Solutions Governance Diminish Corruption in Public Health Care Systems in Indonesia

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ABSTRACT: The problem with the lack of concern for basic governance principles in health care delivery is that the well-intentioned spending may have no impact. Priorities cannot be met if institutions don't function and scarce resources are wasted. Bribes, corrupt officials and misprocurement undermine the health care delivery in much the same way they do for police services, law courts and customs whose functions become compromised by the culture of poor governance and corruption. This paper examines health systems from the perspective of governance, drawing on the knowledge and experience garnered over the past decade in the national and firm levels and supplementing that with health-specific evidence. It therefore examines the effectiveness of government and specifically the efficiency of its role in producing health care services. What factors affect health care delivery in Indonesian? Anecdotal evidence of lives cut tragically short and the loss of productivity due to avoidable diseases is an area of salient concern in global health and international development. This working paper looks at factual evidence to describe the main challenges facing health care delivery in Indonesian including absenteeism, corruption, informal payments, and mismanagement. The next section outlines the health care markets, the role of government and the definition and measurement of governance. The evidence in Indonesian on various elements of governance and corruption in health care delivery is then reviewed, and the last two sections lay out Government Indonesian policy possibilities and implications for the sector. The author concludes that good governance is important in ensuring effective health care delivery, and that returns to investments in health are low where governance issues are not addressed.

Keywords: Corruption, hospitalized, good governance, implications, health care cost

Introduction

Defined by Transparency International as 'misuse of entrusted power for private gain', corruption occurs when public officials who have been given the authority to carry out goals which further the public good, instead use their position and power to benefit themselves and others close to them. Corruption in the health sector may be viewed by examining the roles and relationships among the different players to identify potential abuses that are likely to occur. Another way to look at types of corruption is to review the functions of the health care delivery process, and examine the potential abuses that can occur at each step. Risks of corruption in the health sector are uniquely influenced by several organizational factors (**Table 1**). The health sector is particularly vulnerable to corruption due to: uncertainty surrounding the demand for services (who will fall ill, when, and what will they need); many dispersed factors, including regulators, payers, providers, consumers and suppliers interacting in complex ways; and asymmetric information between the different actors, making it difficult to identify and control for diverging interests. In addition, the health care sector is unusual in the extent to which private providers are entrusted with important public roles, and the large amount of public money allocated to health spending in many countries (Savedoff, 2006).

Expensive hospital construction, high tech equipment and the increasing arsenal of drugs needed for treatment, combined with a powerful market of vendors and pharmaceutical companies, present risks of bribery and conflict of interest in the health sector (Lantham and Kassirer, 2006). Government officials use discretion to license and accredit health facilities, providers, services and products, opening risk of abuse of power and use of resources. The patient provider relationship is also marked by risks stemming from imbalances in information and inelastic demand for services. Resulting corruption problems include, among others, inappropriate ordering of tests and procedures to increase financial gain; under the table payments for care; absenteeism; and use of government resources for private practice (Di Tella and Savedoff, 2001). It must be noted that definitions of corruption will vary by country and even within areas of a country. Corruption is a pervasive problem affecting the health sector. At the level of individuals

and households, there is mounting evidence of the negative effects of corruption on the health and welfare of citizens (Lewis, 2006; Rose *at al*., 2006). In the last 10 years, efforts to combat corruption have gained the attention of national governments, development partners and civil society organizations (World Bank, 2000; Transparency International, 2006).

