



Review Paper

Understanding corruption in health systems – an overview

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Abstract

Corruption is one of the critical challenges facing the health systems across the world. Although corruption occurs in most countries, but its effects are particularly devastating in low income countries. There are many aspects of corruption and it may vary in magnitude and impact in terms of health outcomes. As corruption in health system is multifaceted and complex in nature all stakeholders in health system – government, payers, providers, professional associations, citizens and international bodies need to be involved. Most importantly, a strong political will should be a precursor for effective implementation of anti-corruption regulations and corruption free health systems.

Keywords: Corruption, Health systems, Regulations, Health outcomes.

Introduction

Corruption is a universal problem in health systems across the world. A significant share of annual health budgets is lost due to corruption in the health systems. It is estimated that about 10 percent of Gross Domestic Product (GDP) in the world is lost due to corruption in health systems in 2009¹. Corruption leads to waste of limited resources available for health. It also leads to negative consequences on accessibility, availability, and utilization of health services. Further, it can adversely affect quality of services, leading to escalation in cost of health services². Unlike other sectors, corruption in health sector is more precarious that it affects health of the population and economic development³.

Several studies in low income countries illustrate the consequences of corruption on the poor and marginalized population most severely given their restricted capacity to access health care. In low income countries, corruption undesirably affects even access to life-saving treatment for vulnerable population³⁻⁵. There are evidences that corruption causes damaging effect on the health and welfare of populations. It leads to high maternal, infant and child mortalities and reduces immunization rates of children and utilization of public health clinics in low income countries⁶⁻⁹. Public health programmes cannot be implemented successfully in such settings where scarce resources are drained off, depriving the underprivileged of basic health services^{10,11}.

This paper provides an overview of corruption in the health systems, particularly on the framework of understanding corruption and effect of various types of corruption on achieving health system goals. The paper also identifies different anti-corruption strategies that are implemented by health systems across the world.

Corruption: a Serious Threat to Health System

A universally accepted definition of corruption does not exist. In general corruption is defined as “abuse of public or entrusted power for private gain”². Corruption in the government sector occurs when a government official who has been given power to carry out certain functions of the government make uses his or her position to their individual benefits. Corruption is widespread in both developed and developing economies alike.

Quantification of corruption in the health system is difficulty due to many reasons. As there are grey areas, estimates from around the world point to a large amount of corruption¹². An earlier study on corruption in health sector showed that 5-10% of health expenditures of the United States were lost due to overbilling; 5% of the government health budget in Cambodia was lost due to corruption by government officials, and almost 56% of health expenditures of Russian Federation were found to be informal payments¹³.

The health care system is susceptible to corruption, due to number of reasons. Firstly, health care sector is more complicated than many other sectors due to uncertainty of demand for health care. No one knows who will get sick or when, and therefore it is often difficult to decide various type of services are needed, in what quantities and when they are needed. Secondly, there are significant asymmetric information with substantial information disparities between health care providers and patients; health providers and suppliers. When one is sick, she/he does not understand the treatment and must trust physicians in their diagnosis and treatment. It is hard to understand the supply of product due to asymmetric information. Different physicians may suggest different treatments due to uncertainty of outcome. Thirdly, unlike other market for goods,

consumers in health care market are unable to judge quality in health care. Fourthly, the sector is characterized by a high degree of fragmentation and decentralization of responsibility among the different players involved in the delivery of health services, funding and regulation. Many stakeholders exist in health care sector with direct or indirect accountability and their interaction is more complex^{14,15}. Fifthly, unlike other markets, prices in health care markets are not set or determined by the forces of supply and demand in the market. Finally, the difference between corruption and inefficiency is often difficult to make in health sector due to poor management and administration⁸. More precisely, it is the combination of uncertainty of demand for health care, unequal information and fragmentation makes it difficult to standardize services, monitor behaviour and guarantee transparency in the health sector^{16,17}.

As most of services and activities in health sector have public good characteristics, huge amount of government funds are spent in the health sector. Unlike other sectors, providers of health care take major decisions like admission of patients, prescribing medicines, length of a hospital stay, investigations,

referrals, special consultations^{3,14}. There are difficulties in the regulation of various activities in health system which necessitates an understanding of the incentives or disincentives that influence behavior of consumers¹⁸. Studies have shown that lack of transparency, inadequate law enforcement and regulatory control in health systems of developing countries often result in corruption of various kinds^{19,20}.

Types of Corruption and their effects

Corruption in health system, in general, can include lower level common problems like absenteeism of health providers to involvement of multinational companies in fraud and abuse as well as corruption at high levels of government^{1,2}. Common types of corruption, which are most widespread in the health systems include informal payments to health providers by patients and family members, paying bribes to get a government job, absenteeism from work place, bribes and kickbacks, fraud in procurement of medicines and other health supplies, theft of medicines or other material, insurance fraud, embezzlement of user fees or other government revenues^{3,17,21,22}.

