

CONFRONTING CORRUPTION IN THE HEALTH SECTOR IN VIETNAM: PATTERNS AND PROSPECTS

TARYN VIAN^{1*}, DERICK W. BRINKERHOFF², FRANK G. FEELEY¹, MATTHIEU SALOMON³ AND
NGUYEN THI KIEU VIEN³

¹*Boston University School of Public Health, USA*

²*RTI International, USA*

³*Towards Transparency, Vietnam*

SUMMARY

Corruption in Vietnam is a national concern that could derail health sector goals for equity, access and quality. Yet, there is little research on vulnerabilities to corruption or associated factors at the sectoral level. This article examines current patterns and risks of corruption in Vietnam's health sector and reviews strategies for addressing corruption in the future. The article builds on the findings and discussion at the sixth Anti-Corruption Dialogue between the Vietnamese government and the international donor community. Development partners, government agencies, Vietnamese and international non-governmental organisations, media representatives and other stakeholders explored what is known about important problems such as informal payments, procurement corruption and health insurance fraud. The participants proposed corruption-reduction interventions in the areas of administrative oversight, transparency initiatives and civil society participation and health reforms to change incentives. The analysis assesses the prospects for success of these interventions, given the Vietnamese institutional context, and draws conclusions relevant to addressing health sector corruption in other countries. Copyright © 2012 John Wiley & Sons, Ltd.

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Corruption, defined as abuse of entrusted power for private gain, is a major threat to health system performance and health outcomes (Vian, 2008; Hanf *et al.*, 2011; Holmberg and Rothstein, 2011). Theft of medical supplies from facilities and the practice of extorting informal or 'envelope' payments decrease demand for services and prevent quality service delivery. Absenteeism and an internal 'market' for positions make it difficult to have competent people in the right jobs and to use human resources efficiently. Weak financial systems allow opportunities for embezzlement and permit limited resources to be spent on non-priority activities or to support networks of patronage rather than maximising health benefits. Where citizens lack information, they do not have the tools they need to participate in policy decision making or hold their government accountable for performance. Good governance in support of strong health systems therefore requires effective control of corruption (Lewis, 2006; Vian *et al.*, 2010).

In Vietnam, the government and donors are increasingly concerned about corruption. A governance study in 2004 identified control of corruption as a key challenge in the country (World Bank, 2005). After passing a new anti-corruption law in 2005, the Government established a central steering committee for anti-corruption efforts headed by the prime minister to coordinate implementation on anti-corruption efforts. Regional committees on anti-corruption were also established, a specialised anti-corruption bureau was created within the government inspectorate, and special anti-corruption units were placed within the Ministry of Public Security and at the People's Supreme Court, charged with monitoring, detection and enforcement (Ha *et al.*, 2011).

Yet, perceptions of corruption are still high: in 2008, 85 per cent of citizens perceived corruption in central-level health services, whereas 65 per cent perceived corruption in local health services (World Bank, 2010a). A more

*Correspondence to: T. Vian, Department of International Health, Boston University School of Public Health, 801 Massachusetts Avenue, Crosstown Building, 3rd floor, Boston, MA 02118, USA. E-mail: tvian@bu.edu

recent 2010 survey of citizens found that 28 per cent had paid bribes in hospitals in the past year (CECODES *et al.*, 2011). National surveys in 2006 and 2009 found that although Vietnam's anti-corruption law is strong, enforcement and monitoring are weak (Global Integrity, 2006; Transparency International 2006; Global Integrity, 2009). Politicised institutions, overlapping mandates, widespread nepotism and restrictions on freedom of expression are persistent challenges to good governance, whereas weak public administration systems for functions such as financial management and procurement are also a problem (World Bank, 2005; Global Integrity, 2006, 2009; Jones, 2009). Anti-corruption approaches need to take into account such institutional constraints and characteristics (Fritzen, 2005). This is especially important when mainstreaming anti-corruption policies and programmes in specific sectors such as health (UNDP, 2008).

At present in Vietnam, there is little research on corruption risks or associated factors at the sectoral level. Michael Johnston (2010) argues that in order to tackle corruption, we need to identify current vulnerabilities, including opportunities and incentives, which may be sustaining corruption. A vulnerability analysis gives us an idea of where corruption may be occurring because corruption is very difficult to measure directly. Such an assessment can point to appropriate controls and incentives needed to reduce corrupt dealings (Johnston, 2010).

The purpose of this article is to examine patterns and risks of corruption in Vietnam's health sector and to draw conclusions about the likely success of intervention strategies given the institutional context. Our hypothesis is that pressure for anti-corruption is likely to grow if, despite overall economic growth, the Vietnamese government fails to deliver promised goals of better health, financial protection and equity in outcomes and financial burden. Current, largely state-centric anti-corruption reforms alone will not be enough to deter abuse of power. We believe complementary efforts are needed to engage the public and organised civil society in the fight against corruption.

The article builds on the findings and discussion at the Donors Roundtable held as part of the sixth Anti-Corruption Dialogue between the Vietnamese government and the international donor community (hereafter, the 'Roundtable') in November 2009 (Towards Transparency and Embassy of Sweden, 2010). At that meeting, development partners, government agencies, Vietnamese and international non-governmental organisations (NGOs), media representatives and other stakeholders explored what is known about important problems such as envelope payments to medical staff, corruption in the pharmaceutical supply system and health insurance fraud. The participants proposed interventions in the areas of enhanced administrative oversight, transparency and structural health reforms. The analysis assesses the prospects for success of these interventions given the Vietnamese institutional context.

BACKGROUND ON THE VIETNAMESE HEALTH SECTOR

Patterns of corruption vary depending on how funds are mobilised, managed and paid to providers (Savedoff and Hussmann, 2006). It is helpful, therefore, to describe the actual relationships, responsibilities and health financing systems in Vietnam in order to understand the context in which corruption risks arise.

Vietnam is a middle-income East Asian country with a population of 86 million and a per capita GDP of \$1051 in 2009. In 1986, the government committed to a political reform and development strategy based on a market economy with socialist orientation, referred to as *doi moi* (renovation). This resulted in the introduction of market forces in the health system as well as changes to health care financing (Gabriele, 2006). Some of these changes included legalisation of private medical practice in 1986, de-regulation of the pharmaceutical market in 1989, introduction of mandatory state-funded and voluntary health insurance programmes in 1993 and financial decentralisation based on cost recovery principles (Gabriele, 2006; Fritzen, 2007; Ekman *et al.*, 2008; Phuong, 2009; Nguyen *et al.*, 2010). In 2002, the government expanded financial autonomy in government health care facilities, giving hospitals the flexibility to raise remuneration as well as expanding interactions with private and non-state actors (Ha *et al.*, 2011). In addition, policy reforms have increased the role of private clinics and companies, and private financing, in delivery of health services.

