seek to curb corrupt practices, as well as the organisations, associations, groups, lobbies and networks seeking to enforce regulatory practices.

1.3. Conceptual frameworks

The review was guided by two frameworks that help identify reasons why corruption is able to thrive in the health sector. First, Vian (2008) suggests that corruption in the health sector is driven by the interplay of three main forces of government agents, pressured clients and social norms. Government agents in power are pressured to indulge in corruption due to lack of credible systems. The clients who are in dire need of health services are prepared to engage in corrupt behaviour as long as they receive sought-after services. Finally, both government agents and clients rationalise and justify their actions on the basis that it is an accepted norm within their general society. Gaitonde et al (2016), in concurrence with Vian's framework, explains that health-sector corruption is sustained at levels of patients and health professionals, fee-payers and health suppliers/providers, as well as health facilities and suppliers.

A complementary second framework was adapted from the *Global Corruption Report: Corruption and Health* (TI, 2006), which highlights that complex, overlapping relationships

that exist between the different agents in the health sector create an opportunity, as well as a cover, for corruption within the sector. The report acknowledges that corruption between direct health service providers and their patients is the most dominant and pernicious form of corrupt behaviour. Although both frameworks provide insight into corruption in the health sector, there remains a need for evidence-based information that takes into consideration the peculiar context of individual societies and their health-related challenges.

1.4. Method

We conducted a systematic review of the literature published in English between January 2007 and June 2017 focused on the health sector in Anglophone West African countries under the West African Health Organization (WAHO) (namely: Ghana, Liberia, Nigeria, Sierra Leone and The Gambia). Different search methods were used to retrieve literature online using key Boolean operators. The search engines included Google, Google Scholar, PubMed, Researchgate and Yahoo. Print and/or online papers were mainly retrieved from the above databases, with additional hard copy sources retrieved manually from printed newspapers and text books, among other materials. Corruption-related literature that focused on sectors other than health were excluded from the review.

A total of 283 published, unpublished and grey literature were identified and accessed for relevance. The papers were initially assessed on the basis of appropriateness of content, with a special focus on the five Anglophone West African countries above. Sixty one (61) of the accessed documents met the inclusion criteria, and were therefore reviewed.

2. Findings

The recency of most papers retrieved suggests a surge in interest in the area of health-sector corruption between 2007 and 2017. Though the focus of the current study is on countries in Anglophone West Africa, no literature was found on The Gambia or Liberia.

Within the publications under review, there was a mix of approaches used to explore the topic of health-sector corruption. While some studies used a quantitative approach for data collection and analysis, the majority of the studies deployed a qualitative approach using interviews, observations, explorative methods and literature reviews in order to ascertain the incentives behind corruptive behaviour from health service providers, their managers and patients.

2.1. Forms of corruption

Five types of health-sector corruption were commonly identified in the literature, by order of frequency: (1) absenteeism; (2) diversion of patients from the public to the private sector; (3) inappropriate prescribing; (4) informal payments/bribery; and (5) theft of drugs and supplies. Other more subtle manifestations of corruption are also discussed in the literature. See Annex 1 for a summary of the diverse types of corruption within the health sector that are identified in the literature for Ghana, Nigeria and Sierra Leone.

Absenteeism

Absenteeism is commonly reported across studies (UNDP, 2011; Kamorudeen and Bidemi, 2012; Maduke, 2013; Chimezie, 2015; Mackey et al., 2016). This includes health staff not turning up for work, arriving late or leaving their workplace before normal closure time. For example, in Nigeria, publicly employed medical personnel are reported to abandon their official duties to attend to patients in private hospitals or hospitals where they work on a contractual basis. Some doctors serve as consultants in several hospitals, and therefore do not give their best to their primary place of work. Chimezie (2015) reports that doctors in Nigeria arrive very late to work and leave early, while some doctors perform treatments beyond their licenses and expertise.

While absenteeism is considered a major form of corruption among medical personnel in public hospitals in the region (Kamorudeen and Bidemi, 2012; Chimezie, 2015), many public health institutions often turn a blind eye to dual practice. Similarly to informal payments, dual practice is often rationalised among medical professionals as a means of making up for low wages (Turay, 2016; Ibenegbu, 2017). In fact Vian (2008) highlights that corruption is often enabled by political and economic factors that erode public service values, especially among public servants who are originally driven by moral obligation and concern for others. Hence, medical professionals employed in the public sector may not consider it a conflict of interest when they spend considerable amounts of time in private practice for personal financial gain to supplement the meagre salaries they receive in public service (Onwujekwe et al., 2010).

Diversion of patients from public to private clinics

Dual practice is commonplace in the health sector of countries with weak rules (Turay, 2016). Our review showed that health workers working in public facilities are quick to refer/divert patients to private facilities, where gains accrue to the deviant health worker (Chimezie, 2015; Ibenegbu, 2017; Agbenorku, 2012). At times excuses that services are not available in public hospitals are given for the diversion of patients whereas such services might be obtainable at the public facility.

Patients could be aware that the private facility has some connection to the health worker who made the referral (Vian, 2008). However, the patient is led to believe that referral is in his or her best interest. This makes it difficult for the patient to make an informed decision. It was also discovered that doctors and some senior nurses under the covering of consultancy choose to have patients directed to their private facilities, with the impression of speedier services (Mackey et al, 2016; Chimezie, 2015; Adegboyega and Abdulkareem, 2012). This tends to exacerbate in periods of industrial actions of public health facilities, and deprives certain classes of persons affordable healthcare (Maduke, 2013).

Inappropriate prescribing

Some corrupt health workers were reported to make prescriptions after arrangements with pharmaceutical companies and pharmacists, who offer kickbacks or outright bribes to health workers (Owusu-Bempah et al, 2013; UNDP, 2011; Mackey et al, 2016). Patients buy such prescriptions even when there are more effective and cheaper options. It was shown that such scenarios thrive owing to lack of public awareness on essential medicines list (Agbenorku, 2012; WHO, 2016).