Table 1: Types of corruption in the health sector

Area or process	Types of corruption and problems	Results
➢ Construction and rehabilitation of health facilities	➢ Bribes, kickbacks and political considerations influencing the contracting process. ➢ Contractors fail to perform and are not held accountable	➢ High cost, low quality facilities and construction work ➢ Location of facilities that does not correspond to need, resulting in inequities in access ➢ Biased distribution of infrastructure favoring urban and elite focused services, high technology
➢ Purchase of equipment and supplies, including drugs	➢ Bribes, kickbacks and political considerations influence specifications and winners of bids ➢ Collusion or bid rigging during procurement ➢ Lack of incentives to choose low cost and high quality suppliers ➢ Unethical drug promotion ➢ Suppliers fail to deliver and are not held accountable	➢ High cost, inappropriate or duplicative drugs and equipment. Inappropriate equipment located without consideration of true need Sub-standard equipment and drugs ➢ Inequities due to inadequate funds left to provide for all needs
➢ Distribution and use of drugs and supplies in service delivery	➢ Theft (for personal use) or diversion (for private sector resale) of drugs/supplies at storage and distribution points ➢ Sale of drugs or supplies that were supposed to be free	➢ Lower utilization ➢ Patients do not get proper treatment ➢ Patients must make informal payments to obtain drugs ➢ Interruption of treatment or incomplete treatment, leading to the development of anti-

		microbial ➢ Resistance ➢
➢ Regulation of quality in products, services, facilities and professionals	➢ Bribes to speed process or gain approval for drug registration, drug quality inspection, or certifica- tion of good manufacturing practices ➢ Bribes or political considerations influence the results of inspections or suppress findings ➢ Biased application of sanitary regulations for ➢ Restaurants, food production and cosmetics ➢ Biased application of accreditation, certification or licensing procedures and standards	➢ Sub-therapeutic or fake drugs allowed on the market ➢ Marginal suppliers are allowed to continue participating in bids, getting government work ➢ Increased incidence of food poisoning ➢ Spread of infectious and communicable diseases ➢ Poor quality facilities continue to function ➢ Incompetent or fake professionals continue to practice
➢ Education of health professionals	➢ Bribes to gain places in medical school or other pre-service training ➢ Bribes to obtain passing grades ➢ Political influence, nepotism in selection of candidates for training opportunities	➢ Incompetent professionals practicing medicine or working in health professions ➢ Loss of faith and freedom due to unfair system
➢ Medical research	➢ Pseudo-trials funded by drug companies that are really for marketing Misunderstanding of informed consent and other issues of adequate standards in developing countries	➢ Violation of individual rights ➢ Biases and inequities in research
➢ Provision of services by medical personnel and other health workers	➢ Use of public facilities and equipment to see private patients ➢ Unnecessary referrals to private practice or privately owned ancillary services ➢ Absenteeism	➢ Government loses value of investments without adequate compensation ➢ Employees are not available to serve patients, leading to lower volume of services and unmet

	➢ Informal payments required from patients for services ➢ Theft of user fee revenue, another diversion of budget allocations	needs, and higher unit costs of health services actually delivered ➢ Reduced utilization of services by patients who cannot pay ➢ Impoverishment as citizens use income and sell assets to pay for health care ➢ Reduced quality of care from loss of revenue Loss of citizen faith in government

Source: Vian (2005)

Health System in Indonesia

A relatively small list of health conditions makes up the majority of the burden of disease, particularly among the poor, and contribute to high levels of avoidable death. Data from the Ministry of Health's Basic Health Research collected in 2000-2008 indicate that the main causes of child deaths are diarrheal disease (25.2 percent) and pneumonia (15.5 percent). Dengue hemorrhagic fever is the main cause of death among children between the ages of five and 15 in urban areas, responsible for 30.4 percent of deaths in this age group, while diarrhea at 11.3 percent is the main cause of death among the same age group in rural areas. The main causes of death across all ages of the population over five years old are stroke (15.4 percent), TB (7.5 percent), and injuries (6.5 percent)· According to the World Health Organization (WHO), ischemic heart disease, lower respiratory infections, malaria, HIV/AIDS, and nutritional deficiencies also contribute to mortality rates (WHO, 2007). While decentralization of the health sector provides opportunities in districts with capacity to take advantage of their additional authority, it has also created new challenges. Funding for health is much more fragmented, with multiple sources at central, provincial, and district levels. Decentralization has created more confusion around who has ultimate responsibility for providing licensing and oversight, or provision of essential medicines. The health sector is still working out the details to support effective decentralized district management and health financing. More complex issues, such as the dual sector workforce (providers who hold both public and private sector jobs), are not being addressed. Due to longer life expectancy and fewer childhood