Table-1: Common types of corruption, examples and impact of corruption in health systems.

Type of Corruption	Examples	Impact
Informal payments to providers	Payments made to various health facilities for services that are supposed to be free or subsidized or for hospital admission	Increases financial burden on patients and families, worsen access to health care; reduces equity in access to care
Corruption in procurement	Different types of abuse like bribes, kickbacks, fraud in invoicing, collusion with supply agencies, favour during monitoring and evaluation of performance of contract, unethical drug promotion etc.	Corruption in procurement increases the cost of health supplies material, substandard drugs and equipment leading to increasing inefficiency, many of health supplies material may not be delivered, or may not be required or may not be needed, or may be substandard quality.
Construction and maintenance of health facilities	Bribes, kickbacks, collusion with contractors / construction companies, favors to friends & relatives	Low quality construction, shabby conditions of health facilities, poor health services, unequal distribution of health facilities leading to unequal access.
Payment for government jobs	Payment made to a senior official or agent for securing a government job or for promotion etc.	Increases number of unqualified and inexperienced doctors staff; power may be abused by the staff to earn money; Quality of teaching in academic institutions affected
Absenteeism from work	Not attending work, or doing private practice during office working hours	Restricts access to and provision of health services to the needy people
Payment of bribes	Paying bribes for selection & procurement, admission in medical colleges, passing of medical examinations, selection for training etc.	Bribes in registration, selection and procurement can result in substandard, inappropriate, or duplicate medicines or fake medicines, which will have adverse consequences on quality of care.
Misuse or theft of public resources	Misuse or unlawful use of government resources like drugs, medical equipment, or vehicles for personal use, or resale or used for private practice	Results in shortage of medicines, incomplete treatment or interruptions in treatment, increase in cost of treatment etc., leading to adverse effect on access to care
Embezzlement of funds	Using or stealing funds belong to government organizations or health facilities	Shortage of funds for providing necessary care - leading to lower quality of care
Fraud and misuse	False invoicing, billing for ghost patients, or services not actually rendered to patients, diversion of accounts receivables into a personal account, or other type of frauds.	The siphoning off of government funds may result in insolvency; reduces quality of health care; deny access to care for needy patients or ineffective health care delivery or failure to achieve objectives of programmes.

Each type of corruption affects healthcare delivery in various ways. It may lead to incompetent health care providers, inadequate health infrastructures, substandard medicines and medical equipment and inadequate supply of other material etc., adversely affect the provision of effective health care delivery. Table-1 gives an account of common types of corruption and their potential impact on health care delivery system and desired results.

A Framework of Corruption

The study of corruption is based on a general framework of “agency theory”²³. This theory offers a background to recognize power dynamics between the principal and the agent and gives responses to reduce undesirable effects on corruption²⁴. Types of corruption in health sector depend on the relationship among these players in the health system. Corruption in the health system may be observed by examining the roles and relationships among the different players to identify possible misuses that are likely to happen¹⁴. Figure -1 gives a framework for the analysis of corruption in the health system, key agents involvement and to understand the main issues and develop the right strategies to combat corruption in the health systems.

The Framework (Figure-1) shows that government regulators, suppliers of drugs, equipment including construction agencies, providers of health care, payers, construction agencies and patients are the actors of corruption in health systems.

Government regulators such as ministries of health, decision making bodies, national committees etc., have a key role in approval of drugs, quality control, selection of equipment, approval norms for construction etc. Suppliers of drugs and equipment may bribe government officials to approve low quality drugs or equipment. They can persuade health officials to select and order the products manufactured by their companies at higher prices, even though less costly and similar alternatives are available in the market. Payers of care, both government and private sectors may take decisions regarding construction of new health facilities, purchase of costly medical equipment etc., that favors particular region, party or political allies. Corruption can occur when the government controls an insurance fund, like in those countries with compulsory social health insurance. The government health insurance can also allocate funds according to political will and at the cost of patients or taxpayers¹⁴. Private insurers, whether for-profit or non-profit, can resort to corrupt practices when they participate in any public health programmes, or are subjects of regulation. Health care providers can decide hospital admission, investigations, surgery and other procedures, for their financial gains. Patients can seek free or subsidized health care by false reporting their individual or family income, or availing treatment using health insurance cards of their friends or family members, bribing health care providers to receive services or obtain benefits like illness and fitness certificates.