About 42–49 per cent of patients are covered by health insurance programmes (Ekman *et al.*, 2008; Phuong, 2009). Higher level care is mainly delivered in public hospitals, outpatient care is sought in public and private facilities, and most pharmaceuticals are purchased without prescription in the private sector (Ekman *et al.*, 2008). Recently, efforts have also been made to revitalise the network of public, primary health care clinics, called commune health centres, which serve rural populations (Fritzen, 2007).

Although the liberalisation of the Vietnamese economy initially helped promote fast growth and was successful at alleviating poverty (Gabriele, 2006), the effects on the health sector have been less positive over time (Ha *et al.*, 2010). Health sector reforms have resulted in more choices for treatment and fewer protections for patients, increasing overall health care costs while placing a substantial burden on households and exacerbating income inequality (Nguyen *et al.*, 2009b). Health care spending as a percentage of GDP is high in Vietnam: 7.1 per cent in 2007, compared with 3.7 per cent in Thailand, 4.4 per cent in Malaysia and 4.3 per cent in China (World Bank, 2010c). However, a very large proportion of health spending is out-of-pocket (Ha *et al.*, 2010), and the burden of health care costs is limiting access to care. In 2006, household out-of-pocket payments accounted for 61 per cent of the total health expenditures (Phuong, 2009). Moreover, the poor spend a higher percentage of income on health compared with less poor households, and for the poorest quintile of the population, nearly 15 per cent of non-food expenditures go for medicines (World Bank, 2010a). Economic shock from ill health is the most common cause of poverty, pushing an estimated three million people per year below the poverty line because of the burden of paying for catastrophic illness (Thanh *et al.*, 2010).

Medicines account for over 50 per cent of the total health care expenditures in 2005 (Nguyen *et al.*, 2009a), and rising prices are a concern. A study of medicine prices, availability and affordability in five regions of the country found that public procurement prices paid by facilities were 8.3 times the international reference prices for brand-name drugs and 1.8 times the international reference prices for lowest-price generic drugs, whereas prices to patients were 46.6 and 11.4 times the international reference prices for brand-name and generic drugs, respectively (Nguyen *et al.*, 2009a, 2010). At the same time, low-priced generic drugs were generally less available in public sector facilities compared with brand-name drugs. In contrast to most other countries, medicine prices were higher in the public sector than in the private sector and were unaffordable for the lowest-paid government workers or others earning similar wages (Nguyen *et al.*, 2009a, 2010).

HEALTH GOVERNANCE FRAMEWORK

Fritzen (2005) argues that the key to predicting success or failure in implementation of anti-corruption measures lies in institutional constraints. According to Fritzen, although political will for combating corruption in Vietnam is high, approaches to anti-corruption have been hampered by factors such as the dominance of powerful actors in policy making, unclear responsibilities for oversight, lack of resources and a state-centric system that leaves little scope for civil society activity (Fritzen, 2005). Table 1 summarises national anti-corruption approaches, institutional constraints and the impact of these factors on reform progress in Vietnam.

Although Fritzen's framework identifies general institutional constraints that impede anti-corruption strategies in Vietnam, it is applied at a 'whole-of-government' level and is not specific to the health sector. In analysing patterns and risks of corruption in the health sector, we adopt a similar institutional perspective; only we will drill down on the particular institutional roles and functions characterising health sector governance as shown in Figure 1 (Brinkerhoff and Bossert, 2008). Brinkerhoff and Bossert's model illustrates the institutional relationships among three categories of health sector players: government agencies (regulators and payers), facilities and personnel (providers), and patients or other civil society organisations that have an interest in health (clients). Government regulators and payers include Ministry of Health, the Vietnam Health Insurance programme, the Drug Administration of Vietnam, provincial government structures and other regulatory agencies. Providers include doctors, nurses, pharmacists and health facilities—public, private for-profit and voluntary—as well as suppliers. Clients are represented by patient advocacy groups, NGOs, associations of health professionals and other civil society groups active on health issues (Brinkerhoff and Bossert, 2008).

Table 1. Institutional constraints affecting anti-corruption approaches

Vietnam anti-corruption approach	Institutional constraints to implementation and effectiveness	Result
Enhanced administrative oversight and inspections (e.g. asset disclosure, technical audits)	<ul style="list-style-type: none"> • Executive dominance: executive authority is uncontested, few checks and balances • Bureaucratic fragmentation: results in weak authority relationships and unclear oversight roles between executive and non-executive actors • Under-resourced enforcement efforts, lack of investigation capacity 	<ul style="list-style-type: none"> • Weak incentives for enforcement. Actors in system resist or evade stepped-up enforcement efforts; particularistic interests of executive win out • Policies vulnerable to reversal at implementation stage • Low numbers of employees disciplined
Transparency and citizen complaints and participation (e.g. financial transparency, independent monitoring)	<ul style="list-style-type: none"> • State-centric system leaves little scope and few organisational platforms for civil society. • Civil society characterised by many smaller, informal organisations, rather than strong mass organisations • Corruption is systemic; transparency has less effect on systemic corruption so overall effectiveness of this strategy is low 	<ul style="list-style-type: none"> • Range of independent political action within civil society is limited • Civil society groups unable to use information disclosed to hold government agents accountable • May work in selective settings with strong tradition of civic engagement
Administrative and structural reform (reduce opportunities and incentives for corruption)	<ul style="list-style-type: none"> • Closed and centralised policy process produces vague policies that give appearance of unity and allow party insiders discretionary power to interpret as they like • Contestation for power and influence among elites dominates reform incentives; implementation of reform is undermined 	<ul style="list-style-type: none"> • Reform process is complex, conflict-ridden, little agreement over controls and management • Reversals of reform, controversies and complaints

Source: Adapted from Scott Fritzen (2005)

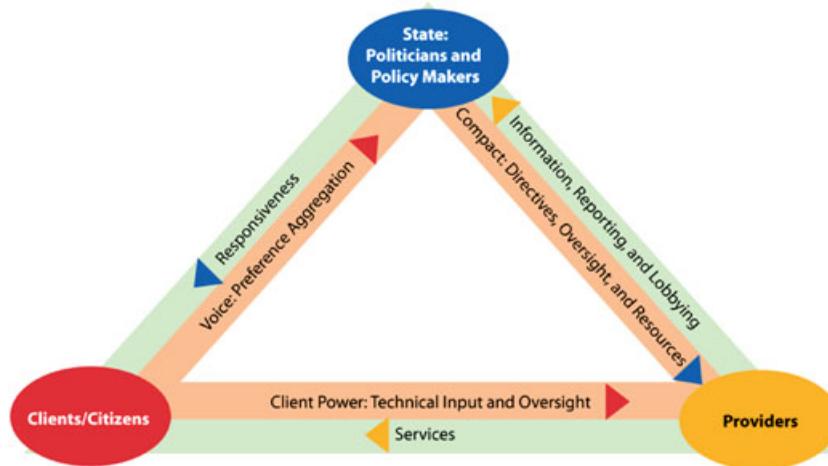
Our analysis highlights how constraints to whole-of-government anti-corruption approaches, such as those identified by Fritzen (2005), also impede health sector reforms. After discussing the roles of the three sets of players and the types of corruption risks or anti-corruption opportunities that arise through their interactions, the article presents current and proposed anti-corruption initiatives in the Vietnam health sector and analyses their prospects for success.