deaths from communicable diseases, the demographic and epidemiological profile of Indonesia is transitioning. In the decades to come, Indonesia will face a "double burden of disease" from both communicable and non-communicable diseases. Already, the number of people with diabetes, heart disease, and cancer is increasing as the population ages, diets change, and lifestyles become more sedentary (World Bank, 2008). These changes have the potential to greatly increase both demand for and the cost of health care.

How Many Challenges Which Corruption Presents in the Health Sector?

Corruption may be needed, sector specific solutions can be pursued at the same time or even in the absence of political will for more systemic reforms (Spector, 2005). In order to be effective, reforms to combat corruption must be informed by theory, guided by evidence and adapted to the context. Efforts to explain abuse of entrusted power for private gain have examined how the structure, management and governance of health care systems contribute to corruption. Based on principles of economics and good governance, these conceptual frameworks have helped policymakers to understand how government monopoly, combined with too much discretion, can lead to abuse of power, while strengthening government accountability, transparency, citizen voice and law enforcement can help to reduce corruption (Klitgaard *et al*., 2002). Individual and social characteristics may also influence the likelihood that officials will abuse power, and need to be considered in developing anti-corruption programs. This article explores the many challenges which corruption presents in the health sector. Following a description of the types of corruption that affect government health facilities and services, the article applies a theoretical framework to explain factors that influence corruption, reviews the methods used to identify and measure an abuse of power and describes anti-corruption strategies appropriate to the health sector.

Measuring Corruption

The first step in applying theory to practice is to measure corruption and the different mediating factors described above. While a number of assessment tools exist to help measure corruption and describe the circumstances in which it is found, there are several

difficulties faced by researchers working in this field. First, the administrative systems in poorer countries are often weak, making it difficult to collect measures of corruption such as unauthorized absences recorded in personnel records, or the percentage of procurements that did not meet standards. Abuse of power is also hard to measure because corruption is a practice that is frequently (though not always) hidden. To overcome these difficulties, researchers have used indirect measures of abuse of power such as perceptions of corruption, or procurement price data suggesting over-payment for supplies.

Household and Public Expenditure Surveys

Household expenditure data can be an important tool for measuring accountability, documenting expenditures on government services that are supposed to be offered free of charge (Balabanova and Hotchkiss *et al*., 2004). They can also show whether public health spending is providing benefits according to government's stated priorities and budget. While household surveys can be expensive to undertake, these data are already being collected in many countries for other purposes. Other forms of financial corruption have been diagnosed using methods such as Public Expenditure Tracking Surveys (PETS) and similar techniques (Lindelow *et al*., 2006). Analysis can highlight weaknesses in recordkeeping, oversight and control procedures, or other bottlenecks causing delays and losses.