Informal payments/bribery

The reviewed publications report regular occurrences of bribes between service users and healthcare staff, with the most common type of corruption being charges for hospital bed spaces in government-funded facilities. (Garuba et al., 2009; Stakeholder Democracy Network, 2013; Saka et al., 2016; Turay, 2016). Chimezie (2015) reports that doctors and nurses in Nigeria demand bribes from patients (e.g. monitoring babies for mothers) before they can be seen for assessment, and hence corruption is perpetrated by frontline staff engaging with service users. Turay (2016) reports demands for money in cases where services should be free, or extra charges in cases where costs should be minimal.

Although patients are sometimes allowed to legitimately pay for services by installment, they may not be discharged from a facility until payment is complete, including any additional costs incurred as a result of their prolonged stay. A Nigerian study even reports that recipients of healthcare in a particular rural area could pay in-kind using manual labour such as undertaking household chores and farming on the land of health workers (Onah and Govender, 2014), although these informal means of payments clearly raise questions regarding accountability.

Bribery and the demand for informal payments involves a complex exchange between both staff and service users, for which it is difficult to pinpoint the driver of this corrupt behaviour. Indeed, it can be difficult to identify true instances of corruption at times, as the line between bribes and gifts may be unclear until gifts begin to influence the behaviour of staff. The literature provides evidence to suggest that corrupt practices seem to be accepted by many service users – particularly if they cut short the bureaucratic process and speed up service delivery – and that a bribery-tolerant climate has arisen where a service user may even offer a bribe or gift to an undemanding health worker (Adegboyega and Abdulkareem, 2012; Saka et al., 2016; Hoffman and Patel, 2017). While one could easily imagine a corrupt staff member demanding bribes from patients, one study (UNDP, 2011) reports service users who sympathise with the challenging/strenuous working conditions of health staff and initiate bribery.

Although demand for informal payments amounts to bribery, the literature describes instances where informal payments are considered justified by healthworkers and/or patients. At times, demands for payment arise because supply of free commodities and medicines by the government is irregular and insufficient (Azuh, 2012; Saka et al., 2016), and health workers step in to purchase supplies from the open market and then charge fees to patients. Such services may include bed space, drugs or equipment (e.g. mosquito nets) that are meant to be distributed freely, and the irregularity in supply from government-run facilities provides an opportunity for corruption to thrive.

Theft or diversion of drugs, medical supplies and other public resources

Theft and diversion of drugs, vaccines and other medical supplies for private use has been observed as commonplace, with diverted supplies mostly thought to be sold for private gain (Vian and Nordberg, 2008; UNDP, 2011; Maduke, 2013; Gaitonde et al., 2016; Mackey et al., 2016; Saka et al., 2016; Turay, 2016; Akokuwebe and Adekanbi, 2017). Health workers reportedly go as far as substituting original materials with inferior ones (Akinbajo, 2012).

This practice is common in government-owned facilities, and contributes significantly to a shortage of drugs. Unlike informal payments which are ‘institutionalised’ and have become the norm for many health workers and patients, however, theft of pharmaceutical products is carried out by health workers who are either acting alone or in collaboration with other staff within the health facility (Akokuwebe and Adekanmbi, 2017). Chimezie (2015) reports that doctors in Nigeria also use government facilities to provide private services at the expense of the public.

Other forms of corruption

The studies under review report other improper practices such as poor recruitment processes (where health staff are hired on a non-merit basis); ‘ghost workers’ on the payroll (where officials include names of non-existent workers on the payroll and divert accrued pay for private use); abuse of public spaces and facilities (where public health facilities and environments are rented or utilised for private gain); nepotism and favouritism; fraud; and the production and distribution of counterfeit drugs (Owusu-Bempah et al, 2013; Ozah, 2017; Osimen et al, 2013).

The processes involved in the procurement of drugs and other medical equipment have received considerable attention as an area prone to corruption in Anglophone West Africa and are observed to be weak and marred by mismanagement (Amnesty International, 2011; UNDP, 2011; Kamorudeen and Bidemi, 2012; Maduke, 2013). Mackey et al. (2016) attributes this to the technical complexity of procurement systems and processes, the numerous stages involved, and the requirement for expertise; corruption seems to spread from the personnel who identify items that need to be procured, to companies who submit tenders, to irregular practices in awarding procurement contracts and approving funds. Other concerns identified by Mackey et al (2016) include contractors supplying sub-standard products and bribery of ministry officials to release drugs/materials.

The Association of Chartered Certified Accountants (2013) observes that the NHIS in Ghana has faced diverse challenges connected to corruption, including long delays in provider reimbursement that threatens the financial sustainability of hospitals, accusations of fraud and abuse, inaccurate record-keeping, delays in issuing patient registration cards, and duplicate registration of patients to avoid payment of missed premiums.

Mooketsane and Phirinyane (2017) state that bad governance and corrupt practices such as mismanagement of funds are key processes that sustain corruption in the health sector across West Africa. However, the authors consider religious bodies such as churches, that are known to have experience in health management, to hold promise in keeping health-sector corruption in check.

2.2. Causes of corruption

According to the literature, corruption is driven through informal social networks as well as economic drivers. Among the factors that incentivise corruption in the health sector is patients' belief that one cannot secure quality healthcare unless you are known to service providers (Kamorudeen and Bidemi, 2012). There are also concerns regarding the lack of work incentives for frontline service providers and their managers, such as timely payment of salaries, in-service trainings and opportunities for promotion (Onwujekwe et al., 2010; Ojiaku, 2014). Hoffman and Patel (2017) argue that patients accepting corrupt practices as the norm and not questioning medical staff encourages corruption in the health sector.