REGULATORS AND PAYERS

Government is responsible for system performance and achievement of policy goals (Balabanova *et al.*, 2008), including oversight of revenue collection, pooling of funds and paying providers in ways that encourage efficient, quality service availability. Government also has a standard setting and regulatory role to assure that medicines are safe and effective, individual practitioners are skilled, and facilities are staffed and equipped to assure good care.

Two specific types of regulatory activity in Vietnam's health sector reveal areas of risk for corruption: regulation of medicine prices and promotion, and legal reform related to examination and treatment by clinical providers.

Regarding medicine pricing, the government has expressed concern over equitable access to medicines and has made efforts to stabilise prices through regulatory intervention (Nguyen *et al.*, 2010). In 2003, the government began requiring price declaration and publication to ensure transparency although medicine suppliers were still allowed to set prices on the basis of market conditions. While this reform shows government commitment to the goal of affordable care, success has been limited because of gaps in the structure of regulations and the



Source: Brinkerhoff and Bossert, 2008

Figure 1. Health governance framework.

lack of monitoring and enforcement, one of the institutional constraints identified by Fritzen (Table 1). For example, the regulations did not require the declared prices and published prices to be reasonable, and tools for assessing reasonableness of prices (such as specifying international comparison procedures) were inadequate or incomplete. Because drug suppliers cannot sell at prices above the declared prices, there is an incentive to declare very high prices (Nguyen *et al.*, 2010).

The government also has weak regulation of drug promotion, which, when combined with the profit incentives from medicine sales, can lead to the misuse or over-use of medicines (World Health Organization, 2011). In Vietnam, pharmaceutical representatives often interact with providers and are able to influence the choices of drugs prescribed by providing ‘commissions’ or kickbacks based on prescribing history (Okumura *et al.*, 2002). Although aggressive marketing tactics are not the only cause of irrational drug use, they can contribute to the patterns found in Vietnam. For example, a community-based survey of antibiotic use in children reported that 91 per cent of children with symptoms of acute respiratory illness (ARI) were treated with antibiotics, even though up to 80 per cent of ARI episodes are caused by viruses and antibiotics are not an effective treatment (Larsson *et al.*, 2000). The study noted that 23 per cent of children were treated with combinations of two or more antibiotics, a practice that can sometimes cause serious adverse effects (Larsson *et al.*, 2000). A more recent investigation by the Ministry of Health reported that 41 per cent of patients studied had received combined antibiotics, 7.7 per cent of patient received three types of antibiotics, and 10 per cent of patients had received 11–15 types of medicine (Acuña-Alfaro, 2009). These patterns may be caused at least in part by the pharmaceutical company incentives to prescribers.

Excessive drug promotion activities may also result in inflated spending on pharmaceuticals. According to one media story, medicines account for 45 to 60 per cent of hospitalisation costs incurred by households [Phap Luat (Vietnamese news source), 29/08/2009, cited in Acuña-Alfaro, 2009]. Deficiencies in legal and institutional frameworks may also be a factor in inflated costs, creating loopholes under which open competition bidding can be avoided. Current laws do not mandate disclosure of information related to the procurement process, and legal safeguards proscribing conflict of interest are inadequate (Jones, 2009). In a 2005 survey of business opinions on the frequency of bribery in public procurement, Vietnam scored a low 3 out of 7 (with 1 being ‘common’ and 7 being ‘never’) (Jones, 2009).

A second area where government regulators play a key role is an oversight of clinical practice. Studies in Vietnam have shown that providers often do not follow clinical protocols (Bailey *et al.*, 2010) and quality of care

is weak. The government has tried to address these problems through the Law on Examination and Treatment (LET), which was adopted in 2009. The process of developing and passing the LET shows some of the weaknesses and strengths of the health regulatory environment in Vietnam and potential vulnerabilities for corruption.

The LET was designed to update the legal framework for regulating health professions and protecting patient rights (Wedeen *et al.*, 2011). The draft law proposed to create an independent, accountable and transparent regulatory system for licensing of facilities and certification of individual practitioners, with provisions for continuing education, re-licensing and complaints management. A centralised, independent Medical Council would be the regulatory body.

The LET was the result of an improved policy development process characterised by the use of international evidence, extensive technical consultations and the first regulatory impact assessment ever conducted in the health sector (Wedeen *et al.*, 2011). The process was participatory, involving People's Committees, provincial health authorities, public and private hospitals and professional associations, and drawing on technical assistance through the World Health Organization (WHO), Asian Development Bank, Australian Agency for International Development (AusAID) and other international organisations. Despite this, key provisions of the draft law—the creation of a centralised, independent Medical Council as regulatory authority and re-licensing facilities and practitioners—were not adopted. Some of the reasons included the cabinet's concern that the Medical Council structure did not align with the country's decentralisation goals, questions about the appropriateness of relying on a parastatal organisation for state administrative functions, and the fact that implementation of the re-licensing provision in the law—which would require new systems and procedures—was not aligned with the government's goal of streamlining public administration (Painter, 2003).

The revised law approved by the National Assembly is vulnerable to inconsistent interpretation and to the forces of corruption, including bribes to issue licenses to individuals who have not achieved standards or to reissue a license that has been revoked (Wedeen *et al.*, 2011). In addition, the complaints process specified in the law is to be managed at the facility level, which could result in inconsistent application of disciplinary actions and allow opportunities for conflict of interest or corruption.

PROVIDERS

In addition to bribes related to licensing, as mentioned earlier, types of corruption arising with providers include insurance fraud, over-treatment due to financial motives and informal payments. Provider payment methods, inadequate regulation, asymmetric information and conflicts of interest are risk factors. Information asymmetry occurs when health providers and consumers of services have unequal information about health care needs, service quality and cost. Conflict of interest occurs when a provider has a secondary financial interest that appears to influence the exercise of professional practice in providing patient care.