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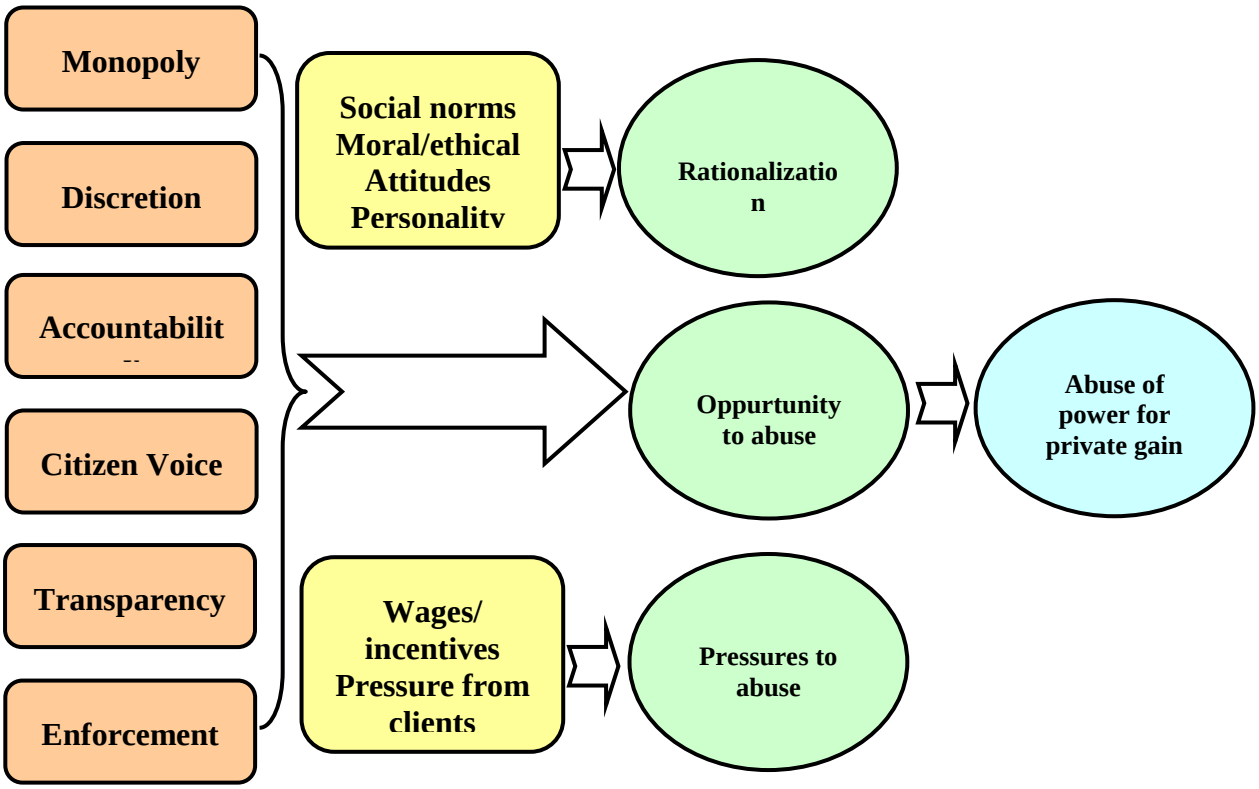

Figure 1: Framework of corruption in the health sector

Health care system & structure	Type of abuse	Resources
➢ Insurance	➢ Hospital construction	➢ High or low income
➢ Payer provider split	➢ Procurement	➢ Donor dependence, influx of funding
➢ Role of private sector etc	➢ Informal payments, etc.	➢

Figure 1 presents a theoretical framework of corruption in the health sector which consolidates some of the concepts and models that have been developed previously (Fung *et al*., 2007). Looking at corruption from the viewpoint of the government agent, the framework suggests that corruption is driven by three main forces: government

agents who abuse public power and position for private gain do so because they feel pressured to abuse (financially or by clients), because they are able to rationalize their behaviour or feel justified (attitudes and social norms support their decision), and because they have the opportunity to abuse power. The factors involved, and the application of this model to the health sector, are discussed below, looking in most detail at the opportunities to abuse. According to economic theory, officials weigh the costs and benefits of acting corruptly against the costs and benefits of acting with integrity, and choose to act in the way that maximizes their self-interest. Opportunities for corruption are greater in situations where the government agent has monopoly power over clients; officials have a great deal of discretion, or autonomous authority to make decisions, without adequate control on that discretion; and there is not enough accountability for decisions or results. Monopoly creates opportunities for corruption by limiting the ability of citizens to choose other providers of services. If the government is the only provider offering medical services, for example, patients could be compelled to pay bribes to access those services. General strategies to reduce monopoly include health reforms to separate payer and provider, privatization or contracting of services with many providers, and increasing the number of government agents providing particular services (Klitgaard *et al*., 2007).