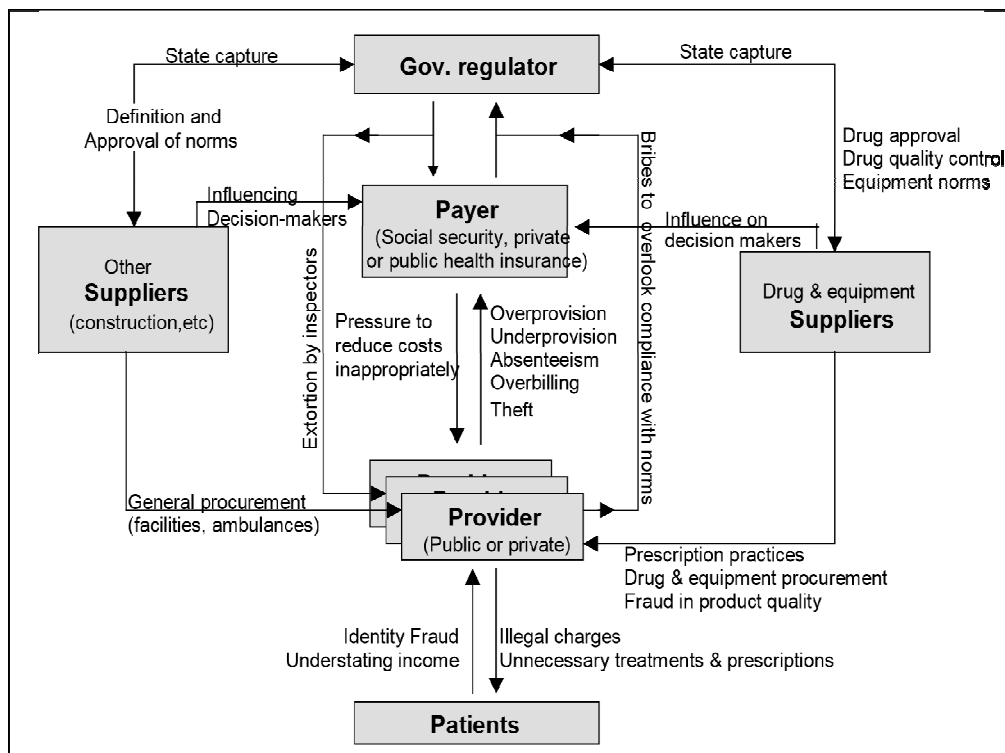


Figure-1: A framework of corruption in health systems¹⁴.

Table-2: Functional areas and types of corruption in health care system²⁵.

Functional Areas	Types of Corruption
Health system regulation	Bribes to speed up process or approval of products
	Improper product quality inspection and certification
	Biased nature of healthcare professional accreditation
	Biased application of accreditation of health facilities
	Inappropriate certification of health/medical colleges
Research and development	Abuse of research funding systems
	Improper clinical trial/study design
	Improper trial/study conduct
	Misleading dissemination of trials/studies
Marketing of health products	Improper inducements to healthcare professionals
	Improper inducements to health facilities and health officials
	Improper inducements to professional associations
	Distortive funding of continuing education
	Improper post-marketing trials/studies
	False or misleading product claims
Procurement of products	Unnecessary or ineffective purchases
	Rigged contract requirements
	Preferential selection of contractor
	Collusion between bidders
	Unfulfilled contract delivery
Product distribution and storage	Theft and diversion of products
	Infiltration of falsified and substandard products
	Re-packaged non-sterile and expired products
Financial and workforce management	Inappropriate selection for jobs, promotions and training
	Absenteeism
	False treatment reimbursement claims
	Embezzlement and misuse of national funds
	Embezzlement and misuse of donor funds
Delivery of healthcare services	Informal payments from patients
	Unnecessary referrals and procedures to private hospitals
	Private use of public facilities, material or time
	Favoritism
	Overcharging for services or providing inferior services
	Manipulation of outcome data

Functional areas and corruption

Health care system comprises of many functional areas. Corruption occurs in all functional areas. Firstly, the healthcare system is profoundly regulated in many ways. Regulation of health system is a one of the key functions of the government. Health system regulations are required to ensure that drugs are safe, effective and of good quality; health professionals are trained appropriately, and health care facilities meet all laid down standards. Such regulations include approval a product, healthcare professional, health facility or medical college. Secondly, research is required for development of drugs, medical devices and treatment technologies. All drugs need to undergo various trials to determine their benefits, safety, effectiveness and quality. Other health care products also require evidence to allow them onto the market. Thirdly, like market for other goods and services, there are marketing interactions between suppliers and customers or healthcare providers in an effort to expand the use or sale of drugs and other products with a view to increase their profits and expand their market share.