Insurance fraud involves billing for ghost patients or services not provided. One story reported in three newspapers [Lao Dong (Vietnamese news source), 03/10/2009, cited in Acuña-Alfaro, 2009; Tuoi Tre (Vietnamese news source), 03/10/2009, cited in Acuña-Alfaro, 2009; Vietnam Net, (Vietnamese news source), 19/06/2009, cited in Acuña-Alfaro, 2009] alleged that a hospital in Hanoi had faked 1500 claims, totaling about 10 billion VN Dong (approx. \$510 200) before the fraud was detected. In addition, fee-for-service insurance reimbursement procedures prompt providers to over-utilise more profitable diagnostic and treatment services (Tangcharoensathien *et al.*, 2011). This is made possible because of information asymmetry: often patients have no other source of information except their doctor, especially in rural areas.

Over-treatment is a complex issue. The line between over-treatment as a form of corruption and as a form of misguided clinical judgement is not always clear. Some doctors may believe that aggressive treatment is appropriate, whereas others may be over-treating to increase their income. The degree to which over-treatment causes harm is also uncertain. At the same time, we believe that financial incentives to over-treat are a risk factor related to corruption and that government efforts to control over-treatment are warranted. Subsequently, we discuss several risk factors in Vietnam that may lead to over-treatment.

Vietnamese public hospitals are allowed to contract and share user fee revenue with private medical equipment or diagnostic testing companies, bringing profit motivations into public service provision without

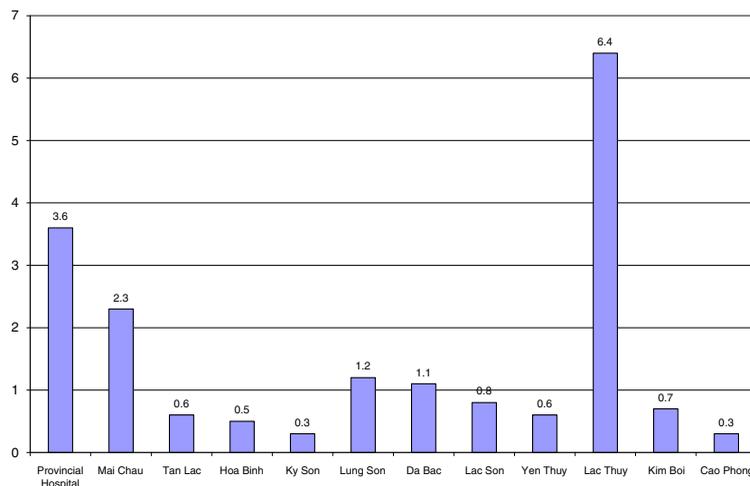
adequate accountability for performance (Towards Transparency and Embassy of Sweden, 2010). Weak monitoring systems make it difficult to assess whether such public–private partnerships encouraged by government are achieving desired outcomes of service expansion and efficiency, or simply promoting over-treatment and enriching the particular managers involved.

The level at which fees are set, and the frequency with which they are updated, is another corruption risk factor. Insurance reimbursement rates for basic patient services such as simple diagnostic procedures have not been raised since 1994, which means that the fees no longer cover true costs. Fees for newer, high-tech services were established more recently and are more profitable. This creates an incentive for providers to avoid supplying basic services and to substitute higher tech services.

The Key Improvements in Community Health project in Hoa Binh province has tried to develop measures of treatment patterns, in order to identify inappropriate use of services. The project found wide variation in diagnostic testing rates ranging from 6.4 tests per patient visit in Lac Thuy versus 0.3 tests per patient visit in Cao Pong and Ky Son hospitals, as shown in Figure 2. In addition, the analysis noted that among 200 people who had a CT scan, 80 per cent also had an ultrasound, a rate that they considered excessive (Towards Transparency and Embassy of Sweden, 2010).

Finally, informal or ‘envelope’ payments between patients and providers are a growing concern. Informal payments are contributions made to health care providers in addition to any officially required contributions, for services to which patients are entitled (Gaal *et al.*, 2006). Informal payments may be made in cash or in kind. A Medical University of Hanoi study reported that 70 per cent of medical staff interviewed admitted that they sometimes or often ask for or accept informal payments although some consider these payments to be gifts [Tuoi Tre (Vietnamese news source), 09/08/2009, cited in Acuña-Alfaro, 2009]. In another study, 29 per cent of urban residents who have had contact with health services in the last 12 months said that they had to pay bribes, about double the number who reported paying bribes in 2007 (Towards Transparency, 2011). A recent survey of Vietnamese youth found that 33 per cent of youth who came into contact with medical services reported experiencing corruption and 8 per cent of youth perceived corruption as ‘widespread’ (Transparency International, 2011) while a social audit conducted in 30 provinces in 2010 found that 61 per cent of respondents agreed that bribes are necessary in hospitals (CECODES *et al.*, 2011).

Informal payments appear related to overcrowding and high demand at the tertiary level. This in turn creates pressures for patients to bribe doctors and nurses in order to be seen sooner or to be assured of adequate time



Source: Sixth Anti-Corruption Dialogue between the Vietnamese Government and the international donor community (Donors Roundtable), November 2009, Hanoi, Vietnam. Presentation by Birgit Wendling on behalf of the EU Health Sector Working Group.

Figure 2. Variation in number of tests per patient visit in hospitals, Hoa Binh, 2008.

and attention from providers (Ha *et al.*, 2011). Yet, informal payments also seem to be driven by cultural expectations and ideas of social reciprocity and prevailing attitudes toward corruption. For example, when asked whether a government official receiving a 'small gift or money after performing duties' was corruption, 45 per cent of Vietnamese surveyed said yes, whereas 37 per cent said no and 18 per cent were undecided (World Bank, 2010a). Similarly, when faced with the situation of 'giving an additional payment or a gift to a doctor or nurse in order to receive better treatment', 32 per cent of Vietnamese youth consider this behaviour 'not wrong', whereas an additional 13 per cent of youth acknowledge that it is wrong but still 'acceptable' (Transparency International, 2011).

CLIENTS

Clients are sometimes complicit in corruption when they urge providers to accept informal payments or bribes in order to access better treatment, as discussed in the previous section. In this section, we focus on the role of clients, civil society organisations and the media in creating pressures for provider accountability and transparency.

An important factor in the control of corruption is external oversight and patient involvement, including reporting by media and participation of citizens in facility oversight (Gray-Molina *et al.*, 2001). One-party states such as Vietnam tend to be protective of their legitimacy and seek to minimise dissent (Jones, 2009), and political and operational issues in NGOs' relationships with the state are magnified (Lux and Straussman, 2004). Indeed, it is complicated for civil society organisations to be registered as NGOs in Vietnam; the 6-month process is cumbersome and gives state institutions numerous opportunities for discretion over authorization to register in general, as well as the definition of areas of activity in which the organisation can engage.

