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# **Role of Governance in Infection Prevention and Control Policy and Strategy Implementation in the Public Health Sector in South Africa**

by

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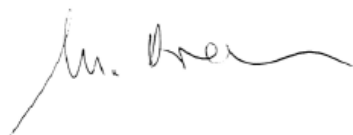
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## **Abstract**

Reports have shown that the challenges of policy implementation in South Africa (SA) are the main weakness of the health system. National and provincial guidelines for infection control (IC) have been adapted for the implementation of IC practices in SA. However, research has revealed poor infection prevention and control (IPC) in public healthcare in SA.

There is no evidence to what extent the IPC guidelines have been implemented and whether governance has played a role in the implementation of the National Infection Prevention and Control Policy and Strategy (NIPCPS; 2007). The aim of the study was therefore to explore how governance plays a role in the implementation of NIPCPS in SA's public healthcare sector.

The study employed a qualitative research approach as the focus was on documenting the shortages of antimicrobial drugs, space and equipment, as well as the maltreatment of patients with infectious diseases by healthcare workers in SA, and the impact of this on IPC. Data was collected through the internet and relevant newspaper articles were used for the study. The study findings were presented using the thematic approach and inductive and deductive approaches were integrated to form a coherent narrative. Deductive analysis involved the application of a framework for assessing governance of the health system by Siddiqi et al. (2009).

The findings of case study analysis and framework application revealed shortages of antimicrobial drugs, space and equipment, as well as the maltreatment of patients by HCWs in public healthcare in SA several years post the launch of NIPCPS. Shortages of antimicrobial drugs and the maltreatment of patients by HCWs are due to the lack of accountability by DoH. HCWs in SA still lack training in IPC, they have poor job descriptions, and their participation in policymaking and implementation is inadequate. Other healthcare facilities in SA still lack institutional IPC guidelines.

Shortages of antimicrobial drugs, space and equipment, and the maltreatment of patients by HCWs have a negative impact on IPC. The state of affairs exposes patients to infectious diseases, puts them at risk of developing drug resistance and may lead to nosocomial infections outbreaks. It also exposes HCWs to infectious diseases, hampers their jobs by delaying important medical procedures and subjects them to medical errors and wrong prescriptions. Further studies are warranted to explore the topic of research.

**Key words: Governance, antimicrobials, equipment, space, healthcare, public, SA, IPC, NIPCPS, nosocomial infections**

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## **Abbreviations**

<b>AIDS</b>	Acquire Immunodeficiency Syndrome
<b>AMR</b>	Antimicrobial Resistance
<b>ARV</b>	Antiretroviral
<b>CHC</b>	Community Health Centre
<b>CSOs</b>	Civil Society Organizations
<b>DHC</b>	District Health Council
<b>DHS</b>	District Health System
<b>DoH</b>	Department of Health
<b>DPW</b>	Department of Public Works
<b>HAI</b>	Hospital Acquired Infections
<b>HCS</b>	HealthCare System
<b>HCWs</b>	Healthcare Workers
<b>HIV</b>	Human Immunodeficiency Virus
<b>HRH</b>	Human Resources for Health
<b>IC</b>	Infection Control
<b>ICU</b>	Intensive Care Unit
<b>IPC</b>	Infection Prevention and Control
<b>MDR-TB</b>	Multidrug Resistant Tuberculosis
<b>MECs</b>	Members of Executive Council
<b>MTB</b>	Mycobacterium Tuberculosis
<b>NIPCPS</b>	National Infection Prevention and Control Policy and Strategy
<b>NDoH</b>	National Department of Health
<b>NHC</b>	National Health Council

<b>NHI</b>	National Health Insurance
<b>NHMC</b>	National Health Management Committee
<b>NHS</b>	National Health System
<b>NIIs</b>	Nosocomial Infections
<b>PHC</b>	Primary Healthcare
<b>PPE</b>	Personal Protective Equipment
<b>SA</b>	South Africa
<b>TAC</b>	Treatment Action Campaign
<b>TB</b>	Tuberculosis
<b>WHO</b>	World Health Organization
<b>XDR-TB</b>	Extensively Drug-Resistant Tuberculosis

## **Chapter 1: Introduction and problem formulation**

This chapter provides an overview of the study, and describes the problem statement, aim and objectives of the study, along with a governance framework.

### **1.1 Introduction and background**

Reports have demonstrated that infection prevention and control (IPC) is not being practised enough in South Africa (SA) (Visser et al., 2011), when compared with the World Health Organization (WHO) levels of infection control (IC) (Engelbrecht & Janse van Rensburg, 2013). As a result, research has raised concerns regarding the implementation of practices of infection control at public health facilities in SA (Engelbrecht & Janse van Rensburg, 2013), placing emphasis particularly on the main policy of IC, the National Infection Prevention and Control Policy and Strategy (NIPCPS; 2007). An assessment of the implementation of this policy in primary healthcare (PHC) and tertiary healthcare will inform stakeholders about the safety of clinics and hospitals for patients and healthcare workers (HCWs).

The basic right to healthcare, a basic human right embedded in section 27 of the SA Constitution 1996 (Chapter 2) is the foundation of the current healthcare system (HCS) in SA (Dambisi & Modipa, 2009). The HCS in SA comprises the public and private health sectors (Dambisi & Modipa, 2009). Public healthcare is largely offered by the government (Department of Health) which provides the finances that are obtained from the taxpayers, while the private sector provides for-profit health services (Biermann, 2006). The public sector provides services to approximately 84% of the population who are mostly black and poor (Naidoo, 2012).

IC is an important component of delivery care, and it needs an appropriately functioning health system (Hussein et al., 2011). However, SA's health system currently buckles under a quadruple burden of diseases. It includes a high prevalence of Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) which exist in a complex relationship with tuberculosis (TB); high levels of maternal mortality; and elevated levels of non-communicable diseases which are escalated by risk factors associated to life-style, violence, injuries and trauma (Naidoo, 2012). Maternal sepsis is a leading cause of maternal mortality (Hussein et al., 2011). It is described as a disease burden in women by the WHO (2008) and is a consequence of deteriorating IC practices (Hussein et al., 2011). Poor TB IC is partly a result of escalated TB incidence in public healthcare in SA (Engelbrecht & Van Rensburg, 2013). The TB/HIV treatment integration is a basis for the control of the increase in the incidence of TB and HIV co-infection, but it remains poorly implemented, and plans

for strengthening the integration of services such as antiretroviral (ART) are necessary (Churchyard et al., 2014). In reaction to this disease burden, the National Department of Health (NDoH) of SA has introduced several national pertinent policy documents including the South African Draft NIPC guidelines for TB, multidrug resistant tuberculosis (MDR-TB) and extensively drug-resistant tuberculosis (XDR-TB), and the NIPCPS (Engelbrecht & Van Rensburg, 2013).