Most of the studies under review concur that cash payments for services are handed over to healthcare providers by patients (Onwujekwe et al., 2010; Onotai and Nwankwo, 2012; Onah and Govender, 2014; Saka et al., 2016), with bank payments or online transactions rarely reported as the means of payment in health facilities in the region. The studies are not explicit as to whether irregularities occur differently in health facilities that rely on out-of-pocket or cash payments alone as a legitimate means of payment, as opposed to those facilities that accept both out-of-pocket payments and payment via health insurance. However, there is agreement across the studies that out-of-pocket payments facilitate and encourage corruption (Kamorudeen and Bidemi, 2012; Kankeu and Ventelou, 2016; Saka et al., 2016; Turay, 2016; Akokuwebe and Adekanbi, 2017; Hoffman and Patel, 2017).

Major incentives that encourage diversion of resources from the public sector by health workers include poor documentation, lack of public awareness regarding healthcare processes, and inadequacies in monitoring and evaluation (Vian, 2008; Stakeholder Democracy Network, 2013). These conditions give room for providers to divert drugs, vaccines and other consumables (even from donor agencies) to their private clinics, and for personal use and sales. Money meant for equipment, fuel, food items and other resources are not spared either (Akokuwebe and Adekanbi, 2017). In addition, when drugs are in low supply, it becomes justifiable to extort money from patients who are in dire need of such medication.

2.3. Inequity dimensions of corruption

Although corruption in the health sector is reported in both urban and rural areas, the studies suggest that most victims are poor uneducated patients in rural areas who willingly make informal payments to access healthcare (Adegboyega and Abdulkareem, 2012; Agbenorku, 2012; Ozah, 2017; Kankeu and Ventelou, 2016). A case in point is a study by the Stakeholder Democracy Network (2013) in a typical rural community of Rivers State, Nigeria, which discloses how patients see medical professionals as infallible, and always do as they are told without question. Poorer patients may particularly be at risk. Studies point to poorer patients giving bribes to medical and non-medical staff to help them access healthcare, as well as in return for certain 'favours' such as jumping queues and obtaining medication quickly that is ordinarily free (Kamorudeen and Bidemi, 2012; Osimen et al., 2013; Saka et al., 2016). These studies also suggest that the relatives of poor patients willingly pay bribes to enable their sick ones to receive medical attention (ibid.). In fact, there seems to be a general perception amongst health service users (across income divides) that there is nothing wrong with bribery to gain access to much needed medical care, and many individuals tend to consider it appropriate (Agbenorku, 2012; Stakeholder Democracy Network, 2013; Dizon-Ross et al., 2017). However, such informal payments for care can reduce access to services, especially for the poor who cannot afford such fees, and can cause delays in care-seeking behaviour.

2.4. The effects of corruption

Corruption favours the construction of hospitals and the purchase of expensive, high technology equipment over primary healthcare programmes, such as immunisation and family planning. As resources are drained from health budgets through embezzlement and procurement fraud (Obi, 2016), less funding is available to pay salaries and to fund operations and maintenance, which leads to demotivated staff, lower quality of care and reduced service availability and use.

As many studies reveal, corruption in the health sector has varying consequences, which demand further research and investigation. It manifests as specific areas of very low immunisation/vaccination rates, increased mortality rates amongst patients (particularly for infants and children, with mortality rates estimated to be almost twice as high in countries with high corruption than in countries with low corruption (World Bank, 2015), gross

absence of service delivery, lack of transparency, low utilisation of public health clinics and reduced satisfaction with care, and lack of credibility in dispensing health supplies, to mention but a few (Vian and Nordberg, 2008; Adegboyega and Abdulkareem, 2012; Hadi, n.d; Agbenorku, 2012; Onotai and Nwankwo, 2012; World Bank, 2015; Gaitonde et al., 2016; Tormusa and Idom, 2016; Mooketsane and Phirinyane, 2017). In addition, corruption in the health sector has been noted to significantly affect the cost of service, staff development, drugs and consumables, as well as the availability and quality of health service equipment (Akinbajo, 2012; Dominic, 2012). Gaitonde et al. (2016) summarises the different effects of corruption across different levels, including general effects, effects on the healthcare system and those on health outcomes.

Table 2 summarises the impact of different forms of corruption across different areas of the health sector.

Table 2: Summary of the impact of corruption across the health sector

Area of health sector or system within which corruption occurs	Form of corruption	Impact of corruption	Sources
1 Construction and rehabilitation of health facilities	<ul style="list-style-type: none"> Bribes, kickbacks and political involvement influence the contracting process. Contractors fail to deliver and are not held accountable. 	<ul style="list-style-type: none"> High-cost, low-quality facilities and construction work. Facilities are built in locations that do not correspond to needs, which results in inequities in access. Biased distribution of infrastructure that favours urban- and elite-focused services. 	Vian and Nordberg (2008); Akpomuvie (2010); Onotai and Nwankwo (2012); Mooketsane and Phirinyane (2017); Enakhimion (2011); Ibenegbu (2017)
2 Procurement of equipment, supplies and drugs	<ul style="list-style-type: none"> Bribes, kickbacks and political involvement influence the specifications and winners of bids. Collusion or bid-rigging during procurement. Lack of incentives to choose low- cost but high-quality suppliers. Unethical drug promotion. Suppliers fail to deliver and are not held accountable. 	<ul style="list-style-type: none"> High-cost, inappropriate or surplus drugs and equipment. Inappropriate equipment purchased without consideration of true need. Sub-standard equipment and drugs Inequities due to inadequate funds left to meet all needs. 	Vian (2008); Vian and Nordberg (2008); Agbenorku (2012); World Bank (2015); Akokuwebe and Adekanbi (2017).
3 Distribution and use of drugs and supplies in service delivery	<ul style="list-style-type: none"> Theft (for personal use) or diversion (for private-sector re-sale) of drugs/supplies at storage and distribution points. Sale of drugs or supplies to end-users (patients) that are supposed to be free. 	<ul style="list-style-type: none"> Low utilisation of drugs and supplies. Inadequate treatment of patients. Patients must make informal payments to obtain drugs. Interruption of treatment or incomplete treatment, leading to anti-microbial resistance. 	Vian and Nordberg (2008); Amnesty International (2011); Azuh (2012); Stakeholder Democracy Network (2013); Owusu-Bempah et al (2013); ; Kankeu and Ventelou (2016).