Discretion refers to the autonomous power of a government official to make decisions, such as hiring staff or deciding what medicines are needed and in what quantities to procure them. Clinical care providers also exercise discretion by making decisions about the amount and types of health care services a patient should have. High amounts of discretion without adequate controls can create opportunities for corruption. For example, a department head can choose to hire an unqualified relative, or a procurement agent can decide to procure a new, high priced drug in quantities that greatly exceed need, in order to obtain a promised kickback. The goal of anti-corruption strategies is to increase appropriate control on discretion without creating dysfunctional bureaucracy. Strategies can include dividing tasks between individuals to create checks and balances; clarifying the decision-making process through standard operating policies and procedures; and strengthening information systems such as personnel management, drug inventory control and internal financial control systems. To control discretion in drug warehouses, for example, one South African distribution agency strictly segregates

duties for order fulfilment, order checking and transport; staff working in each area has access only to the information needed to fulfil their own task, thus minimizing chances for collusion and drug diversion (Vian, 2006).

Reforms to improve control on discretion may not be possible if there are so few health workers available that tasks cannot be separated and there is no time for control, and it is of limited use when there is extensive collusion among health workers at different levels in the hierarchy. Accountability is government's obligation to demonstrate effectiveness in carrying out goals and producing the types of services that the public wants and needs (Segal and Summers, 2006). Lack of accountability creates opportunities for corruption. Brinkerhoff (2004) identifies three key components of accountability, including the measurement of goals and results, the justification or explanation of those results to internal or external monitors, and punishment or sanctions for non-performance or corrupt behaviour. Strategies to help increase accountability include information systems which measure how inputs are used to produce outputs; watchdog organizations, health boards or other civic organizations to demand an explanation of results; performance incentives to reward good performance; and sanctions for poor performance.

Citizen voice refers to the channels and means for active participation by stakeholders in the planning and provision of services (Lewis *et al*., 2006). One purpose of citizen voice is to increase external accountability of government. Strategies to promote citizen voice include local health boards where citizens can have input into the budgeting and planning processes; patient surveys to provide feedback on satisfaction and complaint offices to record and mediate reports of unethical or corrupt conduct. Research conducted by the Center for Civic Education (http://www.civiced.org), in countries such as Russia, Latvia and Indonesia, suggests that civic education can be effec- tive in increasing citizens' willingness to participate in civic and political life, and their skills in explaining their problems. However, increasing citizen voice is not always easy; in countries where citizen participation was repressed for many years, there may be limited experience with non-governmental organizations and other forms of civic activism, and more work may be needed to develop effective approaches. In addition, incentives must be structured, and the

nature of accountability defined, so that local committees have the power to influence the actions of centrally managed staff (Lewis, 2007).

Transparency is another concept which is closely related to accountability. The idea behind transparency is that by actively disclosing information on how decisions are made, as well as measures of performance, we can improve public deliberation, reinforce accountability and inform citizen choice. In addition, transparency helps to document and disseminate information on the scope and consequences of corruption, information which can help build support for anti-corruption programmes and target enforcement efforts. Transparency policies may include government-mandated disclosure of information, or may involve external agents such as civil society or the media (Fung *et al*., 2007). Strategies to increase transparency include public service 'report cards', price monitoring and release of government documents or decisions through web sites, public databases, public meetings and the media (World Bank, 2003). Detection and enforcement include steps taken to collect evidence that corruption has occurred, and to punish those who engage in corruption. The goal of detection and enforcement is both to get rid of bad agents, i.e. those government officials abusing their power, and to deter others from engaging in corruption in the future. Mechanisms of enforcement can function within the Ministry of Health bureaucracy (for example, an Inspector General's Office or Internal Auditor) or externally through policing and the criminal justice system. Enforcement includes such activities as surveillance, internal security, fraud control, investigation (including investigative journalism), whistle-blowing and punishment. Effective disciplinary systems can increase accountability and deter corruption, although they may require difficult changes in organizational culture. While a hospital in Cambodia found it hard to punish employees, it was able to withhold bonus payments from poorly performing employees (Barber *et al*., 2004). This is a start in changing incentives.

