Exploring corruption in the South African health sector

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Abstract

Recent scholarly attention has focused on weak governance and the negative effects of corruption on the provision of health services. Employing agency theory, this article discusses corruption in the South African health sector. We used a combination of research methods and triangulated data from three sources: Auditor-General of South Africa reports for each province covering a 9-year period; 13 semi-structured interviews with health sector key informants and a content analysis of print media reports covering a 3-year period. Findings from the Auditor-General reports showed a worsening trend in audit outcomes with marked variation across the nine provinces. Key-informants indicated that corruption has a negative effect on patient care and the morale of healthcare workers. The majority of the print media reports on corruption concerned the public health sector (63%) and involved provincial health departments (45%). Characteristics and complexity of the public health sector may increase its vulnerability to corruption, but the private-public binary constitutes a false dichotomy as corruption often involves agents from both sectors. Notwithstanding the lack of global validated indicators to measure corruption, our findings suggest that corruption is a problem in the South African healthcare sector. Corruption is influenced by adverse agent selection, lack of mechanisms to detect corruption and a failure to sanction those involved in corrupt activities. We conclude that appropriate legislation is a necessary, but not sufficient intervention to reduce corruption. We propose that mechanisms to reduce corruption must include the political will to run corruption-free health services, effective government to enforce laws, appropriate systems, and citizen involvement and advocacy to hold public officials accountable. Importantly, the institutionalization of a functional bureaucracy and public servants with the right skills, competencies, ethics and value systems and whose interests are aligned with health system goals are critical interventions in the fight against corruption.

Key words: Corruption, health systems, governance, agency theory, South Africa
Key Messages

- Agency theory provides a useful framework for describing relationships in the health sector and categorizing pathways for corruption.
- Key prerequisites in the fight against corruption are the political will to run corruption-free health services, effective government to uphold and enforce laws, and public officials with the right skills, competencies, ethics and value systems.
- Citizen voice is important in holding public officials accountable for health system performance.
- Researchers should pay more attention to developing robust indicators for measuring corruption and its impact on the health system.

Introduction

The 2000 World Health Report introduced the concept of stewardship as the most fundamental function of a health system, as it makes possible the attainment of the health system goals of: improving and promoting people’s health; ensuring responsive and quality health service delivery and protecting citizens against the financial costs of illness (WHO 2000). There is now global recognition of the importance of leadership and governance to the optimal performance of health systems (WHO 2007), which enable improved population health outcomes and returns on health investment (Lewis 2006; Holmberg and Rothstein 2011).

Recent scholarly attention has focused on the relationship between weak governance and corruption (Lewis 2007; Holmberg and Rothstein 2011; Brinkerhoff and Bossert 2014; Cockcroft 2014). Corruption is defined by Transparency International as ‘the abuse of entrusted power for private gain’ (Transparency International, p. xvii), although the term has a more varied conceptual history (Chipkin 2012).

Corruption in the health sector is a global problem, and the magnitude is significant in both rich and poor countries (Transparency International 2006). Corruption has negative consequences for economic growth and development (Bardhan 1997; Cockcroft 2014) and adversely affects health service delivery, accessibility, affordability, efficiency and equity (Lewis 2007; Cockcroft 2014). Corruption also affects health policy and spending priorities, and can be deadly in some instances, e.g. where ineffective, counterfeit medicines are administered (Transparency International 2006). Strengthening governance and reducing corruption are widely recognized as critical interventions for: improving health outcomes (Lewis 2006; Holmberg and Rothstein 2011), achieving the Millennium Development Goals or other social or development outcomes. (Gupta et al. 2000; Transparency International 2006; World Bank 2010; Brinkerhoff and Bossert 2014; Cockcroft 2014).

Corruption and health

Transparency International has noted that:

The diversity of health systems worldwide, the multiplicity of parties involved, and the complexity of distinguishing among corruption, inefficiency and honest mistakes make it difficult to determine the overall costs of corruption in this sector around the globe (Transparency International 2006; xvi).

 Nonetheless, it has been estimated that in the US health sector, 60 billion US dollars are lost due to corruption every year, equating to around 3% of total annual US health expenditure (Iglehart 2009). Similarly, healthcare corruption amounts to ~50 billion Euros across the European Union per year (Nuthall 2010). In Cambodia, it is estimated that more than 5% of the health budget is lost to corruption at central government level (Transparency International 2006).

The nature of corruption makes it difficult to study or to assess on the basis of empirical evidence. Research is often based on public perception surveys as a proxy of actual corruption and there are no formal reporting systems in place to measure corruption. In high-income countries, research on corruption typically aims to: quantify the burden of corruption on the health system (Levine 2009; Morris 2009; Berwick and Hackbarth 2012); assess interventions to reduce opportunities for corrupt behaviour (Lubao 2008; Francis et al. 2011); analyse the implications of new anti-corruption regulations on the delivery of services (Klein and Campbell 2006; Spevak 2006; Carpenter et al. 2011) or evaluate emerging opportunities for corruption as new markets are introduced due to technological advances, such as stem cell tourism (Caulfield 2012).