The NIPCPS (2007) highlights that IC is a crucial issue because it places a huge burden of cost on the health services in that it extends hospitalization, increases the antimicrobial drugs usage, and it escalates the number of remedial interventions per patient (NIPCPS, 2007). A rational antibiotic use is one of the IPC measures (NIPCPS, 2007). Shortages of antimicrobial drugs are an important issue in public health and the delivery of medical care in that they result in poor IC by shrinking the pipeline of new antibiotics, and increasing drug resistance, for example, interrupting the antiretroviral treatment can result in treatment failure and drug resistance (Quadri et al., 2015).

Antibiotic resistance is a serious threat in hospitals and it results in higher morbidity and mortality when caused by drug-resistant organisms (Hosein et al., 2002), such as *Mycobacterium tuberculosis* (MTB) with resistant strains causing MDR-TB (Andrews et al., 2007). It can also be difficult to manage because in the case of an outbreak, providing healthcare to cohorts of patients is difficult, and would result in hospital ward crowding and would add to a shortage of beds, which is a persistent problem (Hosein et al., 2002).

Despite the knowledge and distribution of the NIPCPS in respect of the implementation in public healthcare, the shortage of antimicrobial drugs is still a problem in SA. Bateman (2013) and Schowalter and Conradie (2012) reported shortages of antimicrobial drugs in SA. This places more emphasis on the implementation of the NIPCPS.

Another important challenge to effective healthcare delivery is hospital-acquired infections (HAIs) (Kaier et al., 2012). In an effort to minimize nosocomial infections (NIs) that prolong hospitalization and require high remedial interventions, contact precautions are taken which require the isolation of infected patients in order to control the spread of resistant organisms in hospitals (Hosein et al., 2002). However, overcrowding in hospitals might compromise IC measures (Visser et al., 2011), and this highlights the importance of the implementation of the current NIPCPS document.

It is documented in section 8.3 on page 9 of the NIPCPS document that the rights of patients will be upheld, but the patients are still neglected and maltreated in public healthcare

facilities. Jewkes et al. (1998), Andrews et al. (2007) and Human et al. (2010) report on the maltreatment of patients by HCWs in public healthcare in SA.

Section 6 of the NIPCPS document describes the consequences for public healthcare and its staff members should they expose the patients to the risk of infection. Consequences include litigation against the state; disciplinary action against the staff members by the professional health council; criminal or civil prosecution of the individual staff member; and loss of public confidence in the particular health facility (NIPCPS, 2007). The issues of patient neglect and IC are important, which require the close compliance with the implementation of the current NIPCPS document.

The rational use of antibiotics, patients' isolation and adhering to patients' right to healthcare are the important components of the NIPCPS. A shortage of antibiotics exposes patients to drug resistance, the lack of hospital beds (medical devices) hinders patients' isolation and the maltreatment of patients, who have communicable diseases, are the valid issues that need to be looked at in the investigation of NIPCPS implementation. The reason is that all these problems might result in an elevated cost for public healthcare due to litigation, antibiotic resistance, and unmanageable outbreaks. Looking at the implementation of this particular policy it might be essential to also help minimize the risks of exposing the patients and staff members of public healthcare to infections.

Post-apartheid SA is still facing the challenge of controlling infections such as HIV and TB co-infection, which are declared a national emergency, but the government response has been a poor implementation of policies and programmes (Abdool-Karim et al., 2009). These problems are blamed on leadership changes in the Ministry of Health and policy change in the management of HIV and TB, disease of life style, injury and violence as well as maternal and child death (Visagie and Schneider, 2014). As a result, policy development in the integrated HCS fails to direct the translation of policy principles into service delivery, and this is blamed largely on the lack of clear direction and accountability at district level (Dookie & Singh, 2012). According to Dookie and Singh (2012), effective leadership in policy implementation is required for the development of evaluation tools for analysis of the public health system, including the burden of disease, use of health services, and effectiveness of health interventions. For the successful implementation of the strategic frameworks for IPC, there is a need for strong leadership, sufficient human and financial resources, and sustainable development of healthcare services (Abdool-Karim et al., 2009).

According to Naidoo (2012), policy implementation is a challenge in SA's health system. There is a possibility of formulating a good policy, but there is bad implementation (Carrin et al., 2008). Health policy is described as an official document, a written set of rules and guidelines that provide the information on what actions are considered reasonable and necessary to strengthen and improve the health system. It affects the funding, institutions, organizations, and services of the health system (Gilson, 2012).

Health policy also accommodates the policies made in the public and private sector, since outside factors also influence the health system (Gilson, 2012). A model for explaining implementation simply involves analyzing inputs, outputs, and outcomes, where inputs produce outputs in the form of public policy, and implementation is described as the process by which such outputs are converted into social outcomes (Carrin et al., 2008). Implementation is also viewed as a complex and interactive political process in which a variety of actors guides the direction and execution of a specific policy within the limits of existing institutions (Buse et al., 2005). As a result of the concerns raised on proper implementation of IC procedures at public health facilities in SA (Engelbrecht & Janse van Rensburg, 2013), it is important to analyze whether the NIPCPS is adequately implemented.

IPC is described as measures, practices, protocols and procedures intended to inhibit and regulate infections and their transmissions in the healthcare environment (NIPCPS, 2007). These measures are collective interventions and actions such as personnel hygiene, the use of personal protective equipment (PPE), programmes of employees' immunization, aseptic techniques, waste management, the proper use of antibiotics, and so on (NIPCPS, 2007).

The aim of infection and control guidelines is to provide safe healthcare settings for both patients and staff by ensuring good IC practice which must be established to improve health outcomes and prevent diseases, deaths, escalated healthcare costs and potential lawsuits. The concept of governance comprising the specific roles and responsibilities of national, provincial and local government representatives and civil society on the prevention and management of infections is described and incorporated within these guidelines (NIPCPS, 2007).

The WHO (2007) definition of governance is "ensuring [that] strategic policy frameworks exist and are combined with effective oversight, coalition-building, the provision of appropriate regulations and incentives, attention to system design, and accountability" (Mikkelsen-Lopez et al., 2011). Governance is concerned with the implementation of the

policies and it is an important topic since the concept and descriptions of the health systems formulated explain governance, either in a point of stewardship, regulation, oversight or governance itself (Mikkelsen-Lopez et al., 2011).

Stewardship is one of the four main functions of the health system, the other three being service delivery, financing, and creating and managing resources. It is said to be about trust and legitimacy, where good stewardship is viewed as the core of good governance in health (Siddiqi et al., 2009).

Good governance of the health system is promoted by the assessment of governance. Governance affects all other functions of the health system and results in an enhanced performance of the health system, and eventually in improved health outcomes (Siddiqi et al., 2009). The concept of governance in the health sector is still very new and is composed in reports suggesting that it is an ongoing process, and there is a vast interest in understanding the relationship between governance and health worldwide via discussions on global health governance (Mikkelsen-Lopez et al., 2011).