Area of health sector or system within which corruption occurs	Form of corruption	Impact of corruption	Sources
4 Quality assurance of products, services, facilities and professionals	<ul style="list-style-type: none"> • Bribes to speed up or gain approval for drug registration, drug quality inspections, or certification of good manufacturing practices. • Bribes or political involvement influence the outcome of inspections or suppress findings. • Biased application of sanitary regulations for restaurants, food production and cosmetics. • Biased accreditation, certification or licensing procedures and standards. 	<ul style="list-style-type: none"> • Sub-therapeutic or fake drugs are allowed on the market. • Marginal suppliers are allowed to participate in bids and secure government work. • Increased incidence of food poisoning. • Spread of infectious and communicable diseases. • Poor-quality facilities continue to function. • Incompetent or fraudulent professionals continue to practice. 	AkuaAgyepong (2008); Garuba et al. (2009); Bloom et al. (2011); Kamorudeen and Bidemi (2012).
5 Education of health professionals	<ul style="list-style-type: none"> • Bribes to gain places at medical school or other pre-service training. • Bribes to obtain passing grades. • Political influence and nepotism in the selection of candidates for training opportunities. 	<ul style="list-style-type: none"> • Incompetent professionals are able to practice medicine or work as health professionals. • Loss of trust in the health sector. 	Agbenorku (2012); ; Mackey et al. (2013); Maduke (2013).
6 Medical research	<ul style="list-style-type: none"> • Pseudo-trials funded by drug companies that are really for marketing purposes. • Misunderstanding of informed consent and non-compliance with other research and ethics standards standards. 	<ul style="list-style-type: none"> • Violation of individual rights. • Biases and inequities in research. 	Garuba et al. (2009); Kamorudeen and Bidemi (2012).
7 Provision of services by medical personnel and other health workers	<ul style="list-style-type: none"> • Use of public facilities and equipment to treat private patients. • Unnecessary referrals to private practice or privately owned ancillary services. • Absenteeism. • Informal payments from patients to access services. • Theft of user fee revenue. • Diversion of budget allocations. 	<ul style="list-style-type: none"> • Government loses value of investments without adequate compensation. • Employees are not available to serve patients, leading to inadequate service provision and unmet needs. • Higher unit costs for health services actually delivered. • Reduced utilisation of services by patients who cannot pay. • Impoverishment as citizens use income and sell assets to pay for healthcare. • Reduced quality of care due to loss of revenue. • Loss of citizen faith in government. 	Vian and Nordberg (2008); Osimen et al (2013); Ozah (2017); Chimezie (2015); Kankeu and Ventelou (2016).Saka et al. (2016); Turay (2016).

2.5. Strategies, initiatives and interventions to reduce corruption in the health sector

Studies that highlight interventions to combat corruption within health systems concur that there is no single measure that best addresses the different forms described above (Vian and Nordberg, 2008; Azuh, 2012). See Annex 1 for a summary of interventions that have been implemented to tackle different forms of health-sector corruption in Ghana, Nigeria and Sierra Leone.

Proposed interventions include guidelines that prohibit doctors from accepting benefits from the pharmaceutical industry, internal control practices in community health centres, and increased transparency and accountability for healthcare service payments combined with strict sanctions on informal payments (Hussmann, 2010; Dabo et al, 2014; Gaitonde et al., 2016; Mackey et al., 2016). Maduke (2013) lists **other** proactive measures to reduce corruption in the health sector, including: enhanced awareness and transparency; the development of health leadership and management; promotion, enforcement, detection and prosecution; improved incentives for health providers to deliver quality care; and ethics training for health workers and other staff. It also recommends that low- and middle-income countries should institutionalise the public-private partnership (PPP) model in their healthcare sector, on the basis that public-private interaction offers opportunity to leverage private investments in the sector and enhances improvements in service delivery, as well as increasing access to quality healthcare.

It should be noted, however, that other studies suggest that anti-corruption approaches that are vertical in nature, flowing from the apex of political governance, can overlook the actual actors who are undertaking corrupt behaviour (Khan, 2017; World Bank, 2015; Dabo et al, 2014; Hussmann, 2010;). This is because top-down rules from such levels often fail to capture the interests and ideas of those for whom the rules are enforced, which creates an 'us-them' dynamic and leads to health workers collaboratively creating strategic pathways to disregard rules.

Having reviewed the literature, we find four main types of intervention to curb corruption in the health sector, namely: (1) Adequate motivational incentives and guaranteed regular salaries for health workers; (2) Adopting ICT-based systems for monitoring procurement of health supplies and general healthcare operations; (3) Effective monitoring and evaluation of healthcare operations; and (4) Public awareness and sensitisation regarding corrupt practices for healthcare workers and seekers. We consider each intervention in turn below.

Incentivising health workers and communities

Several studies conclude that improving incentives for healthcare professionals will encourage them to deliver a higher quality of care, which will subsequently mean that patients do not need to resort to bribes to ensure that their healthcare needs are met (Maduke, 2013; Agbenorku, 2016; Hoffman and Patel, 2017; Mitchell, 2017).

Some authors allude to the poor remuneration of health staff as the reason that they engage in bribery and theft, and so canvass for improved earnings (Chimezie, 2015; Osimen et al, 2013; Stakeholder Democracy Network, 2013; Agbenorku, 2012; Akokuwebe and Adekanmbi, 2012; Azuh, 2012; Uzochukwu et al., 2011; Savedoff, 2007; ;). Azuh (2012) suggests that poor working conditions are principal to corruption in the health sector within low- and middle-income countries, and often leads to the mismanagement of funds and embezzlement (see also Onotai and Nwankwo, 2012; Obi, 2016).