In low- and middle-income countries (LMICs), where health care is largely publicly or donor funded, research has focused on corruption due to government failures. An example is the failure to regulate the supply of pharmaceuticals resulting in a high prevalence of counterfeit drugs (Garuba et al. 2009; Nsimba 2009; Khan et al. 2011). Similarly, informal payments extracted at the point of service delivery decreases access to care, particularly for poor people (Ensor 2004; Cockcroft et al. 2008; Liaropoulos et al. 2008; Hunt 2010; Maestad and Mwisongo 2011; Paredes-Solis et al. 2011). This suggests that the nature and distribution of corruption differ among countries based, in part, on the organizational structure of the institutions delivering and financing health services.

In South Africa, social scientists have examined the relationship between corruption and the state, and have suggested that corruption is influenced by inadequate separation of powers between the governing political party and the state (Matshiqi 2012), different conceptions of politics and of the state (Chipkin 2012), and is compounded by conflicts of interest, information asymmetries and lack of or inappropriate regulation in the private health sector (Francis and Edmeston 2012). In 2013, Transparency International’s corruption perception index ranked the country 72 out of 177 countries (Transparency International 2013). A convergence of opinion is that democratization has decreased overall state vulnerability to corruption, but that an expansion of state services has provided new opportunities for corruption (Hyslop 2005; Chipkin 2012; Matshiqi 2012). Much of the reported corruption occurs in provincial (sub-national) government administrations where vulnerabilities have been largely inherited from apartheid Bantustan structures (Lodge 1998; Hyslop 2005). Bantustans (homelands) were physical locations created by the apartheid government where black Africans, speaking the same language and considered to be from the same ‘ethnic’ group, were compelled to live, many forcibly removed from their place of birth (Van Rensburg 2004). In an attempt to give these
Bantustans some kind of legitimacy, a form of governance was created, both to legitimize and enforce the discriminatory policies of the apartheid state (Khunou 2009).

Formal research on corruption in South Africa is sparse. A 2003 social audit conducted in Gauteng Province found that only 1% of people interviewed have made unofficial payments for health services, but 19% of participants considered the provincial department of health corrupt (Paredes-Solis et al. 2011). This suggests that corruption may be of a different form in South Africa, in contrast to other LMICs where unofficial payments at the point of service are more common (Vian et al. 2006; Lewis 2007; Paredes-Solis et al. 2011). The National Development Plan (NDP) acknowledges that South Africa has high-levels of corruption (across the private and public sectors) and that this undermines the country’s ability to achieve various social and developmental goals (National Planning Commission 2011). The NDP also notes that poor accountability in the health sector reduces health system effectiveness (National Planning Commission 2011). The problem of corruption is also illustrated by the National Treasury’s 2013 budget allocation of R71.4 million (US$ 7.14 million) to the South African Public Service Commission ‘to combat corruption and address grievances’ (National Treasury 2013, p. 127).

Notwithstanding the difficulties of measuring corruption, we could not find empirical studies on corruption in the South African healthcare sector. Using agency theory as a conceptual framework, this article triangulates information from three sources: Auditor-General of South Africa (AGSA) reports for each province covering a 9-year period; 13 semi-structured interviews with health sector key-informants and a content analysis of print media reports covering a 3-year period, to explore corruption in the South African health sector. We argue that a critical discussion on corruption in the health sector is an important component of achieving the health sector goals of re-engineering of the health system towards primary health care and implementing a national health insurance system (DOH 2010).

Conceptual framework

Agency theory has been widely applied in economics, political sciences and sociology as a general model to understand social structures and relations (Kiser 1999). It has also been applied to the study of corruption (Groenendijk 1997). In brief, agency theory recognizes and proposes solutions to problems that arise from the delegation of authority by the ‘principal’ to the ‘agent’ (Eisenhardt 1989). This suggests that corruption may be of a different form in South Africa, in contrast to other LMICs where unofficial payments at the point of service are more common (Vian et al. 2006; Lewis 2007; Paredes-Solis et al. 2011). The National Development Plan (NDP) acknowledges that South Africa has high-levels of corruption (across the private and public sectors) and that this undermines the country’s ability to achieve various social and developmental goals (National Planning Commission 2011). The problem of corruption is also illustrated by the National Treasury’s 2013 budget allocation of R71.4 million (US$ 7.14 million) to the South African Public Service Commission ‘to combat corruption and address grievances’ (National Treasury 2013, p. 127).

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Agency theory provides a framework to understand power dynamics between the principal and the agent and provides solutions to mitigate unwanted effects such as corruption. These solutions may include: selecting the appropriate agents (e.g. meritocratic recruitment) to reduce adverse selection, monitoring agent activities and utilizing various positive and negative sanctions to influence agent behaviour (Kiser 1999). The degree and intensity of controls must be evaluated, balancing the potential benefits of reducing the opportunities for agents to abuse their delegated authority with the costs of implementing the controls (Kiser 1999).