At the same time, media reporting on health sector corruption in Vietnam is surprisingly robust although mainly focused on issues of petty corruption, that is, front-line government officials or providers accepting bribes or engaged in abuse of office. To assess corruption-related reporting, the United Nations Development Program (UNDP) funded a study that examined reporting from five national-level Vietnamese media outlets between 2008 and 2009 (Acuña-Alfaro, 2009). Topics related to health covered by media reports covered a wide range of areas, including gaining commissions from sale of medicines (18% of the stories reported); personal gains from health insurance funds (14%); corrupt practices related to financial incentives in management of public hospitals, also known as 'socialisation' of public hospitals in Vietnam (7%); demands for bribes and abuse of patients through unnecessary treatment (31%); corruption in licensing (6%); abuses of management power in decisions related to properties or donations (11%); and corruption in personnel management and oversight of medical facilities (13%). The data showed a rise in reporting, with 88 articles published in 2008 and 122 in 2009. In a tightly controlled environment, media still exposed more than two stories per week.

Although media reports on corruption may raise public awareness about the problem, this has not created a strong anti-corruption movement in the health sector. One reason is that state controls limit the space for NGOs to operate, especially organisations seeking to engage the public on issues such as government transparency, accountability and abuse of office (Lux and Straussman, 2004). Despite perceptions that corruption is prevalent, Vietnamese are generally satisfied with health services: over 50 per cent are satisfied with central health services and 45 per cent are satisfied with local health services (World Bank, 2010a). This suggests that people may be resigned to corruption. Corruption may even increase patient satisfaction among those with adequate financial means because they are able to pay a bribe to access better and faster care. In any case, most people think corruption has not diminished over time (World Bank, 2010a), and many citizens are pessimistic about the fight against corruption. For example, when asked their reasons for not reporting corruption, 28 per cent of Vietnamese youth surveyed stated that 'it would not help' (Transparency International, 2011).

ANTI-CORRUPTION INITIATIVES IN THE HEALTH SECTOR IN VIETNAM

Roundtable participants identified and discussed both current and planned initiatives to address corruption in Vietnam. Using the framework in Figure 1, we can categorise these initiatives in terms of which health system

actors are most directly engaged. Table 2 captures graphically the results of this mapping. This table clearly reveals the dominance of government actors in accountability and transparency reforms in the health sector, and the relatively limited role of citizens and service users.

Three initiatives are attempting to increase the engagement of civil society and service users in reforms. Examples include work on payment system reform, efforts to increase accountability through patient feedback and a social audit programme. The summaries in the following sections are based on presentations from the Donors Roundtable in 2009 (Towards Transparency and Embassy of Sweden, 2010). As the reforms were ongoing at that time, their impact on corruption is not yet known.

Clinical pathways and payment system reform

Researchers from Vietnamese Health Economics Association, a civil society organisation with support from AusAID (Australia), are developing a case-based reimbursement methodology, which they believe can help improve transparency and reduce perverse incentives in the health care delivery process. Case-based payments, established prospectively based on estimated resource needs for standard care, would replace fee-for-service reimbursement. Under this kind of payment system, providers no longer have the incentive to use many diagnostic tests or potentially ineffective treatments to maximise revenue.

Working in four pilot hospitals, the research team collaborated with facility personnel to develop care pathways for the treatment of three types of cases: pneumonia (medical), normal delivery (obstetrics) and appendicitis (surgery). For each of these cases, the researchers developed criteria for admission and discharge, indications for standard mandatory and other diagnostic tests and imaging, guidance for selection of drugs and criteria for other interventions. Checklists were developed for monitoring patient status to achieve safe discharge. The standard pathway was then compared with actual utilisation data, and differences were explored to shed light on recordkeeping problems or other issues. For example, the process identified tests results

Table 2. Current and planned anti-corruption reforms and governance linkages

Anti-corruption interventions, current and planned in Vietnam	Governance linkages by health system actor		
	Clients/citizens ← → Government regulators and payers	Government regulators and payers ← → Providers	Clients/citizens ← → Providers
Redesign of provider payment systems to change incentives		✓	
Increased transparency in medicines pricing		✓	✓
Expanded avenues for patient feedback	✓	✓	✓
Reduced informal payments to providers		✓	✓
Streamlined administrative procedures		✓	
Improved information systems to detect and deter fraud		✓	
Expanded civil society watchdog monitoring and media reporting	✓		✓
Managing conflicts of interest among public sector providers		✓	
Increased detection and punishment of officials who accept bribes, kickbacks		✓	

performed on outpatients before admission which were not appearing on the inpatient bill. Review also revealed areas where current practice might need to change (e.g. clinicians were using expensive sutures without any clinical indication or were not providing adequate pain relief). Once the clinical pathways were developed, the researchers conducted a cost analysis to determine standard resource costs required per case.

In late 2009, the researchers began pilot implementation of the case-based reimbursement system in two hospitals for four conditions: adult pneumonia, child pneumonia, normal delivery and appendicitis. The pilot uses standard costs to reimburse hospitals for the cases treated, a payment method expected to reduce length of stay, unnecessary interventions (such as extra drugs, diagnostic procedures and surgery) and unnecessary admissions. The new payment system may also reduce use of unnecessarily expensive inputs such as brand-name drugs.

At the same time, certain risks are inherent in this type of payment system. For example, providers could start to game the system by padding care pathways or engaging in creative accounting to increase reimbursement. Clinical audits will be needed to detect potential withholding of necessary care to maximise profit. Informal payments may still occur under the system, and hospitals still have the ability to charge supplementary 'elective' fees to patients over the package reimbursement amount. These informal and 'elective' fees could reduce efficiency gains. Finally, it is unclear how the case-based payments will be integrated with existing user fee schedules for diagnostic and treatment services. The research team will monitor the extent to which outcomes are affected by these problems and will look for ways to adjust the payment system to further minimise risks.

Provider payment reforms hold promise to improve quality of care and reduce medical expenditures, especially the burden on individual patients and households. Clinical pathways can also increase accountability of individual providers and facilities and contribute to increased patient satisfaction. Efforts to introduce electronic patient records in Vietnam can be linked to this reform and further strengthen accountability for high-quality care.

Patient feedback

A second example of a citizen/client focused anti-corruption intervention involves increased pressure for integrity. The Hanoi National Hospital for Pediatrics introduced a patient feedback system in 2009 as a way to improve service delivery after their project won a Vietnam Innovation Day award sponsored by the World Bank and 10 development partners. The hospital had problems with overcrowding due to huge increases in patient utilisation. For example, the number of outpatient paediatric patients per year increased from 94 294 in 1994 to 435 000 in 2008, still with only 70 staff. Doctors were seeing up to 160 patients per day, with waiting times of 4–5 h.