The current study sought to understand whether the concept of governance played a role in the implementation of the NIPCPS, which was made possible by the application of a suitable health system framework. Siddiqi et al. (2009) present a governance framework that can be used to assess the health system in developing countries, which was relevant to this study.

## **1.2 Problem statement**

The public healthcare sector of SA is the first place of hope where the sick and poor citizens go for treatment. It is also documented in the Bill of Rights that it is a constitutional right for such people to be attended to in the public healthcare sector, but the conditions of these institutions have deteriorated and the service delivery for patients is very poor. Despite the fact that the NDoH of SA has formulated and adopted the Draft NIPC guidelines for TB, MDR-TB and XDR-TB, the NIPCPS and the IPC practices are still poorly implemented in the public health facilities.

Firstly, there is still a shortage of antimicrobial drugs including ART drugs, and this compromises the survival of patients due to the development of resistance to these drugs after treatment interruptions. Secondly, there is an issue of overcrowding, and the lack of hospital beds, which is problematic in the case of management or control of communicable diseases where patients who were supposed to be isolated cannot be as a result of a shortage of beds and space.

This makes the management of infections difficult as more patients catch hospital NIs, and the treatment of patients becomes more expensive, which the public healthcare cannot afford. Thirdly, there is the irrefutable issue of the maltreatment of patients, particularly those with HIV and infectious diseases by the staff members of the public healthcare system. The cause of such maltreatment might be largely due to the lack of training in the management of infections on the part of the public healthcare staff.

All of the issues above are documented in the NIPCPS, but the problems persist. This required the analysis of the implementation of such a policy, and the role of governance in such a process in order to arrive at recommendations or solutions to these challenges faced by public healthcare, and eventually result in an improved service delivery.

### **1.3 Aim and objectives**

Subsequent to the identified need for further research, the following aim was formulated as a guiding principle for this study: To explore the role played by governance in the implementation of NIPCPS (2007) in SA's public healthcare sector.

The specific objectives of the study included the following:

- To conduct a multiple-case analysis of the shortage of antimicrobial drugs and its consequences for IPC in the public healthcare sector in SA.
- To conduct a multiple-case analysis of overcrowding and the shortage of hospital beds (medical devices), and its consequences for IPC in the public healthcare sector in SA.
- To conduct a multiple-case analysis of the maltreatment of patients who have infectious diseases and its consequences for IPC in the public healthcare sector in SA.

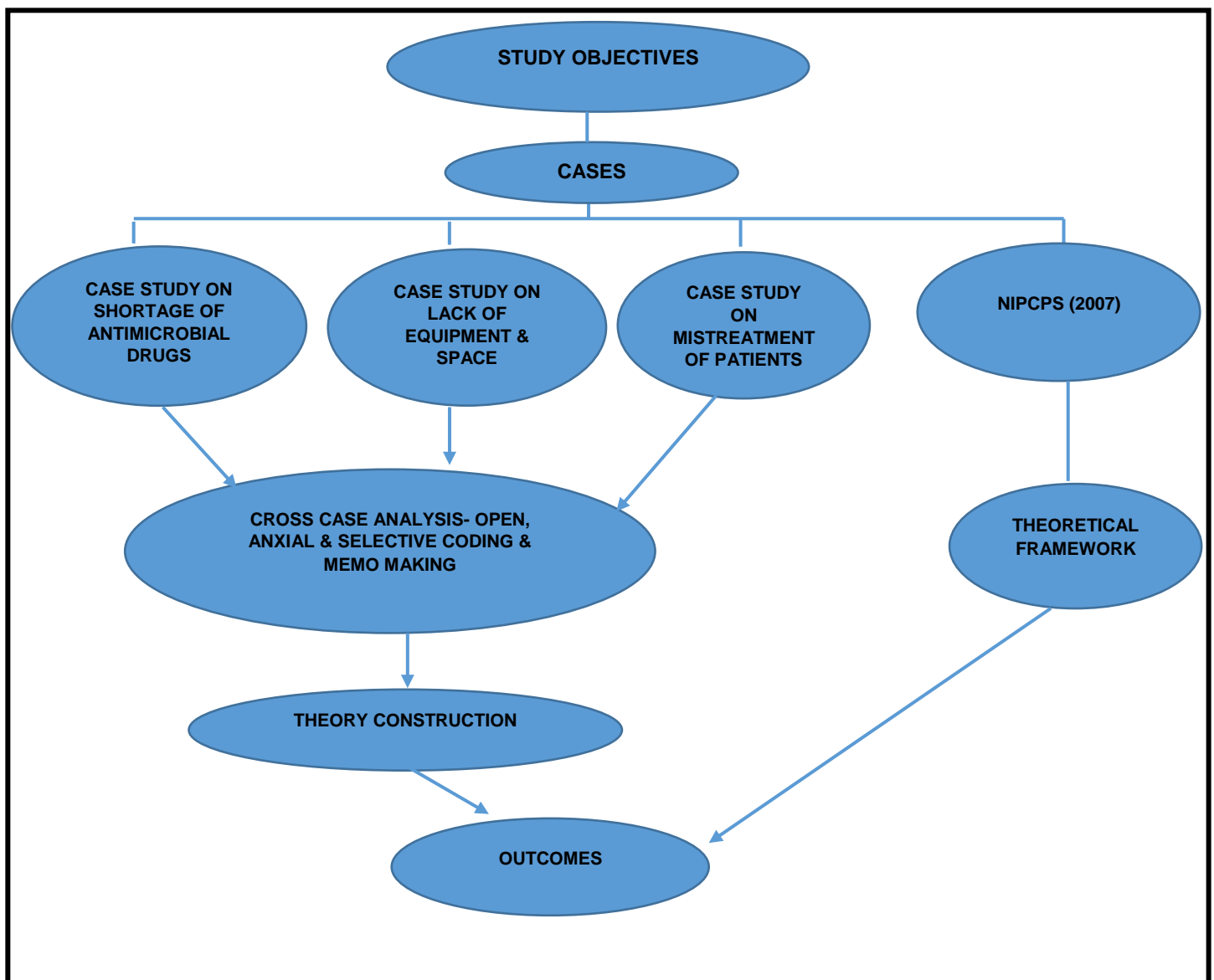
### **1.4 Theoretical framework**

The theoretical framework is one of the most crucial components in the research process (Grant & Osanloo, 2014). It guides the study, gives an idea of the research question and assists the researcher in justifying the research problem (Maxwell, 2005).

Specific to this study, the proposed theoretical framework is designed to explore how governance plays a role in the implementation of NIPCPS in SA's public healthcare sector. The framework used the governance principles including strategic vision, participation and consensus orientation, accountability, ethics, Rule of Law, and effectiveness and efficiency. Figure 1.1 below is the theoretical framework that will guide this study.