Rational choice forms the basis of agency theory and as such a normative criticism of agency theory is that it is ‘outward-looking’, it does not account explicitly for broader social values and how trust, for example, could decrease the problems identified by agency theory (Band 1992). Agency theory is also simplistic and has a one-sided view of human behaviour—that of maximizing individual utility—which does not take into account the complexity of human motivation (Davis et al. 1997). As a result, recommendations stemming from agency theory analysis tend to be ‘outward-looking’ as they revolve around how to manipulate agent behaviour to minimize risks. ‘Inward-looking’ solutions, such as steps to instil values of trust and social cohesion might be missed (Band 1992; Davis et al. 1997).

Nonetheless, agency theory provides a useful conceptual premise to examine the dynamics of health system performance (Brinkerhoff and Bossert 2014) and to understand the incentives and opportunities for corruption to occur (Savedoff and Hussmann 2006; Vian 2008). There may be multiple principals and agents within a system (Vian 2008). For the purposes of our study, society can be viewed as the ‘master’ principal who has delegated authority, through a democratic process, to the state to produce various goods, including health care. Government, from national to a local level, in turn delegates authority to various public servants to deliver services either directly or by contracting with the private sector. In addition some members of society may contract the private sector directly. Each degree of separation from the principal introduces additional levels of information asymmetry and potential divergence of interests (Savedoff and Hussmann 2006; Vian 2008).

In this study, an organizational view was taken where the health sector was simplified into four main actors: regulators, funders, suppliers and providers. From this, we hypothesize how various stakeholders and the nature of their relationships may create opportunities for corruption (Figure 1).

The flows of funds are illustrated as well as a priori principal-agent relationships that could result in corrupt practices. Information asymmetries characteristic of the health sector, create opportunities for corruption. Healthcare providers may bill consumers for services not rendered. Suppliers of medical equipment, technology or pharmaceuticals may influence provider behaviour by creating perverse incentives such as gifts or financial kickbacks. Funders, suppliers and providers may offer bribes to regulators to overlook failures in meeting statutory or contractual obligations or quality standards and specifications. Consumers could collude with providers to misuse private insurance funds.

Research methods

Study setting

South Africa is a unified democratic state, with three spheres of government—national, provincial and local government (Republic of South Africa 1996). After the first democratic elections held in 1994, nine provinces were created. Decentralized governance of the health sector is embodied in the South African constitution and health services are listed as a concurrent national and provincial function (Republic of South Africa 1996). Table 1 provides an overview of the demographic and socio-economic profiles of the nine provinces (Kok and Collinson 2006; Statistics South Africa 2012).

South Africa spends ~8.6% of its gross domestic product on health, of which half is spent in the private sector catering for the socio-economic elite. The remainder of the population, ~84%, carry...
a far greater burden of disease and depend on an under-resourced public sector (Blecher et al. 2011). Compared with other middle-income countries, health system performance is sub-optimal with relatively poor returns on health investment (Blecher et al. 2011).

**Ethical approval, definitions and data sources**

The study was reviewed and received approval from the authors’ institution, and standard ethical procedures were adhered to. We adapted the definition of Transparency International and defined corruption as ‘the abuse of resources, power and/or connections for private gain’ (Transparency International 2006). The study was conducted during 2012 and was informed by our conceptual framework (Figure 1). We used a mixed-methods approach, and collated data from three sources: analysis of the AGSA reports; key informant interviews and content analysis of print media.

The AGSA, established in terms of the South African Constitution, is a national independent institution mandated to support constitutional democracy in South Africa. The AGSA conducts financial audits and reports on all spending by government departments (national, provincial and local) and state-owned entities (Republic of South Africa 1996). We analyse the audit outcomes for each provincial department of health and the national department of health, which can range from an unqualified opinion (the best outcome) through to a disclaimer (the worst outcome) (Table 2) (Auditor-General of South Africa 2014).

Although no single category of expenditure reported by the AGSA is ideal as a measure of corruption, in this study, we chose irregular expenditure (defined as expenditure incurred without complying with applicable laws and regulations) as an indirect measure for examining corruption. Notwithstanding the fact that irregular or unprocedural spending does not always result in personal gain, corruption of necessity involves ‘irregular or unprocedural activities’ (Hyslop 2005).

We did not select unauthorized expenditure or fruitless and wasteful expenditure, because the former refers to overspending or expenditure that was not spent in accordance with the purpose for which it was intended, while the latter includes interest penalties on late payments and can be explained by administrative inefficiencies, rather than corruption. We calculated the proportion of ‘irregular expenditure’ in each financial year, to examine trends over time. We report on both nominal and inflation adjusted amounts in South African Rands.