Rationalization: in addition to the institutional or organizational factors described above, which collectively affect the opportunities for corruption, behavioural scientists have studied the ways in which individual beliefs, attitudes and social norms influence corruption. Although a sense of moral obligation and concern for others is an important influence onbehaviour, especially in the medical professions and among public servants . Increasing salaries is often suggested as a strategy to reduce financial pressure leading to corruption

(Van Lerberghe *et al*., 2004), yet higher salaries alone will not reduce risk of abuse if opportunities and incentives do not also change. Accordingly, some reforms have tried to link compensation to achievement of targets for quality and/or productivity, or to exert professional or peer pressure for performance. Government agents may also feel pressured by clients to accept bribes. This is especially true in situations where people are sick and suffering, and feel that bribes are the only way to ensure they receive the best possible treatment (Vian *et al*., 2006) . Pressure may also be exerted by suppliers, or by other agents involved in corruption.

Control Systems Review

A key assessment tool for measuring vulnerability to corruption is a control system review or risk audit. Control systems are the internal operational processes by which an organization makes decisions and uses resources to perform its mission. A control system review can help measure discretion, accountability, transparency and enforcement. This approach compares an organization's process with best practice standards, to see how well the organization is controlling discretion of decision makers, complying with laws and regulations, and safeguarding resources. The review starts by identifying areas with high inherent risk of corruption, such as units with frequent cash transactions (more at risk of theft), or offices that award approvals, permits or licenses (vulnerable to bribes). The existence of 'best practice' safeguards is then assessed, looking for such things as clear operating policies and procedures, an appropriate division of responsibilities, use of computers for collecting and analyzing data, and procedures for financial management and audit. This approach has been used in the US to develop hospital compliance systems to prevent fraud and abuse (Mills, 2001). As delineated by the federal government, the seven elements of effective hospital compliance systems include: written standards, policies and procedures addressing specific problem areas; designated responsibility structures; education and training; an internal reporting system; disciplinary procedures; audit function; and a evalua- tion system (Office of Inspector General, 2009).

Control reviews can also help develop measures of transparency and accountability. The procurement function was rated as moderately vulnerable, due to problems such as lack of documentation of prices paid and criteria used for awards. The control systems review

approach works best when systems are stable, and is difficult to apply in countries where the health sector is undergoing radical but still uncertain changes in how services are organized, financed and managed. When major health reforms are taking place, it may be useful to examine proposed health laws and regulations, and try to influence the design to control for potential conflict of interest and close off opportunities for corruption (Vian, 2006). Several factors were essential to the successful application of anti-corruption theory in this case. First, the hospital management team and Board of Directors were committed to improving the quality and responsiveness of the hospital, and were not colluding with the fee collection agents. Where collusion is present, this type of control system might not be implemented fully, and external accountability mechanisms become more important. In addition, the hospital management team had sufficient autonomy that fee collection agents who resisted the new system could be removed from their jobs and replaced by carefully screened new agents. Without this level of autonomy in merit-based personnel management, it is doubtful the system would have achieved its goals.

Discussion

This article has presented a conceptual framework to guide policymakers in examining corruption in the health sector and to identify possible ways to intervene. Further research is needed to refine and expand this framework, and to evaluate and document effective anti-corruption policies and pro- grammes in the health sector. First, the model in Figure 2 examines corruption only from the viewpoint of the government agent. A complete theory of corruption would also model how the involvement of others, their beliefs, motivations and behavior influences each of the factors in the model. This is especially important to explain social and interpersonal pressures to abuse power for private gain, and ability to resist. For example, better understanding of local perceptions of power and the role of government may shed light on why so many local health boards are ineffective, and what can be done to improve the design of accountability structures involving community oversight groups. Secondly, more research is needed to explain how the goals of prevention and cure interact. Enforcement is sometimes viewed narrowly as a strategy to fight corruption once it occurs. Yet, lack of enforcement is itself an opportunity for corruption, and a complete policy to prevent corruption must