**Figure 1.1:** Multiple-case study analysis and theoretical framework application



## 1.5 Structure of this dissertation

This dissertation consists of five chapters

### Chapter 1

This section provides a background of the study, and explains the problem statement, aims and objectives, methodology, as well as the layout of the study.

### Chapter 2

This section covers the health policies prior to the NIPCPS (2007) formulation, and the policies and legislations that support the NIPCPS formulation and implementation. It also provides an overview of the public healthcare sector in SA, explaining its different forms and the challenges it is faced with, and the role that governance plays in public healthcare.

### **Chapter 3**

This section of the study provides a review of the methods that are relevant to this study, and describes how the study was conducted.

### **Chapter 4**

This section covers the findings on the multiple-case study analysis of the role of governance in the NIPCPS implementation. This section analyses the NIPCPS in relation to the three study objectives. The findings from a suitable governance framework in relation to the NIPCPS are also reported in this section of the study.

### **Chapter 5**

This section presents the discussion, conclusion, recommendations and study limitations.

#### **1.6 Summary**

This chapter provides an introduction to the study and the research objectives. This study aimed to document how governance plays a role in the implementation of the NIPCPS. To fulfil the aim, three objectives were formulated to give direction and focus to the study. The next chapter focuses on literature review, where the documented knowledge about the study is explored to provide insight into the topic of research.

## **Chapter 2: The health policy and NIPCPS, public healthcare in SA, challenges, and governance**

### **2. Introduction**

The purpose of this chapter is to introduce public healthcare in SA. It begins by describing the policy and health policy, and an overview of the policy-implementation process. Furthermore, it discusses the policies that came into place after 1994, placing more emphasis on the NIPCPS. Secondly, the concept of a health system is explored, followed by categories of existing health systems, the diseases burdening the health system and the key functions that contribute to the improvement of the health system performance. Then, an overview of SA's post-apartheid public health system is unpacked, particularly facilities of care such as the primary, secondary, and the tertiary levels. The discussion then leads into the role of governance in SA's public healthcare.

### **2.1 Policy, public policy and health policy**

There have been significant changes in the South African health sector post-1994, and various policies were drafted under appropriate consultation with the significant actors and stakeholders (Dennill et al., 1999). Policy can be defined as resolutions made by policy makers in a certain area, be it health, education, business or environment, in various levels such as local or central government, local company or hospital (Buse et al., 2005). It provides direction for making decisions, enhances stability in management decisions, and can be used in various conditions found in certain circumstances, areas and communities (Dennill et al., 1999).

Policy can impact negatively or positively on the healthcare or health of individuals, communities or the entire population based on what various health and healthcare systems offer or remove (Paton, 2008). After careful analysis of various definitions, Roux (2002) describes public policy as the anticipated way of acting by the government or rules that should be pursued to achieve the purpose and objectives, or the statement of authority on which the government determines actions to undertake or reject, and integrate or involve the reliable sharing of principles for the entire society.

Health policy can be described as the set of actions that affect the health system by impacting on the group of organizations, institutions and financial provisions, and may consist of both governmental and private sector policies (Gilson, 2012). Dennill et al. (1999) explain that a health policy has an impact on the health and disease conditions of the

country, and thus establishes what the ruling government places on health, as well as the amount of money it gives to health.

The process of public policy (Figure 2.1) involves four consecutive stages, namely setting agenda, formulation, implementation, and analysis (Shiffman, 2008). According to Sutcliffe and Court (2005), the policy process also involves the choice of solution or selection of preferred policy option as well as policy design. Policy pitfalls are mentioned to be in the policy design and implementation processes, where, in the case of the policy design, the limitations include targeting criteria, putting them into action, latent costs; insufficient community involvement; unplanned consequences, such as geographical imbalances and resistance of public servants; and the absence of a monitoring and evaluation system in the majority of policies (Rispel et al., 2010).

According to Rispel et al (2010), the limitations in the policy implementation process include an irregular area implementation that has a more negative impact on rural areas; insufficient administrative and implementation competency; inadequate resources; and an outflow to the wealthy; fraud and corruption problems, poor public servants participation, and worsening implementation ability problems.

According to Buse et al (2005), health policy describes implementation “as what happens between policy expectations and policy results”. The literature on policy implementation suggests that governance is important for opportunity creation, problem-solving and designing structures and mechanisms required for the implementation process (Scott et al., 2014).

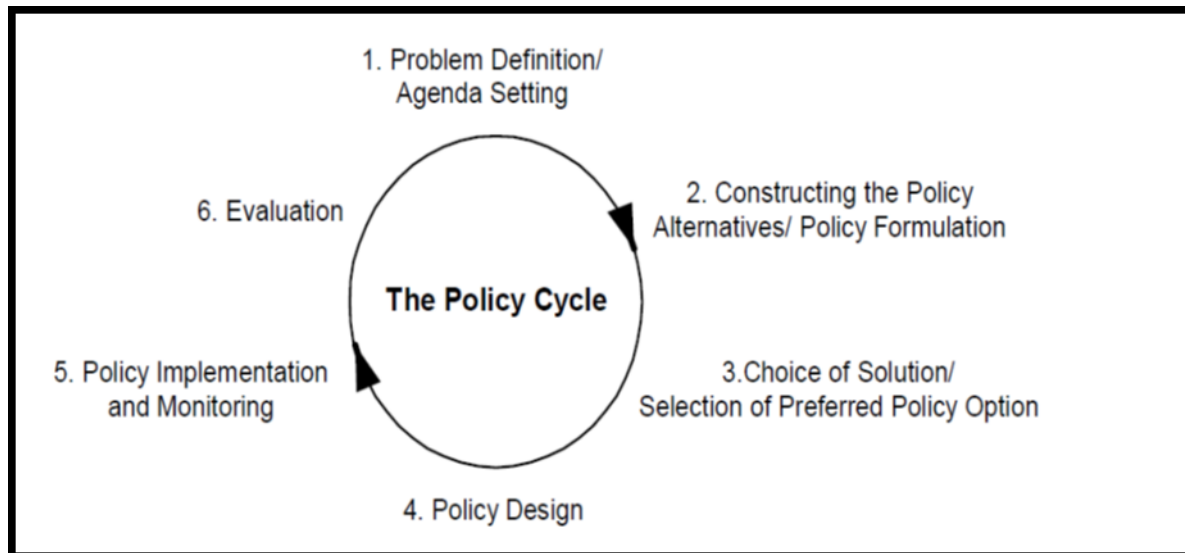
It is important to acknowledge that public policy formulation and implementation in the health sector are very much subject to politics. Decisions are made regarding to whom services must be provided, who the service providers are, who will be financially supported, and how budget spending is allocated (Glassman & Buse, 2008).