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**Table 1.** Demographic and socio-economic profile of South Africa, by Province

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>6.6 (12.7)</td>
<td>38</td>
<td>64 550</td>
<td>7.5</td>
</tr>
<tr>
<td>Free State</td>
<td>2.7 (5.3)</td>
<td>75</td>
<td>75 314</td>
<td>5.2</td>
</tr>
<tr>
<td>Gauteng</td>
<td>12.3 (23.7)</td>
<td>96</td>
<td>156 222</td>
<td>34.7</td>
</tr>
<tr>
<td>KwaZulu Natal</td>
<td>10.3 (19.8)</td>
<td>45</td>
<td>83 050</td>
<td>15.8</td>
</tr>
<tr>
<td>Limpopo</td>
<td>5.4 (10.4)</td>
<td>10</td>
<td>56 841</td>
<td>7.1</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>4.0 (7.8)</td>
<td>39</td>
<td>77 597</td>
<td>7.1</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>1.1 (2.2)</td>
<td>80</td>
<td>86 158</td>
<td>2.2</td>
</tr>
<tr>
<td>North West</td>
<td>3.5 (6.8)</td>
<td>41</td>
<td>69 914</td>
<td>6.4</td>
</tr>
<tr>
<td>Western Cape</td>
<td>5.8 (11.2)</td>
<td>90</td>
<td>143 461</td>
<td>14</td>
</tr>
<tr>
<td>South Africa</td>
<td>51.8 (100)</td>
<td>56</td>
<td>103 195</td>
<td>100</td>
</tr>
</tbody>
</table>

GDP, gross domestic product.
‘Semi-structured telephonic interviews’ were conducted with 13 key-informants. We selected participants purposively from government, the private sector, academia and non-governmental organizations with a longstanding involvement in and a good understanding of the South African healthcare system. The key informant interviews focused on: the extent of corruption in the South African health sector (public and/or private) or in the individual’s own work setting; systems to detect or prevent corruption; personal knowledge or experience of incidents of fraud or corruption in the preceding year; perceptions of which actor (service provider; supplier; funders or regulator) was more vulnerable to fraud and corruption; and the impact of corruption on health service delivery. Data from these interviews were transcribed and captured in NVivo (Version 10) where it was coded. A thematic network analysis approach was taken to identify basic, organizing and global themes where it was coded. A thematic network analysis approach was taken to identify basic, organizing and global themes where it was coded.

Table 2. Definition of terms used in AGSA reports

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially unqualified audit opinion</td>
<td>The financial statements contain no material misstatements</td>
</tr>
<tr>
<td>Qualified audit opinion</td>
<td>The financial statements contain material misstatements in specific amounts or there is insufficient evidence for the auditor to conclude that specific amounts included in the financial statements are not materially misstated.</td>
</tr>
<tr>
<td>Adverse opinion</td>
<td>The financial statements contain misstatements that are not confined to specific amounts or the misstatements represent a substantial proportion of the financial statements.</td>
</tr>
<tr>
<td>Disclaimer of audit opinion</td>
<td>There was insufficient appropriate evidence (documentation) on which the auditor could base an opinion concerning the items reported in the financial statements. The lack of sufficient evidence is not confined to specific amounts or represents a substantial portion of the information contained in the financial statements.</td>
</tr>
<tr>
<td>Irregular expenditure</td>
<td>Expenditure incurred without complying with applicable laws and regulations</td>
</tr>
<tr>
<td>Unauthorized expenditure</td>
<td>Expenditure that was in excess of the amount budgeted or allocated by government to the entity (overspending) or that was not spent in accordance with the purpose for which it was intended</td>
</tr>
<tr>
<td>Fruitless and wasteful expenditure</td>
<td>Expenditure was made in vain and could have been avoided if reasonable care had been exercised. This includes penalties and interest on late payments, as well as payments for services not utilized or goods not received</td>
</tr>
</tbody>
</table>

Source: Auditor-General of South Africa (2014).

Results

Auditor General reports

Financial audit outcome

Table 3 shows the analysis of the financial audit outcomes for the nine provincial departments and the national department of health over the 9-year period of the review.

The analysis illustrates a worsening trend in provincial health departments’ audit outcomes. In 2004/05, the majority of the provincial health departments received unqualified audits. There has been a steady reduction in the number of unqualified audits with only the Western Cape and North West provincial health departments receiving an unqualified audit in 2012/13. The Eastern Cape has never received an unqualified audit, but received an improved audit outcome for the first time in 2010/11. From 2005/06 until 2011/12 the Northern Cape has only received adverse opinions or has not submitted sufficient documentation for the auditor to form an opinion (disclaimers).

Types of expenditure

Over the 4-year period (2009/10–2012/13) ZAR 8.005 billion (800 million USD; 1 $ = ZAR10) of combined provincial departments of health expenditure was classified as unauthorized and ZAR 24.082 billion ($2.40 billion) as irregular. Fruitless and wasteful expenditure amounted to ZAR 1.302 billion ($130 million) for the 3-year period (these analyses were only available for a 3-year period) from 2010/11 until 2012/13.

In 2009/2010 almost 4% of combined provincial health expenditure was assessed by the AGSA as irregular expenditure. This increased to 6% in 2010/11; to 7% in 2011/12 and in 2012/13 it amounted to 6.3% of the combined provincial health expenditure (Table 4).