recognize enforcement as a critical element. Future research should explore the ways in which enforcement can deter corruption in the health sector, including the cost-effectiveness of alternative strategies for detection and enforcement such as fraud control units, training of internal auditors, or surveillance systems. Thirdly, more work is needed to distinguish individual-level versus organizational-level influences on corruption, and to analyze the interactions among the different influences. While the current framework suggests that opportunities for abuse are mainly organizational level variables, it could be that norms and attitudes influence these variables as well, and that interventions educate or change beliefs could contribute to the effectiveness of organizational-level anti-corruption strategies. In addition, interactions between the different model elements such as trans- parency and citizen voice, or discretion and accountability, need to be clarified in order to better predict their effects on the level of corruption in particular programs.

Finally, increased attention should be focused on designing and testing anti-corruption interventions in the health sector. This work, now focused on measuring transparency, should be expanded to other aspects of account- ability: how do we use transparency as a policy tool? Who is responsible for holding government accountable for their performance according to the indicators measured? What is the role of civil society organizations in strengthening accountability for government performance in the health sector? In addition to pharmaceuticals, policymakers have been closely studying the problems of absenteeism and ghost workers (Garcia-Prado *at al*., 2006), and policies to address informal payments (Lewis *et al*., 2007). Here, the focus should be on evaluating policy effectiveness and identifying preconditions needed for success. The policy implementation process should be documented as well, making it easier for other countries to adopt reforms and avoid mistakes. In addition, we should consider ways to refine and adapt other, more general anti-corruption strategies such as public finance management reforms, watchdog agencies and whistle blowing programs to the particular risks and the needs of the health sector.

References

Alcazar, L. and Andrade, R. (2005). Induced demand and absenteeism in Peruvian hospitals. *In*: Di Tella R, Savedoff WD, (eds). Diagnosis corruption: fraud in Latin America's public hospitals. Washington, DC: Inter-American Development Bank.

Azfar, O. (2005). Corruption and the delivery of health and education services. *In*: Spector BI, (ed.). *Fighting corruption in developing countries: strategies and analysis*. Bloomfield, CT: Kumarian Press, pp. 181–212.

Barber, S., Bonnet, F. and Bekedam, H. (2004). Formalizing under-the-table payments to control out-of-pocket hospital expenditures in Cambodia. *Health Policy and Planning*, **19**: 199–208.

Brinkerhoff, D.W. (2004). Accountability and health systems: Toward conceptual clarity and policy relevance. *Health Policy and Planning*, **19**: 371–379.

Chaudhury, N. and Hammer, J. (2004). Ghost doctors: Absenteeism in Bangladeshi rural health facilities. *The World Bank Economic Review* **18**: 423–441.

Di Tella, R. and Savedoff, W. (2007). Diagnosis corruption: Fraud in Latin America's public hospitals. Washington, DC: Inter-American Development Bank.

Duncan F. (2003). Corruption in the health sector. Washington, DC: USAID Bureau for Europe & Eurasia, Office of Democracy and Governance.

Ramos, M. (2003). Auditors' responsibility for fraud detection. *Journal of Accountancy*, January, 28-35.

Ensor, T. (2004). Informal payments for health care in transition economies. *Social Science and Medicine*, **58**: 237-246.

Fung, A., Graham, M. and Weil, D. (2007). Full disclosure: The perils and promise of transparency. New York: Cambridge University Press.

Garcia-Prado, A. and Chawla, M. (2006). The impact of hospital management reforms on absenteeism in Costa Rica. *Health Policy and Planning*, **21**:91–100.

Gupta, S., Davoodi, H.R. and Tiongson, E.R. (2006). Corruption and the provision of health care and education services. *In*: Abed GT, Gupta S, (eds). Governance, corruption, and economic performance. Washington, DC: International Monetary Fund, pp. 245–272.