Fourthly, procurement of drugs, equipment & supplies, and construction of health facilities is one of the vital functions, which occupies a significant portion of health budget in many countries. Health sector procurement is particularly vulnerable to corruption due to its technical complexity, numerous stages, and requirement of high expertise. It is universally accepted that a fundamental practice for curbing corruption in public procurement is increasing transparency in procurement. Fifthly, inventory management, distribution and storage facilities throughout the country which involves many individuals and processes leading to many types of corruption. Sixthly, a well-functioning health financing and health human resources development system are fundamental to deliver a high quality health care to the population. Transparency and accountability in health care financing system and well-designed human resources planning, and management systems are required. Finally, delivery of health services is the crucial function of health care system. Corruption exists in many forms in the delivery of services at various levels, which can have an undesirable effect on access as well as quality of services. Corruption in this level should be seen as an effect of wider governance failures in the health systems¹. Table-2 gives an account of corruptions taking place at different functional areas in the health systems.

Anti-Corruption Measures in Health Systems

Corruption is a serious threat to the health systems of developing countries. It is a challenge to diagnose and tackle different forms of corruption. There are many common types of corruption identified, but particular form of corruption is more predominant in few countries.

A number of legal and institutional mechanisms have been implemented by governments in most countries which include

auditing of health expenditures, tracking of health expenditure; institutionalizing codes of conduct and ethics; measures to increase transparency; improving public awareness of rights, particularly on the costs of medicines and treatments; mechanism to listen citizen voices and responding to their concerns; establishment of anti-corruption commission and public service codes of conduct; advocacy with civil society organizations; creation of volunteer citizen committees to identify corruption etc. At health facility level initiatives like patient management committees, patient grievance cell, patients/citizens' charter, right to information, capacity development in management, e-governance, patient redressal systems, etc., are some of the mechanisms that are implemented by countries for counter-checking malpractice and corruption in health systems.

In view of resource crunch, the governments in poor countries should identify and prioritize activities that are most vulnerable to corruption by functional areas, then design and implement suitable strategies to mitigate them. Experiences from different countries suggest that corruption in health system cannot be mitigated without the coordination of other critical sectors, like transportation, finance, education etc. Therefore a strong anti-corruption strategy should follow a multi sectoral approach.

Further, in the health systems, often the anti-corruption strategies are implemented only when corruption is suspected or noticed. It is better to deal with corruption from the beginning rather than waiting for it to happen. Therefore appropriate attention should be given on anti-corruption considerations in the health policy goals of countries³. Health system should also work in partnership with non-governmental organizations, international agencies, research groups, technical experts and citizens in implementing anticorruption strategies.

Conclusion

Corruption in health system is a serious concern in both developed and developing countries. The health system is susceptible to corruption due to factors such as uncertainty of the demand for health services; involvement of multiple actors; and asymmetric information among different actors involved. Corruption in health systems results in waste of resources; reduce access to quality care and thus health outcomes. At the global level, there are many good practices on anti-corruption strategies work in the health system, but there are paucity of evidences of the effects of these interventions to reduce corruption in developing countries. There is a need to evaluate the effect of all interventions that are implemented in different country settings. Evidences suggest that reviewing the vulnerabilities of corruption in each functional areas of the health system, prioritizing them and designing appropriate strategies are the first step towards designing effective strategies to reduce corruption in the health systems. This requires a holistic approach involving collaborative effort by the government, health providers, people and social organizations.

Table-3: Select interventions to reduce the risks of corruption among various actors³.

Actors	Select interventions
Government regulators	<ul style="list-style-type: none"> • Set up independent procurement agencies for drugs and medical supplies. • Information on registration, approval of suppliers on public domain. • Provide justifications for decisions on government on public domain. • Education program to public on how to identify counterfeit products. • Transparency in bidding, selection/award of contract. • Information on prequalification of suppliers on government websites. • Monitoring prices of drugs and other health supplies. • Adopt international guidelines for procurements of drugs and other supplies. • Appoint oversight committee for all procurements in health sector. • Capacity development of procurement officials • Involvement of civil society groups for monitoring drug delivery system.
Health providers	<ul style="list-style-type: none"> • Apply performance based financing. • Legislations making managers responsible for actions of subordinates. • Action for individual breaches. • Introducing an effective internal control mechanism. • Enforcing code of conduct to government officials. • Monitor job performance and merit based promotion policies. • Implement and enforce transparent rules. • Formalize user fee system exemption policies.
Payers	<ul style="list-style-type: none"> • Implement public expenditure and financial accountability framework. • Code of conduct for fiscal transparency. • Government expenditure tracking studies. • Government expenditure reviews. • Establish independent audit organizations. • Institutionalize national health accounts system • Encourage peoples participation in budgetary process. • Establish citizen's score cards. • Develop performance based budgeting. • Capacity development of key personnel on financial and risk management. • Develop an effective oversight and audit system. • Simplifying reporting system.

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