The provinces displayed varying and erratic expenditure patterns (Figure 2). In Gauteng, the irregular expenditure for the 4-year period from 2009/10 to 2012/13 amounted to ZAR 5.326 billion ($533 million). However, there had been an improvement in irregular expenditure in Gauteng reducing from 11.0% of the provincial health expenditure in 2010/11 to 4.8% in 2011/12, but increasing again to 6.1% in 2012/13. In contrast, KwaZulu Natal’s irregular spending as a proportion of the total health expenditure increased over the 4-year period, whereas Northern Cape remained high at 33.5% (ZAR 1.065 billion or $100 million) in 2012/13.
Table 3. Provincial and national health department financial audit outcomes: 2004/05–2012/13

<table>
<thead>
<tr>
<th>Province</th>
<th>04/05</th>
<th>05/06</th>
<th>06/07</th>
<th>07/08</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
<th>11/12</th>
<th>12/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Kwa-Zulu Natal</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Free State</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>North West</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Gauteng</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<td>2</td>
</tr>
<tr>
<td>Limpopo</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>National Department</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Key: 1 = unqualified; 2 = qualified and 3 = adverse/disclaimer.
Source: Auditor-General of South Africa (2014).

Table 4. Total amount assessed by Auditor-General as irregular expenditure 2009/10–2012/13, by province Nominal ZAR ‘000 and (Real ZAR ‘000, December 2012 prices)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Western Cape</td>
<td>27 168 (30 803)</td>
<td>119 194 (128 719)</td>
<td>74 000 (75 665)</td>
<td>86 700 (83 849)</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>0 (0)</td>
<td>15 281 (16 502)</td>
<td>285 061 (291 473)</td>
<td>123 100 (119 052)</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>1 327 628 (1 505 247)</td>
<td>278 320 (300 562)</td>
<td>436 000 (445 808)</td>
<td>304 000 (294 004)</td>
</tr>
<tr>
<td>Kwa-Zulu Natal</td>
<td>637 725 (723 044)</td>
<td>562 329 (607 267)</td>
<td>2 038 000 (2 083 845)</td>
<td>2 719 200 (2 629 787)</td>
</tr>
<tr>
<td>Limpopo</td>
<td>159 (180)</td>
<td>401 477 (433 560)</td>
<td>625 600 (639 737)</td>
<td>571 200 (552 418)</td>
</tr>
<tr>
<td>Free State</td>
<td>273 615 (310 221)</td>
<td>318 543 (343 999)</td>
<td>45 300 (46 319)</td>
<td>143 700 (138 975)</td>
</tr>
<tr>
<td>Gauteng</td>
<td>455 643 (516 602)</td>
<td>2 246 121 (2 425 617)</td>
<td>110 000 (1 124 744)</td>
<td>1 524 200 (1 474 081)</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>100 872 (114 367)</td>
<td>1 074 860 (1 160 736)</td>
<td>942 000 (963 190)</td>
<td>1 064 500 (1 029 497)</td>
</tr>
<tr>
<td>North West</td>
<td>513 759 (582 493)</td>
<td>949 487 (1 025 364)</td>
<td>1 726 000 (1 764 826)</td>
<td>971 300 (939 362)</td>
</tr>
<tr>
<td>Total</td>
<td>3 336 569 (3 782 958)</td>
<td>5 965 613 (6 442 347)</td>
<td>7 271 961 (7 435 543)</td>
<td>7 507 900 (7 261 025)</td>
</tr>
</tbody>
</table>

Base 100 = December 2012.
Source: Auditor-General of South Africa (2014).

Key informant interviews

Nature and distribution of corruption

All the key informants were of the opinion that there is corruption in the South African health care system, and had personal experience of hearing about or dealing with an incident of corruption in the preceding year. The majority were of the opinion that corruption is pervasive, particularly in the public health sector. For example, commenting on corruption in the public sector respondents note that it is ‘rampant’ (Private Hospital Manager) and has ‘reached uncontrollable levels’ (Provincial Department of Health Director).

Suppliers and service providers were implicated in corruption in the public sector. In the private sector, regulators and funders were reportedly more often involved, but cases of private providers defrauding funders were also reported. In South Africa, suppliers are most often private companies and regulation is primarily a state function. Therefore, the private–public binary constitutes a false dichotomy when it comes to corruption in South Africa as corruption most often occurs across private–public sectors, involving agents from both sectors. A respondent, commenting on the relationship between suppliers and providers in the public sector said the following:

They [suppliers] make use of their political connections. They have insiders who advise them. The suppliers always tell you what they can do for you when they want the business. Once they have the business they tell you it is the Department’s fault why they cannot meet their contractual obligations. As they [suppliers] are protected from within it makes it virtually impossible to hold them accountable. There is very little trust. People in positions to award tenders or purchase goods from suppliers are in collaboration [collude] with the suppliers. This leads to the price being increased to enable mutual benefit—the service provider receives a kickback (Private Hospital Manager).