Jaen, M.H. and Paravisini, D. (2007). Wages, capture and penalities in Venezuela'. *In*: Di Tella, R., Savedoff, W.D., (eds). Diagnosis corruption: fraud in Latin America's public hospitals. Washington, DC: Inter-American Develop- ment Bank, pp. 57–94.

Kassirer, J. (2006). The corrupting influence of money in medicine. *In*: Transparency International. Global Corruption Report 2006: Special focus on corruption and health. London: Pluto Press.

Khemani, S. (2007). Local government accountability for service delivery in Nigeria. Washington, DC: World Bank.

Klitgaard, R. (2008). Controlling corruption. Berkeley, CA: University of California Press.

Klitgaard, R., Maclean-Abaroa, R. and Parris, H.L. (2008). Corrupt cities: A practical guide to cure and prevention. Oakland, CA and Washington, DC: Institute for Contemporary Studies and the World Bank Institute.

Kutzin, J., Meimanaliev, T., Ibraimova, A. *et al*. (2008). Formalizing informal payments in Kyrgyz hospitals: Evidence from phased implementation of financing reforms. Paper presented at the 4th World Congress of the International Health Economics Association, San Francisco, CA.

Lewis, M. (2006). Governance and corruption in public health care systems. Working paper number 78. Washington, DC: Center for Global Development.

Lewis, M. (2006). Governance and corruption in public health care systems. Working paper number 78. Washington, DC: Center for Global Development.

Lewis, M. (2007). Informal payments and the financing of health care in developing and transition countries. *Health Affairs*, **26**: 984–997.

Lindelow, M., Kushnarova, I. and Kaiser, K. (2006). Measuring corruption in the health sector: What can we learn from public expenditure tracking and service delivery surveys in developing countries? *In*: Transparency International. Global Corruption Report 2006: Special focus on corruption and health. London: Pluto Press.

Milewa, T. (2006). Health technology adoption and the politics of governance in the UK. *Social Science and Medicine*, **63**: 3102–3112.

Miller, W.L., Grodeland, A.B. and Koshechkina, T.Y. (2001). A culture of corruption? Coping with government in post-communist Europe. Budapest and New York: Central European University Press.

Miller, W.L., Grodeland, A.B. and Koshechkina, T.Y. (2006). A culture of corruption? Coping with government in post-communist Europe. Budapest and New York: Central European University Press.

Office of Inspector General. (1998). OIG compliance program guidance for hospitals. *Federal Register*, **63**: 8987–8998.

Reinikka, R.. and Svensson, J. (2006). Assessing frontline service delivery. Washington, DC: World Bank, Development Research Group, Public Services.

Rose, R. (2006). Corruption is bad for your health: findings from Central and Eastern Europe. *In*: Transparency International. Global Corruption Report 2006: Special focus on corruption and health. London: Pluto Press, pp. 39–43.

Savedoff, W.D. (2006). The causes of corruption in the health sector: a focus on health care systems. In: Transparency International. Global Corruption Report 2006: Special focus on corruption and health. London: Pluto Press.

Segal, G. & Summers, A.B. (2006). Citizens' budget reports: improving performance and accountability in government. Reason Public Policy Institute.

Spector, B.I. (2005). Fighting corruption. Chapter 1. *In*: Spector B, (ed.). Thompson DF. 2005. Restoring responsibility: ethics in government, business, and healthcare. New York: Cambridge University Press.

Transparency International. 2006. Global Corruption Report 2006: Special focus on corruption and health. London: Pluto Press.

Vian, T. (2006). Preventing drug diversion through supply chain management. U4 Brief 3. Bergen, Norway: Anti-Corruption Resource Centre, Chr. Michelsen Institute.

World Bank. 2003. Poverty net tools and practices. Washington, DC: World Bank.

World Bank. (2000). Helping countries combat corruption: progress at the World Bank since 1997. Washington, DC: World Bank.