As part of the grant, the intervention team developed six tools to collect feedback from doctors and patients. Students collected the feedback and helped to analyse the data. Patients responded positively to being asked their opinions and were eager to participate. Data from the study are being used to set benchmarks and to identify specific issues for problem solving. The feedback included information on whether patients felt compelled to pay informal fees and has contributed to increased transparency about this practice.

Social audit: the Public Administration Performance Index

A third initiative is the Public Administration Performance Index (PAPI, www.papi.vn), developed through a collaboration between the Center for Community Support and Development Studies (CECODES) and the Vietnam Fatherland Front (VFF), with technical support from UNDP. This social audit tool is meant to strengthen accountability and responsiveness of government by providing a way for citizens to engage with government through performance monitoring (UNDP Governance Assessment Portal, 2011).

The index is compiled by surveying citizens and assesses policy making, policy implementation and service delivery at the provincial level. Pilot-tested in 2009, the survey was administered to 5568 citizens in 30 provinces and cities in 2010 and was expanded to all 63 provinces in 2011 (World Bank, 2010b). Results are posted online with indicators in the areas of participation, transparency, accountability, anti-corruption,

administrative procedures and public services. PAPI ranks provinces against each other, fostering a friendly competition to perform better. It also gives detailed information to government officials on citizen perceptions.

Although some indicators are objective (per cent of citizens who are aware of the Anti-Corruption Law or per cent of those who paid a bribe when using hospital services), others are based on opinions (per cent of respondents who agreed that bribes are necessary at hospitals or that officials divert state funds for private use) (CECODES *et al.*, 2011). While the PAPI tool and feedback process has been endorsed by key stakeholders including senior local government officials and Communist Party leaders, it will be important to assess how the indicators are used by media, citizens and other stakeholders to hold providers and government accountable and to evaluate how PAPI reports help influence and shape public administration reforms over time.

PROSPECTS FOR SUCCESS IN PURSUING HEALTH SECTOR ANTI-CORRUPTION INITIATIVES

The examples of experimentation with citizen/client focused reforms notwithstanding; the mapping of reforms in Table 2 reveals the predominant role of government actors in current and planned reform initiatives. The general institutional factors constraining anti-corruption reforms identified by Fritzen (2005) offer some explanatory clues. For example, although NGOs are allowed to exist, they are scrutinised by government and their independence is limited. In such an environment, independent structures that could increase accountability for medical care—such as the Medical Council regulatory authority proposed in the original LET—are too uncomfortable for government and may be considered a circumvention of state responsibilities. In addition, the overall direction of public administration reform in the country—to decentralise and streamline—leads to a climate where people may not adequately consider the risks involved in decentralised regulatory authority and the special requirements for quality control in the health sector (Wedeen *et al.*, 2011). Spending to strengthen quality monitoring, complaint systems and audit functions may be seen as a low priority in such an environment.

A major challenge to government stewardship in the health sector is the government's desire to both control and operate (Painter, 2003): to manage health care delivery systems while setting policies and regulations for financing, purchasing and monitoring quality outcomes. There will be endemic corruption until the government realises that it cannot be both a 'player' and a 'referee' at the same time. Regulatory and service delivery functions must be split, even though national laws govern the regulator and significant health services are provided by government-owned institutions. Other countries have models similar to the Medical Council model, where a board independent of the Ministry of Health has disciplinary powers over professionals working in Ministry of Health facilities. The government of Vietnam was apparently reluctant to accept such division of authority. To effectively mainstream national anti-corruption approaches into the health sector, adaptation and support are needed. The following options could improve the prospect for success. These follow the three approaches of Vietnam's anti-corruption strategy described in Table 1, are based on the discussions at the Roundtable, and are supported by experience and analysis in other countries as well.

Approach 1: Enhanced administrative oversight

Many of the health sector anti-corruption strategies listed in Table 2 focus on creating effective checks and balances through administrative oversight. Yet, capacity constraints impede the government from implementing these approaches. Greater attention is needed to identify and fill gaps in government capacity for implementing regulatory action, especially through stronger information and audit systems. Weak accounting systems are risk factors that allow embezzlement, as shown in Zambia. In that country, a lack of procedures to monitor health spending in relation to performance and a long and cumbersome audit process were causal factors in a \$4.8 million embezzlement detected in 2009. Although procedures were in place to follow up on funds and results, these procedures were not followed (Pereira, 2009), and although previous audits had revealed many problems, audit findings were not released in a timely manner and were not acted upon by the legislature.

Information systems can also help to deter corruption through improved transparency of procurement decisions and doctors' prescription practices. Monitoring of doctors' prescription practices can detect

relationships between physicians and pharmaceutical companies, which can be investigated for kickbacks. Investment in these types of management systems may work because it fits within the strong executive structure favoured in Vietnam. Oversight capacity must also be strengthened to assure that complaint mechanisms are being used by clients and staff, and provide adequate protection to complainants.

Approach 2: Transparency, citizen monitoring and participation

Constructive engagement of clients and citizens is helpful in policy dialogue and collaborative problem solving, whereas citizen monitoring can help promote transparency and accountability. The PAPI social audit initiative is an important mechanism for increasing public engagement, and its progress and impact should be evaluated. Lessons learned could help inform other initiatives, such as more citizen-initiated lobbying, or additional participatory research on root causes for problems. The Affiliated Network for Social Accountability for East Asia and the Pacific (ANSA EAP) has developed many such tools and methods for public engagement to increase accountability and has been involved in training youth to monitor local service delivery in Cambodia, citizen report cards in the Philippines and participatory budgeting in Indonesia (www.ansa.eap.net). Stronger public engagement in Vietnam depends on improving the quality of NGO management capacity (Lux and Straussman, 2004). In addition to capacity strengthening of civil society organisations, Vietnam should loosen state controls constricting the establishment and operation of NGOs engaged in advocacy. This will allow them to function more effectively as watchdogs and increase opportunities for citizen voice in the policy-making process.

Civil society organisations engaged in research also have a role in promoting transparency through data gathering and use. For example, if public and private providers are required to disclose procurement bidding information, external monitoring groups could examine the losing bids compared with winning bids, creating more pressure for accountability on decisions to procure cost-effectively. Right now, winning bids may be neither technically better nor cheaper than their competitors, but only winning bids are disclosed.