Factors influencing corruption

Most respondents were of the opinion that complexity in the health system together with a high degree of centralization of decision-making and authority increase the opportunities for corruption in the public health sector. Numerous examples were provided of corruption in provincial health departments and large tertiary hospitals, as illustrated by the comment from one of the key informants:

My impression is that the provincial level is most vulnerable. National [level] focuses on policy, local on environmental health and primary care. Provinces are the level where services are delivered and because of the requirement to manage large budgets and complex systems, there is a greater potential for fraud and corruption (Public Health Expert).

Although this complexity and centralization may create more opportunities for corruption, without divergent interests providing motive for various agents to abuse their power for private gain—corruption is unlikely to result. Thus agent selection in various administrations may in part explain the observed variation, as one informant indicated.

You must employ the right people, with no political connections—if someone says they want to become a public servant you should question their motives, because they are probably thinking ‘in five years’ time I can be a millionaire’ (Clinical Director, Public Tertiary Hospital)
Key informants indicated that less is known about corruption in the private sector, but were of the opinion that the most common form of corruption is that private providers (hospitals or doctors) submit inflated bills or false claims of treatment or tests to private health insurance schemes, in order to maximize their income. Nevertheless, some respondents were of the opinion that there is less corruption in the private sector because the health facilities are smaller and more manageable, there are more robust systems in place to detect corruption, and checks and balances are in place to monitor daily operations.

Conflicts of interests, either political or business, were also identified as factors influencing corruption. For example a key informant from a public tertiary hospital noted:

> Some tertiary facilities are more corrupt than others. For example the CEO of Hospital X is also a director on the board of nine [private] companies (Clinical Director, Public Tertiary Hospital)

Divergent interests seem to be a cause of corruption in both the public and private health sectors. Political power was often blurred with business interests where those in positions of power were reported to use it to their economic advantage:

> Most of the big fraud and corruption cases are highly organised and run by persons with the skill to cover their tracks. The largest fraud occurs at an executive and senior political level (Executive Manager, Provincial Department of Health)

The tender system has created opportunities for people to be corrupt. It has also created a blurring of roles between the executive and those in politics. This is the case in all provinces where one sees no clear lines of accountability or responsibility (Public Health Expert)

Corruption in the public sector is also influenced by the poor enforcement of rules and regulations. As noted by a clinical director in a tertiary hospital:

> Even though a policy has been developed previously by the hospital to provide technical guidance during procurement processes and clinicians and other experts dissuaded the acquisition of this equipment ‘an order came from above to install’. Policies are just ignored. (Clinical Director, Public Tertiary Hospital)

Key informants were of the opinion that the general lack of accountability contributes to corruption in the public sector. One of the key informants noted that:

> Attitudes are appalling—people know that they can get away with it [corruption]. There are no consequences of fraud and corruption, they won’t lose their jobs (CEO, Public Tertiary Hospital)

The final reason highlighted by key informants is that negative sanctions are often placed against whistle-blowers. This discourages people from reporting corrupt activities:

> There is no distinction between management and politicians—if you are a strong manager, you get targeted and destroyed. If you want to keep your job, you become corrupt yourself (Trade Union Office-bearer)

Corruption in the public sector is also driven by the poor enforcement of anti-corruption legislation and policy in a complex service delivery environment. Divergent political and economic interests as well as information asymmetry particularly between suppliers and providers also play an important role.

**Effects of corruption**

Respondents from the public sector highlighted how corruption has negatively impacted on the morale of health care personnel and...
support staff. One noted that ‘there is a level of despondency and at the level of doctors, there is little trust or hope’ (Senior Clinician, Tertiary Hospital). Managers are also affected, with a chief executive officer (CEO) of another tertiary hospital noting that: ‘It [corruption] is rife—I am totally disillusioned with the health system… honesty is becoming almost an exception in the public sector’ (CEO, Tertiary Public Hospital).

Respondents were of the opinion that corruption leads to increased cost, siphoning off of scarce resources from the healthcare sector and/or the delivery of less and/or lower quality services. In this way corruption could impact on patient care directly and result in poorer health outcomes than expected, given the amount of resources invested:

A bid to deliver hospital beds was awarded to a company whose bid was almost twice as high as other bids, even though the beds were of an inferior quality. The result was that a surgical bed [table] broke during a patient's C-section and the patient cracked her skull (Clinical Director, Tertiary Hospital)

Corruption impacts negatively on the health services, and prevents much needed equipment from reaching remote facilities—and that increases the chances of adverse events, such as the death of a baby or the mother—it means that the individual nurse or health worker is alone, and will be held responsible. (Trade Union Office-bearer)

Print media
The majority of the 41 print media reports (63%) on corruption were from the public sector and mainly involved provincial health departments (45%) followed by the national health department (23%) and health workers (23%). The Eastern Cape Province (56%) was most often cited in articles reporting on corruption followed by Gauteng Province (16%); Limpopo Province (12%); KwaZulu-Natal (8%); Free State (4%) and the Western Cape (4%). After service providers (44%), funders (31%) and suppliers (21%) were most often implicated in corruption (Figure 3).