The studies recommend that healthcare funding is increased by putting more resources into the sector, as well as restructuring insurance schemes to be more inclusive, such that community-based health insurance better covers the general population. Vian and Nordberg (2008), recommend tight regulations against absenteeism in particular, with the application of sanctions and rewards to curb this behaviour.

ICT for procurement and health system operations

As mentioned previously, out-of-pocket payments are deemed to enable bribery and the arbitrary inflation of medical costs. It has been suggested that electronic procurement systems should be used to monitor payments, in order to increase transparency (Association of Chartered Certified Accountants, 2013; Maduke, 2013; UNDP, 2011; Onwujekwe, 2010).

The National Health Insurance Authority in Ghana has already deployed ICT to improve service provision. Dizon-Ross et al. (2017) examined distribution programmes of treated mosquito nets administered through existing health centres and, contrary to most other studies reviewed, found that the health system performed better, partly owing to ICT and its monitoring efficiency.

Several studies also recommend that automated auditing processes could reduce corruption in the health sector (Vian, 2008; Association of Chartered Certified Accountants, 2013; Holeman et al., 2016). To combat corrupt practices in approving tenders, some studies recommend the use of electronic media to publicise and update the tender and supply process, while others suggest the deployment of management information systems to monitor the flow of supplies as well as frequent internal and external audits (Vian, 2008; Association of Chartered Certified Accountants, 2013; Tormusa and Idom, 2016).

Effective monitoring of healthcare operations

Corruption is at most times invisible, difficult to detect, and often highly politicised, all of which require better indicators, data collection, reporting and analysis. Turay (2016) points out that the reluctance by health-sector managers and administrators to instill values of integrity, transparency and accountability in the sector enables corruption to thrive. In order for anti-corruption efforts to succeed, it is suggested that transparency and disclosure in financial and procurement systems need to be enhanced, and that different actors and organisations need to work through multi-stakeholder partnerships.

The studies provide evidence that some health facilities are characterised by weak internal control mechanisms as well as irregular or non-existent auditing. By improving monitoring

and supervision within these health facilities, the studies suggest that the diversion of funds and drugs could be reduced (Bloom et al., 2011; UNDP, 2011; Gaitonde et al., 2016; Turay, 2016). Vian (2008) also recommends fraud control units, training of internal auditors and surveillance systems to tackle corruption in the health sector. Tormusa and Idom (2016) recommend a whistle-blowing mechanism as an essential avenue to encourage the reporting of misconduct, fraud and corruption. However, this must be done by providing effective protection for whistle-blowers.

Community monitoring for accountability has proven effective in reducing medicine stock outs, unjustified absenteeism, informal payments, and other forms of abuse of power (Human Rights Watch, 2007; Vian and Nordberg, 2008; Bloom et al., 2011; UNDP, 2011; Mackey et al., 2016). These strategies need to be adapted to context, however, so that they pay attention to local knowledge and build on local values that are compatible with improved integrity and better governance. Relating to theft, recommendations and interventions include effective store management procedures, appropriate staffing, deployment of security personnel, and regular checks of stores and store records (Garuba et al., 2009).

In addition, personal gains from corrupt behaviour need to be curbed by instituting 'effective sanctions' (Gaitonde et al., 2016; Turay, 2016). In this regard, the judiciary must be given adequate freedom to investigate perpetrators within the health sector, coupled with the power to enforce sanctions on guilty parties. In this way, the use of a 'top-down' discipline-based strategy could help governments to establish anti-corruption laws and facilitate legislation and regulation governing the health sector, especially with regards to pharmaceutical companies.

Indeed, as part of interventions to curb corruption in Nigeria's health sector, Bloom, et al. (2011) reveal that the National Association of Patent Medicine Dealers punishes members who supply fake or expired drugs or sell in unlicensed zones. Other bodies and organisations in the country that contribute to combating corruption include: the Economic and Financial Crime Commission (EFCC), the Independent Corrupt Practices Commission (ICPC), the National Agency for Food and Drug Administration and Control (NAFDAC), the Nigerian Ports Authority (NPA), the Ministry of Health (MoH), the Nigeria Police (Anti-Fraud Unit), the Ministry of Finance (MoF) and the National Drug Law Enforcement Agency (NDLEA). Other bodies highlighted by the studies elsewhere in the region include local government authorities, hospital boards, and the Human Rights Commission. While these agencies sometimes work in collaboration, a more structured approach that is specifically oriented to tackling corruption would be effective in detecting and addressing issues of malpractice. The studies call on anti-corruption agencies within the region to be more proactive in identifying, investigating and following through on credible allegations of corruption.

Raising awareness of corruption

Maduke (2013) emphasises the role of collective beliefs, norms and expectations in the giving and taking of bribes in Nigeria, and suggests that this 'normalization of bribery' needs to be effectively targeted among service users and service providers through informed

communication and sensitisation. The author also recommends the implementation of payment systems reforms, while Onwujekwe et al. (2010) and Tormusa and Idom (2016) suggest that informal payments across the region may be reduced by making sure that patients are aware of official pricing policies.

In Ghana, the United Nations Development Programme (UNDP, 2011) highlights the Medicines Transparency Alliance (MeTA), which initiated multi-stakeholder councils that were charged with the task of generating and disclosing information regarding the price, quality, availability and promotion of medicines. In a later study by the World Health Organization (2016), MeTA was found to have succeeded in bridging information asymmetry through stakeholder collaboration and to have also achieved the removal of levies on products in lists of national essential medicines.

Vian (2008) suggests that interventions to educate or change beliefs could contribute to the effectiveness of organisational-level anti-corruption strategies. Further to this, Holeman et al. (2016) suggest that patients should be sensitised and equipped with the necessary tools to report poor service delivery and perceived corrupt acts, with the aim to improve accountability and quality of services received. It is noted that penalties should not be too harsh, however, as this could create the need to conceal corruption.