### **2.1.1 Policy implementation processes**

Alvarez-Rosete (2008) discusses that the process of policy implementation is said to be a top-down process led by the central government, and it requires involvement by local leaders, and its failure is perceived to be a compliance problem at the lower levels of administration. Apart from being a top-down process, policy implementation can also be a bottom-up process, where the front-line staff such as nurses and doctors deliver health services (Buse et al., 2005), or principal-agent theory where the principals hand over

responsibilities of policy implementation to their officials (public servants in the Health Ministry) (Buse et al., 2005). To ensure the success of the policy implementation process, policy makers must consider the viability of the policy, the availability of resources, the timing, and the ways of measuring policy failure or success, doing all in consultation with the implementers during policy design and development (Alvarez-Rosete, 2008).

**Figure 2.1:** The public policy cycle



Sutcliffe & Court (2005)

### 2.1.2 Health-related policy introduction and implementation in post-apartheid SA

Policy implementation is guided by legislation, that is the policy must be drafted first to guide the content of the legislation, and then legislation will be developed to provide a direction for policy implementation (Pillay et al., 2002). Both policy and legislation are plans for implementation, and policy directs the actors on a journey of the implementation plan, whereas legislation provides the whole information on how to go about implementing a plan (Van Rensburg 2012). However, the capacity to formulate and implement policies for the delivery of government health reform programmes has become a great concern, and the process of policy implementation and delivery has proven to be challenging (Hunter & Killoran, 2004).

Healthcare before 1994 was believed to be an opportunity, and not a right, and the people who were eligible were those who had money to pay for it; the wealthy and white people who were medically insured (Van Rensburg 2012). The legislation and institutions of the apartheid era had left an inheritance of continuous poverty, national divisions and tremendous differences over the time of 300 years (Gumede, 2008).

Post 1994, several important policies and legislation related to health reform were rolled out, which are listed in Table 2.1: The National Drug Policy, 1996 (Dennill et al., 1999); The White

Paper on Transforming Public Service Delivery, 1997 (Van Rensburg et al., 2004); National Health Act 61 of 2003 (Van Rensburg et al., 2012); The South African Draft NIPC Guidelines for TB; Multidrug resistant tuberculosis (MDR-TB) and Extensively drug resistant tuberculosis (XDR-TB), 2007; and the NIPCPS, 2007 (Engelbrecht & Janse van Rensburg, 2013) that is established in the Constitution of the Republic of South Africa Act 108 of 1996; and the National Health Act (NHA) 61 of 2003 (NIPCPS, 2007).

Several other important policies and legislation (Figure 2.2) were adopted in the formulation and implementation of the NIPCPS (2007); The Occupational Health and Safety Act 85 of 1993, Hazardous Biological Agents Regulations, The Environment Conservation Act No 73 of 1989, The Foodstuffs, Cosmetics, and Disinfectants Act No 54 of 1972, as well as the NHA 61 of 2003, and the Constitution of the Republic of South Africa Act 108 of 1996 (NIPCPS, 2007).

This study focuses on the NIPCPS, which was launched in 2007. The NIPCPS (2007) is aimed at setting the minimum national standards for the appropriate prevention and effective management of NIs in order to ascertain that biological agent hazards are limited for patients, visitors and HCWs (NIPCPS, 2007). An NI, also referred to as HAI, is the kind of infection where there is evidence that upon the patient's arrival in the healthcare facility there was no infection present, and 48 hours after admission the infection occurs (Perovic & Singh, 2011). NIs comprise a huge number of healthcare problems and lead to increased hospitalization that adds additional expenses to healthcare and also results in more diseases and deaths (Petrosillo et al., 2005).

Therefore, these HAIs must be properly controlled in order to prevent the transmission of organisms amongst patients, HCWs and visitors, especially HCWs and visitors who may be the primary sources of infections that lead to outbreaks. Practising good IC is thus essential to improve health results and preventing negative consequences such as diseases, deaths and possible legal action (NIPCPS, 2007). The programme for IPC covers all features of IPC including surveillance, research on the outbreak, and education, environmental and waste management, formulation and revision of IPC policies, guidelines and procedures, cleaning, disinfection and sterilization, health of HCW and quality IC management (NIPCPS, 2007).

Table 2.1 below shows several important policies and legislation related to health reform that were rolled out in SA post 1994. Figure 2.2 below shows several other important policies and legislation that were adopted in the formulation and implementation of the NIPCPS (2007).