In the Philippines, Procurement Watch (www.procurementwatch.org) has been engaged in building accountability into government procurement systems by measuring fair market prices and comparing them with what is actually paid. This type of approach has also been implemented in Argentina and Bolivia to deter corruption and inefficiency (Savedoff, 2008). Analysis of insurance claim databases is another area where monitoring may help to detect where hospitals are abusing the reimbursement system by ordering excessive testing.

Approach 3: Structural policy reform to reduce incentives for corruption

The balancing of Vietnam's market-driven economic reform agenda within its socialist political framework suggests that the policy reform process must include more engagement of political leadership, the press and the public at earlier stages. Such engagement can create stronger incentives for government responsiveness (Brinkerhoff and Bossert, 2008). Technical stakeholders must learn to discern and appreciate political interests and to develop skills in policy advocacy. The reform impact assessment process can be used more effectively if it is implemented early in the law development process and used to formally assess the costs and impact on quality, safety and consumer satisfaction of reform options.

Health sector reform efforts should be attentive to those issues where concern about corruption is strong. For example, inappropriate drug promotion and physician-pharma interactions may lead to higher prices and inappropriate prescribing. These things can be measured and monitored. The WHO has created process indicators for transparent and accountable drug promotion practices as part of the Good Governance in Medicines programme (GGM, www.who.int/medicines/ggm/). The GGM approach to increasing transparency in public pharmaceutical systems includes three steps: risk assessment, development of a national framework for responding to identified needs and implementation of approaches such as procedures for disclosure and management of conflict of interest, web-based medicines registration and licensing systems, and other interventions. To date, 26 countries are participating in the GGM, including Cambodia, Malaysia, Mongolia and the Philippines.

Another important area of patient discontent is informal payments. Informal payments are a complex problem, exacerbated by underfunding of public entitlements to service, overcrowding in tertiary facilities, providers who are inadequately paid and lack of transparency. Although some hospitals have tried to control informal payments, there has been limited success in Vietnam. Government is essentially licensing itself and may not be likely to condemn government-run institutions where informal payments are prevalent. Although patient complaint mechanisms exist, their independence and effectiveness has been questioned and public trust is low. Greater transparency could help create pressure for policy change. Civil society organisations could try to provide patients with information on their rights and official fee policies. In an environment where there is political pressure on government to reduce informal payments, provider payment reform, which links remuneration more closely to performance indicators, is a strategy that has had some success in Cambodia and Kyrgyzstan (Barber *et al.*, 2004; Gaal *et al.*, 2010; Miller and Vian, 2010).

CONCLUSION

Controlling corruption in the Vietnamese health sector, as in any country, requires changes in institutions, attitudes and behaviour. Controlling corruption is a critical component of governance and is essential to achieve health sector goals of improved quality of care and equity in access and outcomes. Government, providers, and citizens and service users each have a role to play in promoting good governance for better health. Key to success is unlocking the incentives that enable and motivate health system actors to fulfil their roles and adapting strategies to work within and overcome institutional constraints.

To what extent will the government of Vietnam allow civil society organisations to pursue the watchdog functions that are part of many anti-corruption strategies in democratic societies? Will civil society organisations in Vietnam continue to tread carefully in exploiting openings to pressure government, as do Chinese NGOs (see Tang and Zhan, 2008)? What are the prospects for more confrontational civil society advocacy and lobbying against corruption in the health sector in Vietnam? Answering these questions through future research will help to assess the validity of our hypothesis and advance understanding of effective anti-corruption measures across a range of institutional settings.

DISCLOSURE STATEMENT

NV is a current and MS is a former employee of Towards Transparency (TT). The opinions expressed herein are those of the authors and do not necessarily reflect the views of Transparency International (TI) or Towards Transparency (TT).

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REFERENCES

- Acuña-Alfaro J. 2009. Media's coverage on corruption in the health sector in Viet Nam: the tip of the iceberg? Presentation prepared for Anti-Corruption Dialogue meetings. United Nations Development Programme (UNDP): November. Hanoi, Vietnam.
- Bailey PE, Binh HT, Bang HT. 2010. Promoting accountability in obstetric care: use of criteria-based audit in Viet Nam. *Global Public Health* 5: 62–74.
- Balabanova D, Oliveira-Cruz V, Hanson K. 2008. Health sector governance and implications for the private sector. Technical partner paper 9 of the Rockefeller Foundation-sponsored initiative on the role of the private sector in health systems in developing countries. London School of Hygiene and Tropical Medicine: London.