3. Discussion and conclusion

In systematically reviewing the literature published from 2007 to 2017 on the dynamics of health-sector corruption in Anglophone West Africa we sought to identify different forms of corruption, the (dis)incentives that fuel or curb particular behaviours and the impact it can have on the lives of service users in the region. From the evidence, it is clear that corruption causes unequal distribution of income, inhibits the improvement or reform of services, increases the cost of key public services, and limits access for those least able to pay.

Our objective was to inform strategic plans aimed at tackling corruption and ultimately to help channel the very limited resources in low-income settings such as those in Anglophone West Africa. There is increasing need for health policy-makers, planners and donors to understand how corruption affects healthcare access and outcomes, and what can be done to combat corruption in the sector. Behavioural and anthropological perspectives may also be required to probe individual and social characteristics that influence the behaviour of government agents, frontline staff and patients engaging in diverse forms of corruption.

Generally, most studies discuss different types of corruption in one paper rather than analyse one behaviour or practice. While this is beneficial in identifying the diverse concerns and types of corruption in the region, a narrower focus on a particular form of corruption would provide the detailed understanding needed to design effective interventions or programmes to counter it. Although the end goal of the corrupt practices and behaviours identified in the literature fits with a universal understanding of corruption (namely, the misuse of power for private gain), the individuals or groups involved and the motivations behind each form of corruption may differ.

Most studies tend to identify authorities at the apex of governance structures as the origin of corruption. Adegboyega and Abdulkareem (2012), and Anyika (2014) identify poor governance structures and weak accountability systems as responsible for widespread corruption in Nigeria and across Anglophone West Africa more generally, and Akpomovie (2010) comments that most governments in the region (and particularly in Nigeria) ‘play politics’ with healthcare so that communities that support incumbent governments receive health services over those that do not. In Ghana, Agbenorku (2012) reports ‘quiet corruption’ and embezzlement that has resulted in poor working conditions as well as loss of patients’ lives, and highlights instances of fraud and forgery as a result of auditing of the NHIS that has denied patients access to quality health services. Vian and Nordberg (2008) describe the draining of health budgets in Anglophone West Africa through embezzlement and procurement fraud. As a consequence of this sort of corruption at government level, less funding is available to pay salaries and fund operations and maintenance, which leads to de-motivated staff, lower quality care and reduced service availability and use. While these findings are very important, unfortunately they do not seem technically feasible to address, since they deal with leadership and would require far-reaching efforts in terms of legalities and constitutional approaches.

The studies identify intervention strategies that hold potential but monitoring and evaluation is needed. For instance, informal payments could be reduced through efforts to educate and raise awareness amongst patients of official pricing policies, through implementation of payment systems reforms, and by incentivising healthcare professionals to provide good quality care so that patients do not need to resort to bribes. Price monitoring, through electronic procurement systems that will increase transparency as well as regular internal and external audits, will also help to keep corruption in check. Community monitoring for accountability has also proven effective in reducing medicine stock outs, unjustified absenteeism, informal payments, and other forms of abuse of power. These strategies need to be adapted to context, however, paying attention to local knowledge and building on local values that are compatible with improved integrity and better governance.

Other promising interventions include improvements in the detection and punishment of corruption, especially efforts that are coordinated by independent agencies, as well as guidelines that prohibit doctors from accepting benefits from the pharmaceutical industry, internal control practices in community health centres, and increased transparency and accountability for co-payments (i.e. payments shared by service users and health insurance). To date, monitoring and evaluation studies of interventions in the region are rare, and there is a need to evaluate the impacts of all anti-corruption interventions, including their potential adverse effects.

Anti-corruption strategies must be comprehensive in nature, integrating coordinated reforms across the sector. The review shows that corruption in Anglophone West African Health systems is widespread and pervasive, therefore it can only be effectively addressed using integrated reforms that are sensitive to the broader social, legal, political and economic structures within specific countries. Vertical, top-down approaches (e.g. leadership initiatives, establishing fraud control units, internal auditing, improving incentives etc.) must be complemented by horizontal strategies (e.g. public awareness campaigns) that engage and neutralise corruption at grass-roots level where frontline hospital staff engage with service users and where most reported forms of corruption occur (Khan, 2018).

Based on the evidence reviewed in this study, the following key interventions are recommended to curb corruption in Anglophone West Africa:

- 1 Adequate incentives and guaranteed regular salaries for health workers:** Low, irregular wages represents one area of temptation for corrupt behaviour that needs to be addressed by governments, health ministries and managers (Onwujekwe et al., 2010; Aregbeshola, 2016; Tormusa and Idom, 2016). Defining and monitoring clear performance expectations of civil servants, as well as instilling norms of professional behaviour through a code of ethics for health workers are also essential (Maduke, 2013). Good performance should be rewarded and sanctions should be applied for poor performance or corrupt behaviour (Kamorudeen and Bidemi, 2012; Tormusa and Idom, 2016).
- 2 Monitoring and evaluation of regulatory compliance:** To instill good governance, relevant supervisory agencies should ensure administrative compliance with stipulated rules and regulations in collaboration with anti-corruption organisations and initiatives

(Tormusa and Idom, 2016). Public office holders should be charged with demonstrating a sense of accountability through adequate checks and balances, and should encourage a culture of transparency through the publication of healthcare expenditures (Kamorudeen and Bidemi, 2012). Whistle-blowing mechanisms could be implemented with strict sanctions for corrupt behaviour among health workers. Local governments could benefit from frequent audits, which have been seen to encourage the provision of more responsible public services in Ghana (Agbenorku, 2012). Lewis (2006) also recommends education and regular checks on staff.