**Table 2.1:** Post-apartheid policies and legislation from 1994 to the launching of NIPCPS (2007)

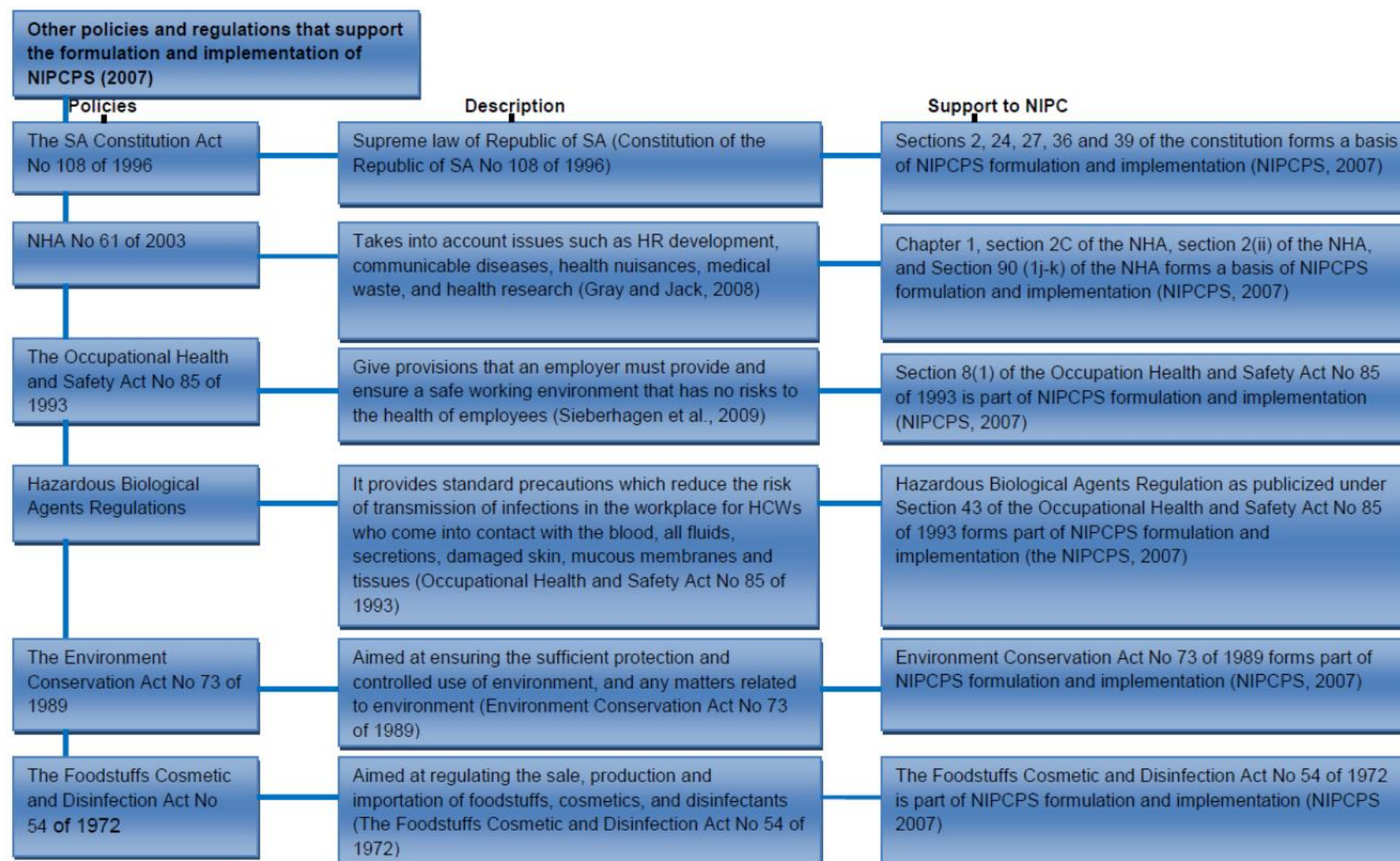
Policy	Year launched	Description/ Objective	Pitfalls
RDP	1994	<ul style="list-style-type: none"><li>• Significantly influenced the nature and strategic content of the first decade of reform (Dennil et al, 1999).</li><li>• ANC's part of manifesto for transformed environment (van Rensburg, 2004).</li><li>• First policy on free health services (van Rensburg et al., 2012).</li><li>• Meant to provide basic needs, economic development, democratic government, people development, human resource development, promotion of nation building (Gumede, 2008), alleviation of poverty, and dispossession (Wessels, 1999).</li></ul>	<ul style="list-style-type: none"><li>• Lack of funds to continue implementation of RDP (Corder, 2005).</li><li>• Socio-economic environmental difference attributed to racism (Venturino, 2013).</li><li>• RDP undermined by GEAR (1996) by introducing foreign investment strategy (van Rensburg et al., 2012).</li><li>• RDP's redistribution and equity objectives rendered unfeasible by preference of GEAR (van Rensburg et al., 2012).</li></ul>
NHP	1994	<ul style="list-style-type: none"><li>• An extension to RDP (van Rensburg et al., 2012).</li><li>• Promote uniform health care centralized on preventive and community involved care (Venturino, 2013).</li></ul>	<ul style="list-style-type: none"><li>• Socio-economic environmental differences attributed to racism (Venturino, 2013).</li><li>• NHP's redistribution and equity objectives rendered unfeasible by Government's preference of GEAR (van Rensburg et al., 2012).</li></ul>

GEAR	1996	<ul style="list-style-type: none"> <li>• Macroeconomic strategy for economic redevelopment and redesigning (van Rensburg et al., 2012).</li> <li>• More embraced by government over RDP and NHP (van Rensburg et al., 2012).</li> </ul>	<ul style="list-style-type: none"> <li>• GEAR failed to deliver the promised economic expansion and job creation goals (Business Report, 2001), as well as substantial redistribution of income and socio-economic opportunities to benefit the poor (Knight, 2001).</li> </ul>
The White Paper	1997	<ul style="list-style-type: none"> <li>• Promotes health service transformation focusing on: accessibility, acceptability, affordability, availability, suitability, and equity (Sibaya and Muller, 2000)</li> <li>• Batho Pele document providing Batho Pele principles (van Rensburg et al., 2012)</li> </ul>	<ul style="list-style-type: none"> <li>• Did not provide solutions to challenges of the NHS implementation through PHC idea (Pillay et al., 2002)</li> </ul>
NHA No 61	2003	<ul style="list-style-type: none"> <li>• Legislation to implement rights to health care, and provides legal aspect to the White Paper and NHP (van Rensburg et al., 2012).</li> <li>• Takes into account issues such as; human resource development, communicable diseases, health nuisances, medical waste, and health research (Gray and Jack, 2008).</li> <li>• Evidence progress made in 2007 included; regulation regarding communicable diseases TB, MDR, and XDR-TB (Tshabalala-Msimang, 2008).</li> </ul>	<ul style="list-style-type: none"> <li>• Important chapters and sections are still in the basic form, and details are still missing, but the attention was shifted by the rushed publication of a draft National Health Amendment Bill (Gray and Jack., 2008)</li> </ul>



		<ul style="list-style-type: none"> <li>Provisions for control of communicable diseases and IC policy (Tshabalala-Msimang, 2008)</li> </ul>	
NIPC guidelines for TB, MDR-TB, and XDR-TB	2007	<ul style="list-style-type: none"> <li>To assist HCWs to minimize TB transmission risk within health care institutions, outside institutions, in the community, and correctional institutions</li> </ul>	SA still have a number of poorly implemented practice at the facility level, patients not isolated from TB patients, insufficient TB screening practices, absence of formal sputum collection areas, absence of N95 respirators, <i>etc.</i> , (Engelbrecht and van Rensburg, 2013).

**Figure 2.2:** Policies and regulations that form part of the NIPCPS's formulation and implementation



Basic surveillance is a good starting point of IC programmes in that it assists in the calculation of the infections rate, and it provides data that can notify HCWs about the spread of HAIs (Perovic & Singh, 2011). The IPC programme covers the following: medical devices such as hospital beds, radiotherapy machines, contact lenses, condoms, heart valves, syringes, resuscitators, wheelchairs, walking frames, and surgical instruments (NIPCPS, 2007). It also covers respiratory tract equipment, ventilator and bed rails (Saiman & Siegel, 2004), while the PPE (shown in Figure 2.3) encompasses gloves, aprons, gowns, caps, masks and protective eye wear (NIPCPS, 2007).

The appropriate IC practices also include the commitment of HCWs in ensuring careful hand hygiene, correct patient isolation, the use of gloves, and the utilization of sterilized medical devices (Perovic & Singh, 2011). Alcohol-based hand rubs must be used in order to practise proper hand hygiene. However, when the hands look dirty or are covered with blood or body fluids, an antimicrobial-containing soap and water may be used. Other aspects of hand hygiene include caring for the skin of hands and fingernails, which includes discouraging the HCWs from wearing artificial nails since they harbor gram-negative pathogens more than natural nails, even after washing (Saiman & Siegel, 2004).