Of the 9% of cases reported at a facility level half were from tertiary hospitals. Where healthcare workers were involved, 71% were reported to be doctors.

Discussion
In this article, we have used agency theory and a combination of research methods in an attempt to understand the nature and possible effects of corruption in the South African health sector. The quantum of irregular spending (i.e. expenditure incurred without complying with applicable laws and regulations) in the majority of provincial health departments, perceptions of 10 key informants and analysis of media reports over a 3-year period suggest that corruption is a problem in the South African health sector.

The study found that almost 6.3% of combined provincial expenditure was classified as irregular expenditure in the 2012/13 financial year. Although not directly comparable, this proportion is almost double the estimate for the US health sector (Iglehart 2009), and similar to the estimate for Cambodia (Transparency International 2006). However, the figures should be interpreted with caution as ‘irregular expenditure’ implies non-compliance with rules and regulations, rather than corrupt activities for personal gain.

Although all provincial administrations are governed by the same legislation, the AGSA reports describe varying levels of irregular expenditure across the nine provinces. This could be the result of the institutional characteristics of provincial administrations, ineffective management and the lack of enforcement of legislation rather than inherent legislative short-comings. Varying skill levels across provinces may also explain the variations. Capacity constraints could conceivably result in a lack of awareness of the laws and regulations that govern public expenditure and lead to an increase in irregular expenditure, without the intention to enrich oneself. Agent selection in various administrations may also explain the observed variation. In administrations where agent selection is not scrutinized, divergent interests are more likely to occur and in conjunction with complexity (information asymmetry) provide greater opportunity for corruption. The NDP for South Africa notes the erosion of accountability in the public service (National Planning Commission 2011). It recommends that the current situation of political deployment in the civil service needs to be replaced by one based on merit and the insulation of administrative processes from political interference to prevent state resources being accessed on the basis of political affiliation rather than citizenship (National Planning Commission 2011).

We conducted a small number of interviews with key informants who shared their perceptions of the extent and effects of corruption in the South African health system. Key informants described particular characteristics in the public sector that they perceive make it vulnerable to corrupt agent behaviour. They reported that oversight...
can be influenced by power relations and political connectedness. Although key informants were of the opinion that checks and balances in the private sector are more robust, this needs to be tested. Further, agents involved with corrupt activities seem to face a low risk of being detected and if found, are unlikely to face negative sanctions. Hence, their perceptions were that the cost of engaging in corrupt activities is low.

In some instances, participants highlighted inefficiencies or frustration with an apparent dysfunctional health system as examples of corruption, rather than confining themselves to the definition of corruption provided in the study information sheet. This is interesting in and of itself and may reflect the lack of the trust in the overall health care system where inefficiency or incompetence is assumed to connote corruption. A profound impression left by the qualitative data was the negative impact of the perceptions of corruption, real or imagined, on healthcare workers’ morale, again reflecting possible mistrust in the healthcare system. Information asymmetries in the absence of transparency create opportunities for corruption, with key informants reporting that private healthcare providers charge consumers for services not rendered who may be unaware of this as the bills are submitted to private health insurers. These asymmetries also exist in the public sector with an example provided of the procurement of sub-standard equipment, with dire consequences for at least one patient.

The study found that the majority of the print media reports (63%) on corruption were from the public sector and involved provincial health departments (45%). This is not surprising as most of the money is spent at provincial level. However, reviewing print media is not a reliable method of assessing the extent of corruption. What is newsworthy is often a reflection of fashion, timing (e.g. proximity to elections) or the vagaries of editorial preference. Furthermore, an alleged case of corruption reported in the media may later turn out to have been false. Nonetheless, media reports help to focus attention on corruption or to raise awareness among the public or may influence public perceptions about the importance of addressing corruption. Importantly, an independent media and strong civil society play an important role in preventing or combatting corruption (Transparency International 2006).

The study has a number of limitations. The AGSA reports only focus on the public health sector, and similar data are not available for the private sector. This may give the impression that corruption is not a problem in the private sector. As indicated above, the use of irregular expenditure as a proxy for possible corrupt activities may result in an overestimate of the quantum of money lost due to corruption as some of the irregular spend may have been done in good faith and without personal gain. We interviewed a small number of purposively selected key informants, and this is a limitation. Even though we provided a standard definition of corruption, key informants may have interpreted the concept differently, and the comments reflect their views at a point in time. We only analysed print media as it is can be reviewed retrospectively, and we did not analyse radio and other electronic media, and there is arbitrariness to what gets printed at any given time. We also did not include informal fees (not considered to be common in the public health sector in South Africa) or absenteeism in our search which may have been an oversight and may have underestimated the number of articles relating to potential corruption in the study period.