- 3 **Accountability and transparency in health systems:** ICT systems should be utilised to measure procurement, service delivery and health outcomes. Open contracting should be used so that information is accessible throughout key stages of the procurement process, from publishing needs assessments through to quality assurance and contract completion (Mackey et al., 2016).
- 4 **Education and awareness-raising around corruption:** Seminars, symposiums and other education programmes would enlighten health workers and officials on the dangers and negative impacts of corruption on both themselves and patients (Akokuwebe and Adekanmbi, 2017). Public awareness campaigns should be rolled out to ensure that patients are knowledgeable about free drugs and services and official pricing policies. Patients should also be made aware of the possibility of overcharging by health providers and the correct procedure to report wrongdoings to the appropriate authority (Onwujekwe et al., 2010).

Annex 1

Table A1: Categorisation of the main types of health-sector corruption in Anglophone West African countries and interventions to curb them

Country	No. of papers reviewed	Types and causes of corruption	Main interventions to curb corruptive behaviour
Ghana	9	<p>a. Payment of bribes to ‘jump the queue’ to receive treatment or services, to receive better or more care, to obtain drugs, or simply to receive any care at all.</p> <p>Sources: Agbenorku (2012); Association of Chartered Certified Accountants (2013); Dizon-Ross et al (2017).</p>	<p>a. Incentive structures and the payment of good salaries to health workers should act to reduce the system (and expectation for) informal payments within the sector. Regular audits and checks on staff conducted by the central government have proven to encourage more responsible public service provision.</p> <p>Sources: Vian (2008); UNDP (2011); Agbenorku (2012); Association of Chartered Certified Accountants (2013); WHO (2016).</p>
		<p>b. The sale of public positions and payment of bribes to secure promotions, as well as the expectation that newly hired and promoted staff must find the resources to ensure their continued employment and advancement.</p>	<p>b. Health professionals and the public should be educated to help fight this ‘norm’.</p> <p>Sources: UNDP (2011); Agbenorku (2012); Dizon-Ross et al. (2017).</p>
		<p>c. Inadequate salaries and supervision of health workers.</p> <p>Sources: Agbenorku (2012); Maduke (2013).</p>	<p>c. The centralised hiring, promotion and deployment of public health workers in all countries could effectively neutralise the role of local supervision that gives room for corruption.</p>
		<p>d. Poor supply and quality of medical equipment, and poor working conditions generally</p> <p>Source: Agbenorku (2012); WHO (2016)</p>	<p>d. Provision of adequate equipment for effective service delivery, and improving working conditions by the government.</p> <p>Sources: Agbenorku (2012); Association of Chartered Certified Accountants (2013).</p>
		<p>e. An imbalance of decision-making power between dominant political actors, weaker civil society and healthcare managers coupled with poor accountability systems.</p>	<p>e. The government should promote good governance and ensure that people are held accountable for their offences. Strict measures should be explored, including total withdrawal/dismissal from service.</p> <p>Sources: Agyepong (2008); Vian (2008); Agbenorku (2012); Holeman et al. (2016); Mooketsane and Phirinyane (2017).</p>
		<p>g. Information asymmetry (one party [usually the professional] having better information than the other [service receiver]).</p> <p>Source: WHO (2016).</p>	<p>g. Public sensitisation for healthcare receivers to be abreast of relevant information e.g. essential medicines list, pricing, etc.</p> <p>Sources: Agbenorku (2012); WHO (2016); Dizon-Ross et al. (2017).</p>
		<p>h. Lack of monitoring of the National Health Information Scheme (NHIS).</p>	<p>h. Information communication technology (ICT) should be used in monitoring the NHIS.</p> <p>Source: Association of Chartered Certified Accountants (2013).</p>

Country	No. of papers reviewed	Types and causes of corruption	Main interventions to curb corruptive behaviour
Nigeria	50	<p>a. Low wages received by health workers lead to absenteeism, as individuals seek alternative employment to supplement their earnings.</p> <p>Sources: Vian and Nordberg (2008); Onwujekwe et al. (2010); UNDP (2011); Azuh (2012); Akwataghibe et al. (2013); Maduke (2013); Stakeholder Democracy Network (2013); Maduke (2013); Ojiaku (2014); Chimezie (2015); Mackey et al. (2016); Tormusa and Idom (2016).</p>	<p>Adequate motivational incentives and guaranteed regular salaries for health workers will help reduce absenteeism.</p> <p>Sources: Vian and Nordberg (2008); Onwujekwe et al. (2010); Agbenorku (2012); Maduke (2013); Stakeholder Democracy Network (2013); Ojiaku (2014); Saka et al. (2016).</p>
		<p>b. Poor governance structures.</p> <p>Sources: Vian (2008); Vian and Nordberg (2008); Akpomuvie (2010); Onotai and Nwankwo (2012); World Bank (2015); Saka et al. (2016); Mooketsane and Phirinyane (2017); Anyika (2014); Obi (2016)</p>	<p>b. Public office holders in Nigeria must demonstrate a sense of accountability and culture of transparency. Specifically, adequate checks and balances should be instilled, coupled with effective monitoring and evaluation of health resources and outcomes.</p> <p>Sources: UNDP (2011); Adegboyega and Abdulkareem (2012); Azuh (2012); Kamorudeen and Bidemi (2012); Onotai and Nwankwo (2012); Onuigbo and Eme (2015); Gaitonde et al. (2016); Holeman et al. (2016); Mackey et al. (2016); World Bank (2016); Mooketsane and Phirinyane (2017); Ibenegbu (2017).</p>
		<p>Weak systems of accountability and a society that tolerates such practices.</p> <p>Sources: Vian (2008); Amnesty International (2011); Adegboyega and Abdulkareem (2012); Stakeholder Democracy Network, 2013; Maduke (2013); Tormusa and Idom (2016); Hoffman and Patel (2017); Hadi (n.d.).</p>	<p>c. Relevant supervisory agencies should demonstrate good governance and ensure administrative compliance to stipulated rules and regulations. Anti-corruption initiatives should be introduced such as whistle-blowing mechanisms with strict sanctions and dismissal from service for corrupt acts among health workers.</p> <p>The establishment of an independent agency to investigate cases of corruption in the health sector and enforce sanctions on guilty parties will increase accountability.</p> <p>Sources: Vian (2008); UNDP (2011); Akinbajo (2012); Bloom et al. (2012); Kamorudeen and Bidemi (2012); Gaitonde et al. (2016); Tormusa and Idom (2016); Akokuwebe and Adekanbi (2017); Hoffman and Patel (2017).</p>
		<p>Stock outs of medical supplies and free drugs due to failures on the part of the government-run Drug Revolving Fund.</p> <p>Sources: Azuh (2012); Saka et al. (2016).</p>	<p>Nil</p>
		<p>e. Poor working conditions.</p> <p>Source: Stakeholder Democracy Network (2013).</p>	<p>e. The provision of adequate equipment within health facilities and other amenities will improve the working conditions and motivation of health workers for effective service delivery to the patients</p> <p>Sources: Stakeholder Democracy Network, 2013; Akokuwebe and Adekanbi (2017).</p>