Appropriate hand hygiene practices require the availability of soap and water at locations convenient to HCWs (Perovic & Singh, 2011). The NIPCPS is based on the principles such as prevention, privacy, occupational health and safety, as well as integration, and prevention (NIPCPS, 2007). Section 8 of the NIPCPS discusses that there should be infection prevention interventions, patients' and HCWs' rights to privacy should be upheld, the health and safety of HCWs will be considered. It further describes that IPC programmes will be integrated with programmes such as TB, comprehensive care, control of communicable diseases, and Environmental and Occupational Health (NIPCPS, 2007).

In addition to this document, there are guidelines for SA's Draft for NIPC guidelines for TB, MDR-TB and XDR-TB and the NIPCPS (Engelbrecht & Van Rensburg, 2013). The draft NIPC policy for TB, MDRTB and XDR-TB was developed to assist the HCW, both management and staff with reducing the TB transmission risk within the institutions of healthcare and in other facilities where there is a potential for high TB transmission as a result of undiagnosed TB or increased TB prevalence such as at prisons.

**Figure 2.3:** A picture of PPE



World Health Organization (2003)

The policy covers issues including the procedures for the IPC to reduce the risk of the transmission of MTB in healthcare facilities, significance of controlling TB in drug rehabilitation centres, and correctional institutions including prisons, other detention centres and other facilities where a great numbers of possible TB and HIV infected individuals are found. It also covers MDR-TB and extensively drug-resistant XDR-TB (The draft NICP policy for TB, MDR-TB and XDR-TB, 2007).

According to WHO 2003, TB results from the MTB infection that affects one third of the people in the whole world, and concern is particularly on the rise concerning drug-resistant TB and MDR-TB. MDR-TB is the form of TB that is resistant to any combination of Isoniazid and Rifampicin (WHO, 2003), while XDR-TB is described as the form of TB that is resistant to isoniazid, rifampicin, quinolones, and at least 1 of 3 second-line drugs that are administered intravenously (i.e., kanamycin, capreomycin, or amikacin).

Drug-resistant TB is caused by insufficient treatment therapy that allows the selection and growth of the naturally occurring resistant strains or by the infection with primary drug-resistant strain of TB (Andrews et al., 2007). Prior to the launch of the TB IC programme, there had been reported outbreak cases of MDR-TB and XDR-TB in SA, where 39% of patients had MDR-TB, of which 53 had XDR-TB in a rural hospital in the KwaZulu-Natal Province in 2006.

The outbreak cases of XDR-TB had continued to increase to 266 in a rural KwaZulu-Natal district in 2007 with a death rate of 84%, and the XDR-TB cases were reported in patients attending about 60 various health facilities in the KwaZulu-Natal Province and in all other

nine provinces of SA (Abdool Karim et al., 2009). XDR-TB isolates have been identified in more than 40 institutions of healthcare across the province and in every province in the country (Andrews et al., 2007).

Churchyard et al (2014) mention that the major pillars of TB control are finding, treating and preventing TB in order to minimize TB transmission and associated mortalities. It was the purpose of the TB Strategic Plan for SA (2007-2011) to concentrate on TB and HIV, MDR and XDR-TB, and to empower TB-infected people and their communities to organize and implement TB research and IC strengthening (Abdool Karim et al., 2009). However, the IC guidelines are still poorly implemented, and there is a need of regular monitoring of healthcare institutions to make sure that IC guidelines are constantly implemented. Proper TB IC is not only essential for people at high risk of exposure such as HIV-infected people and children, but also HCWs who are at risk of contracting nosocomial TB (Churchyard et al., 2014).

Engelbrecht and Van Rensburg (2013) argue that the high incidence of TB in SA could partly be a result of poor IC in public healthcare facilities. Reports from research have raised the alarm around the issue of implementation of IC practices in public healthcare institutions, and when compared with the levels of IC stipulated by WHO, SA was identified as having a number of poorly implemented practices at the facility level (Engelbrecht & Van Rensburg, 2013).

Indicators of failing to meet the criteria of implementing the IPC measures in SA's public healthcare includes the absence of IPC committees, absence of policies, absence of an IC staff member in charge, and insufficient IC practices. Inadequate IC measures include the failure to isolate patients who are TB infected from those that do not have TB, insufficient screening of TB and triaging of patients, carrying the collection of sputum inside facilities or no formal sputum collection areas.

Other factors include the poorly implemented environmental control practice such as not using natural ventilation and not having the personal protective measures due to staff members lacking skills in the use of N95 respirators. There is also the challenge of not having surgical masks and respirators at some facilities (Engelbrecht & Van Rensburg, 2013).

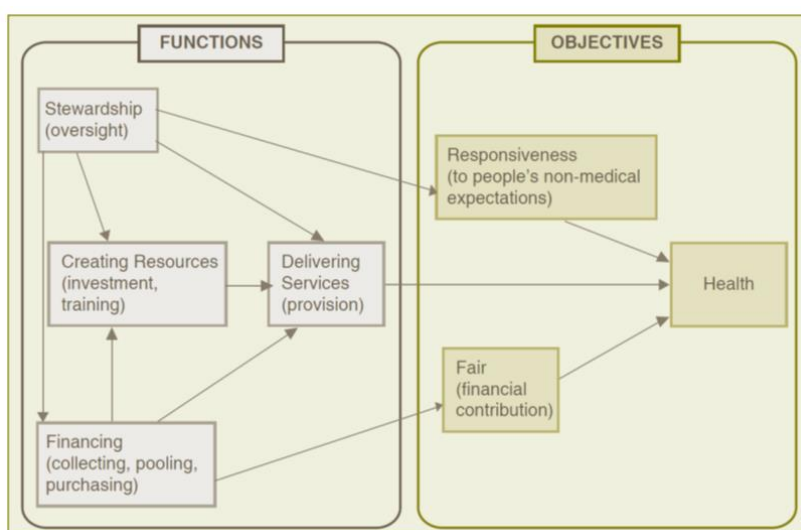
## **2.2 The healthcare system in general**

The WHO (1948) has defined health as "a state of complete physical, mental, and social

wellbeing, and not merely the absence of disease and infirmity (De Haan, 2005). Public health is affected by a certain group of programmes and activities that are employed to make a change to ensure better health promotion, ill health prevention, as well as a safe environmental health (Carrin et al., 2008). On the other hand, the health system is the structuring of people and facilities to convey specialized knowledge and skills to individuals, groups of individuals, or their surroundings to advance, protect or preserve their health (Van Rensburg et al., 1992). The WHO describes health systems as those consisting of all institutions, organizations and resources dedicated to making an impact mainly with the aim of improving population health (Hunter, 2008). Another description of a health system is an institution of healthcare, where healthcare is the complete collaborated actions taken in response to the existence of the disease, and for counteracting the risks to health – this includes patients and communities (Van Rensburg et al., 2012).