- Barber S, Bonnet F, 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 DW, Bossert TJ. 2008. Health governance: concepts, experience, and programming options. Policy Brief. U.S. Agency for International Development, Health Systems 20/20 Project: Washington, DC.
- CECODES, VFF, UNDP. 2011. *The Viet Nam Provincial Governance and Public Administration Index (PAPI) 2010: Measuring Citizens' Experiences*. CECODES, VFF, and UNDP: Hanoi.
- Ekman B, Liem NT, Duc HA, Axelson H. 2008. Health insurance reform in Vietnam: a review of recent developments and future challenges. *Health Policy and Planning* **23**: 252–263.
- Fritzen SA. 2005. Beyond “political will”: how institutional context shapes the implementation of anti-corruption policies. *Policy and Society* **24**: 79–96.
- Fritzen SA. 2007. Legacies of primary health care in an age of health sector reform: Vietnam’s commune clinics in transition. *Social Science & Medicine* **64**: 1611–1623.
- Gaal P, Belli PC, McKee M, Szocska M. 2006. Informal payments for health care: definitions, distinctions, and dilemmas. *Journal of Health Politics, Policy and Law* **31**: 251–293.
- Gaal P, Jakab M, Shishkin S. 2010. Strategies to address informal payments for health care. In *Implementing Health Finance Reform: Lessons from Countries in Transition*, Kutzin J, Cashin C, Jakab M (eds). WHO: Geneva; 327–359.
- Gabriele A. 2006. Social services policies in a developing market economy oriented toward socialism: the case of health system reforms in Vietnam. *Review of International Political Economy* **13**: 258–289.
- Global Integrity. 2006. Country Report: Vietnam.
- Global Integrity. 2009. Global Integrity Scorecard: Vietnam.
- Gray-Molina G, Perez de Rada E, Yanez E. 2001. Does voice matter? Participation and controlling corruption in Bolivian hospitals. In *Diagnosis Corruption: Fraud in Latin America's Public Hospitals*, Di Tella R, Savedoff WD (eds). Inter-American Development Bank: Washington, DC; 27–55.
- Ha BT, Green A, Gerein N, Danielsen K. 2010. Health policy processes in Vietnam: a comparison of three maternal health case studies. *Health Policy* **98**: 178–185.
- Ha TTT, Tho DTH, Tuan T, Vian T. 2011. *Informal Payments in Health Services in Vietnam: Causes, Perceptions and Impact*. Towards Transparency: Hanoi, Vietnam.
- Hanf M, Van-Melle A, Fraise F, Roger A, Carme B, Nacher M. 2011. Corruption kills: estimating the global impact of corruption on children deaths. *PLoS One* **6**: e26990.
- Holmberg S, Rothstein B. 2011. Dying of corruption. *Health Economics, Policy, and Law* **6**: 529–547.
- Johnston M. 2010. Assessing vulnerabilities to corruption: indicators and benchmarks of government performance. *Public Integrity* **12**: 125–142.
- Jones DS. 2009. Curbing corruption in government procurement in Southeast Asia: challenges and constraints. *Asian Journal of Political Science* **17**: 145–172.
- Larsson M, Kronvall G, Chuc NT, Karlsson I, Lager F, Hanh HD, Tomson G, Falkenberg T. 2000. Antibiotic medication and bacterial resistance to antibiotics: a survey of children in a Vietnamese community. *Tropical Medicine & International Health* **5**: 711–721.
- Lewis M. 2006. Governance and corruption in public health care systems. Working Paper 78. Center for Global Development: Washington, DC.
- Lux SJ, Straussman JD. 2004. Searching for balance: Vietnamese NGOs operating in a State-led civil society. *Public Administration and Development* **24**: 173–181.
- Miller K, Vian T. 2010. Strategies for reducing informal payments. In *Anticorruption in the Health Sector: Strategies for Transparency and Accountability*, Vian T, Savedoff W, Mathisen H (eds). Kumarian Press: Sterling, VA; 55–66.
- Nguyen AT, Knight R, Mant A, Cao QM, Auton M. 2009a. Medicine prices, availability, and affordability in Vietnam. *Southern Med Review* **2**: 2–9.
- Nguyen P, Bich Hanh D, Lavergne MR, Mai T, Nguyen Q, Phillips JF, Hughes J, Van Thuc H. 2009b. The effect of a poverty reduction policy and service quality standards on commune-level primary health care utilization in Thai Nguyen Province, Vietnam. *Health Policy and Planning* **25**: 262–271.
- Nguyen AT, Knight R, Mant A, Cao QM, Brooks G. 2010. Medicine pricing policies: lessons from Vietnam. *Southern Med Review* **3**: 12–19.
- Okumura J, Wakai S, Umenai T. 2002. Drug utilisation and self-medication in rural communities in Vietnam. *Social Science & Medicine* **54**: 1875–1886.
- Painter M. 2003. Public administration reform in Vietnam: problems and prospects. *Public Administration and Development* **23**: 259–271.
- Pereira J. 2009. Zamiba aid effectiveness in the health sector. Case study. Action for Global Health. http://www.actionforglobalhealth.eu/fileadmin/user_upload/doc_library/AE_Zambia_Case_Study_Final_version.pdf [July 22, 2011].
- Phuong NK. 2009. Viet Nam: review of financing of health-care including health promotion. In *Promoting sustainable strategies to improve access to health care in the Asian and Pacific Region*, United Nations Economic and Social Commission for Asia and the Pacific SDD (ed.). UN: Bangkok, Thailand.
- Savedoff W. 2008. The impact of information and accountability on hospital procurement corruption in Argentina and Bolivia. U4 Brief 7. U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute: Bergen, Norway.
- Savedoff WD, Hussmann K. 2006. Why are health systems prone to corruption? In *Global Corruption Report 2006: Special Focus Corruption and Health*, Transparency International (ed.). Pluto Press: London; 4–16.
- Tang S-Y, Zhan X. 2008. Civic environmental NGOs, civil society, and democratization in China. *Journal of Development Studies* **44**: 425–448.
- Tangcharoensathien V, Patcharanarumol W, Ir P, Aljunid SM, Mukti AG, Akkhavong K, Banzon E, Huong DB, Thabrany H, Mills A. 2011. Health-financing reforms in southeast Asia: challenges in achieving universal coverage. *Lancet* **377**: 863–873.
- Thanh NX, Lofgren C, Phuc HD, Chuc NT, Lindholm L. 2010. An assessment of the implementation of the Health Care Funds for the Poor policy in rural Vietnam. *Health Policy* **98**: 58–64.

- Towards Transparency. 2011. *Vietnam 2010 Global Corruption Barometer*. Draft. Towards Transparency, for Transparency International: Hanoi, Vietnam.
- Towards Transparency, Embassy of Sweden. 2010. *Corruption Perceptions and Impact on Poverty in the Health Sector in Vietnam: How to Improve Transparency and Accountability: Report of the Donors Roundtable*. Final Version. April 20, 2010. Towards Transparency: Hanoi, Vietnam.
- Transparency International. 2006. *National Integrity Systems*. Transparency International Country Study Report. Vietnam 2006. Transparency International: Berlin.
- Transparency International. 2011. *Youth integrity in Vietnam: Piloting Transparency International's Youth Integrity Survey*. Transparency International and Towards Transparency Vietnam: Berlin and Hanoi.
- UNDP. 2008. *Mainstreaming anti-corruption in development*. Anti-corruption practice note. http://www.unrol.org/files/1%20Mainstreaming%20AC%20in%20Development_AC%20Practice%20Note_2008.pdf [October 26, 2011].
- UNDP Governance Assessment Portal. 2011. *Viet Nam: New online tool will allow greater participation in assessing public administration*. <http://www.gaportal.org/viet-nam-new-online-tool-will-allow-greater-participation-assessing-public-administration> [November 20, 2011].
- Vian T. 2008. *Review of corruption in the health sector: theory, methods and interventions*. *Health Policy and Planning* **23**: 83–94.
- Vian T, Savedoff W, Mathisen H (eds). 2010. *Anticorruption in the Health Sector: Strategies for Transparency and Accountability*. Kumarian Press: Sterling, VA.
- Wedeen L, Van der Velden T, Feeley R, Nguyen HT, Le BN. 2011. *Improving standards of health care practice in Viet Nam: lessons from a recent policy reform process*. **Under review**.
- World Bank. 2005. *Vietnam Development Report 2005: Governance*. Report No. 30462-VN. World Bank: Washington, DC.
- World Bank. 2010a. *Vietnam Development Report (VDR) 2010: Modern Institutions*. World Bank: Hanoi, Vietnam.
- World Bank. 2010b. *Vietnam: Launching a Public Administration Performance Index at the Provincial Level*. <http://go.worldbank.org/LXNOLTBW70> [November 20, 2011].
- World Bank. 2010c. *World Development Indicators 2010*. World Bank: Washington, DC.
- World Health Organization. 2011. *The World Medicines Situation 2011: Rational Use of Medicines*. WHO/EMP/MIE/2011.2.2. WHO: Geneva.