Nonetheless, the study has numerous strengths. This is one of the first studies that triangulated different sources of data (albeit imperfect) to investigate the problem of corruption in the South African health sector. All three data sources in our study indicate that corruption may be common, and present in both the public and private health sectors and often the two together. Although the level at which corruption is most prevalent appears to be at a public provincial level, the agents involved in corruption are not exclusively public or private. The study findings illustrate the need for more robust data collection as one way to address perceptions of corruption and its impact on the health system, both for health care workers and users. We also believe that making corruption a research subject and a responsibility of health systems researchers in South Africa and elsewhere, allows us to name the problem, measure it, and develop and test ideas about how to address it. Such research also allows the global community of health system researchers to contribute towards improved efficiency, effectiveness and social accountability of health systems.

Referring back to the theoretical frame of our article—agency theory—what then are possible strategies to address corruption in the health sector? Our starting premise is that additional legislation is not required as there are control institutions in South Africa with extensive powers, as well as a raft of laws, and formal and detailed rules and procedures, often recommended as a strategy to control the behaviour of public servants (Maesshalck 2004). For example, the AGSA has a constitutional mandate to strengthen South Africa’s democracy by enabling oversight, accountability and governance in the public sector through auditing (Republic of South Africa 1996). Similarly, the Public Service and Public Finance Management Acts (Republic of South Africa 1999, 2007) contain detailed prescriptions that regulate the behaviour of public sector employees and the management of public resources. Rather, as Cockcroft (2014) has pointed out, strong laws are contingent on the political will to run corruption-free health services (Cockcroft 2014). Furthermore, respect for the rule of law and an effective government machinery to enforce laws are prerequisites in the fight against corruption (Cockcroft 2014).

Our second proposition is the importance of citizen voice and holding public officials accountable. This is because the goals and interests of citizens, as societal principals, need to be aligned with public officials, as their agents. How might that be done? Again, there are existing structures and mechanisms in South Africa that allow for citizens to have a say in the health system. At a formal level, existing structures include public participation committees in national parliament and provincial legislatures (parliaments), hospital boards and clinic committees. We need to make sure that these structures are used, and that they function optimally. At an informal level, South Africa has a vibrant civil society movement, including Corruption Watch, which is increasingly vocal about the need to address corruption. The experience in other countries has shown that civil society groups with expertise in financial monitoring, service delivery reports and advocacy play an important role in combatting corruption (Brinkerhoff and Bossert 2014; Cockcroft 2014).

Our third proposition is that staffing levels, competencies and capacity for implementation must be addressed as a matter of urgency, in light of the varying levels of irregular spending across the nine provincial health departments and the crisis of ineffective management and lack of accountability in the health system (Integrated Support Teams 2009; National Planning Commission 2011; Rispel and Moorman 2013). Hence key strategies in the fight against corruption are to ensure that public servants with the right skills, ethos and values are in place, and that their interests are aligned with organizational goals to reduce adverse selection (Vian 2008; Brinkerhoff and Bossert 2014). It also means that appropriate systems are in place to detect corruption and to sanction inappropriate,
illegal or corrupt behaviour. For example, in Brazil effective monitoring through municipal health councils have played an important role in mitigating corruption (Brinkerhoff and Bossert 2014). Some of the key informants in senior positions in the public health sector articulated their sense of disempowerment to act against corrupt health workers. Reversing this situation means that public sector managers need to have sufficient authority to prevent and take action against corruption, and to implement enabling legal provisions.

While agency theory has provided a useful framework for describing relationships in the health sector and categorizing potential pathways for the complex problem of corruption, intervention strategies must also draw on stewardship (Davis et al. 1997) and integrity (Maesschalck 2004) approaches to management. The stewardship approach assumes that ‘collectivistic behaviours have higher utility than individualistic, self-serving behaviours’ (Davis et al. 1997, p. 24). This implies the articulation of a clear vision and set of health system goals to improve health outcomes, quality of care and the performance of the health sector. The integrity approach to management focuses on skills and capacity in moral judgement, and understanding the importance of values and ethical decision-making to the management role.

Conclusion
Poor governance and corruption share a reciprocal relationship and negatively impact on the morale of health care providers, the majority of whom are committed to service excellence. Current health system reforms in South Africa are focused on achieving improved health outcomes and health system performance and this is welcome. Although legislation seems adequate, initiatives by government to identify and ameliorate vulnerabilities to corruption within the health sector need to be further developed. Proactive mechanism to detect corruption and the enforcement of negative sanctions against those found guilty of corruption are important interventions to create disincentives for engaging in corrupt activity. These interventions become more important where there is a centralization of decision-making. Agent selection is a critical intervention to reduce the prevalence of divergent interests. This is one method of addressing corruption. Alternative approaches which include overarching pathways for the complex problem of corruption, intervention strategies become more important where there is a centralization of power and authority. Agent selection is a critical intervention to reduce the prevalence of divergent interests. This is one method of addressing corruption. Alternative approaches which include overarching pathways for the complex problem of corruption, intervention strategies become more important where there is a centralization of power and authority.

Ethical approval
The study was approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg (ethical clearance M10572) and standard ethical procedures were adhered to.

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References