Country	No. of papers reviewed	Types and causes of corruption	Main interventions to curb corruptive behaviour
		<p>f. The belief that one cannot access quality health care without the payment of informal fees to healthcare providers.</p> <p>Sources: Adegboyega and Abdulkareem (2012); Azuh (2012); Kamorudeen and Bidemi (2012); Chimezie (2015); Gaitonde et al. (2016); Kankeu and Ventelou (2016); Saka et al. (2016); Turay (2016); Akokuwebe and Adekanbi (2017); Hoffman and Patel (2017).</p>	<p>f. Public awareness campaigns should be designed to inform patients about which services and drugs are free, alongside official pricing policies for paid services. Patients should also be made aware of the possibility of health providers overcharging them and which authority to report irregular practices to. Seminars, symposiums and convention programmes should be organised to enlighten health workers/officials on the negative impacts of corruption, including on their professional reputation and on the health of the public.</p> <p>Sources: Onwujekwe et al. (2010); Maduke (2013); Akokuwebe and Adekanbi (2017); Hoffman and Patel (2017).</p>
		<p>g. Motivational incentives that are not fully implemented, including house rental allowance, feeding allowance, clothing allowance (for senior staff), duty allowance, leave allowance, study leave allowance, in-service training, hospital bills, etc.</p> <p>Source: Ojiaku (2014).</p>	<p>g. New incentive mechanisms should be considered, alongside effective monitoring of implementation throughout the health sector.</p> <p>Sources: Amnesty International (2011); Dovlo (2012); Maduke (2013).</p>
		<p>h. The relationship among a large number of dispersed actors (government regulators, service providers, patients, suppliers) increases the opportunity for corruption.</p> <p>Sources: Vian (2008).</p>	<p>h. Community-based health insurance schemes are recommended to ensure that legitimate fees are paid for services rendered</p> <p>Sources: Agbenorku (2012); Onotai and Nwankwo (2012).</p>
		<p>i. Lack of emphasis on quality service delivery.</p> <p>Sources: Vian and Nordberg (2008); Stakeholder Democracy Network (2013); World Bank (2015).</p>	<p>i. Community monitoring for accountability has proven effective in reducing medicine stock outs, unjustified absenteeism, informal payments and other forms of abuse of power.</p> <p>Sources: Vian and Nordberg (2008); Bloom et al. (2011); UNDP (2011); Alenoghena et al. (2014).</p>
		<p>j. Information asymmetry.</p> <p>Sources: Vian and Nordberg (2008); UNDP (2011); Kamorudeen and Bidemi (2012); WHO (2016).</p>	<p>j. Open contracting should be used throughout the health sector, from publishing needs assessments through to quality assurance and contract completion.</p> <p>Sources: Mackey et al. (2016); WHO (2016).</p>
Sierra Leone	9	<p>Reluctance by health-sector managers and administrators to instill values of integrity, transparency and accountability.</p> <p>Sources: Pieterse and Lodge (2015); Turay (2016).</p>	<p>a. Institute-level anti-corruption measures should be consistent with the country's National Anti-Corruption Strategy 2014-2018. The strategy seeks to fight corruption by Ministries Departments and Agencies taking ownership within their respective institutions, which requires the setting up of integrity management committees within the health sector.</p> <p>Sources: ACC (2014); Turay (2016).</p>

Country	No. of papers reviewed	Types and causes of corruption	Main interventions to curb corruptive behaviour
		Low or withheld pay for qualified medical staff, Source: Mitchell (2017).	b. Unpaid staff – and other individuals such as patients who experience corrupt behaviour – are encouraged to report cases of bribery and corruption to Sierra Leone’s Anti-Corruption Commission (ACC) via an anonymous toll-free phone number. The initiative is organised by the ACC and funded by the UK Department of International Development to try to curb corruption across the education, electricity, health, police, water and sanitation sectors. The government is promoting this initiative through posters at state-run hospitals which proclaim ‘pay no bribe’. Better pay for nursing staff and other health workers is also needed. Source: Mitchell (2017).
		Lack of accountability. Source: Turay (2016).	c. Tighter regulation of hospitals and scrutiny of healthcare budgets will act to improve transparency and accountability across the sector. Source: Turay (2016); Mitchell (2017).
		d. Information asymmetry. Sources: ACC (2014); Turay (2016).	Using strategically displayed adverts to communicate vital information will bridge gaps Turay (2016)
		e. Understaffing. Turay (2016)	e. Employment of more staff, with legitimate pay and opportunities for promotion will improve working conditions for all. Turay (2016); Mitchell (2017)
		f. Poor working conditions. Sources: Turay (2016); PNB (2017).	Nil

Note: Total numbers of publications in the table are more than 61 because some publications covered more than one country. Such papers are Vian (2008), UNDP (2011), WHO (2016), Maduke (2013), Mooketsane and Phirinyane (2017) that covered both Nigeria and Ghana.

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Disclaimer: This publication is an output of a research programme funded by UK aid from the UK Government. The views presented in this paper are those of the author(s) and do not necessarily represent the views of UK Government's official policies.

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