There is a national and a total health system (Van Rensburg et al., 2004). The national health system (NHS) includes the ‘policies, programmes, institutions’ and players that offer healthcare which consists of combined actions to cure and inhibit disease. The total health system includes the entire NHS and all matters related to health, particularly the environment around the health system, and the people receiving healthcare services from that particular health system (Van Rensburg et al., 2012; Van Rensburg et al., 2004). The functioning of the health system depends on its ability to carry out four key functions, namely stewardship, financing, service delivery, and resource creation (Engelbrecht & Crisp, 2010; Hunter, 2008). Figure 2.4 below shows the above-mentioned critical functions necessary for the improvement of the health systems.

**Figure 2.4:** Health system performance model: relationship between key functions and respective objectives



Engelbrecht & Crisp (2010)

Stewardship is the responsible management of what is placed under one's care, and it has an impact on policies and deeds in all the aspects that may affect people's health. It is the most crucial function of governments, and it indicates the ability to create and implement directive policy plans that can ensure a good health system performance that has accountability and transparency (Hunter, 2008). On the other hand, financing in the health system involves the strategies used to collect an income, gathering and sharing it among the healthcare providers to improve health. Stewardship assists most health systems to enhance social unity and the protection of finances (Hunter, 2008).

Service delivery in healthcare is a function that ensures the availability to care among all groups of people in order to address inequality, while making sure that the total population is covered, promoting the safety of patients, and being aware of various service delivery plans in the health system (Hunter, 2008). Good service delivery is an important element of every health system, and it is a major input to the health status of the people. The network of service delivery in a well-operating health system should include the following main features: comprehensiveness, accessibility, coverage, continuity, quality, person-centredness, coordination, accountability and efficiency (WHO, 2008). Health system resources include the following (Hunter, 2008):

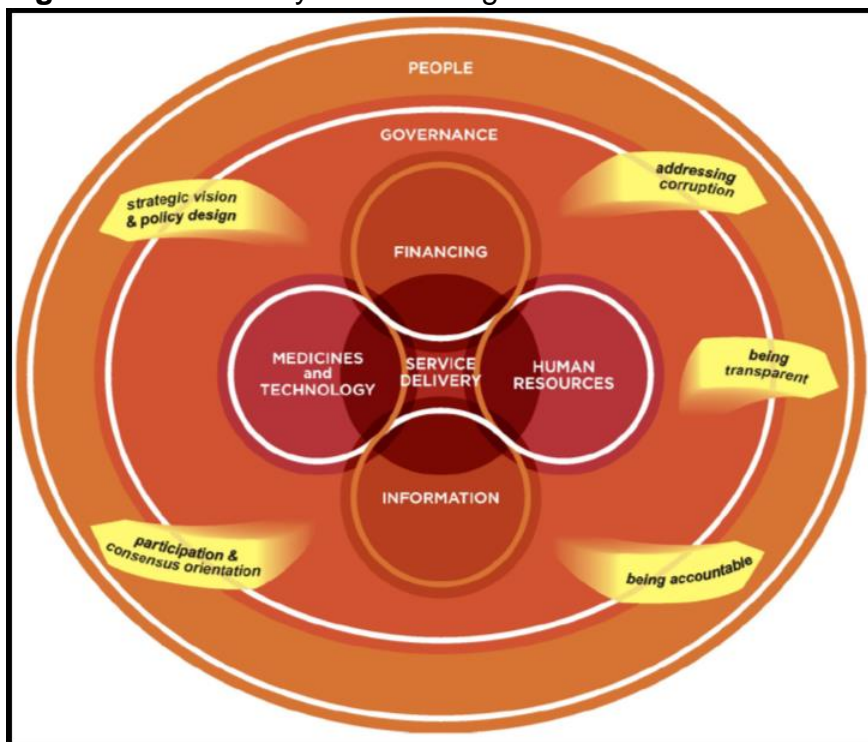
- Financial resources,
- Human resources,
- Universities and educational institutions,
- Research centres, and
- Companies that manufacture healthcare technologies such as drugs and medical equipment.

Regarding the last point, resource generation in the health system involves investing to obtain a maximum balance between resources and new medical technologies (Hunter, 2008).

Gilson (2012) also highlights the health system building blocks (shown in Figure 2.5) that influence the performance of the health system, dividing them into the hardware and software, where the hardware includes the specific organization, policy, financing and legitimate structures that make up any health system, and also its clinical and service delivery needs.



**Figure 2.5:** Health system building blocks



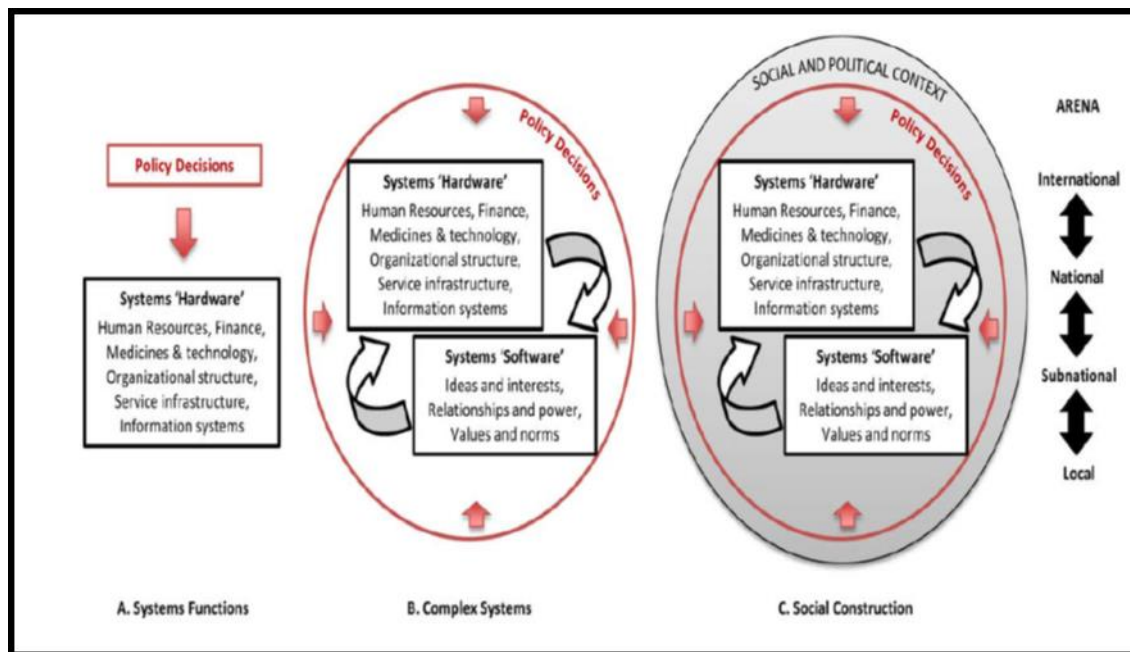
Mikkelsen-Lopez et al (2011)

The WHO broadens this term "hardware" to include information systems, and types of human resources, and governance, and also recognizes the inclusion of the policy suppliers, services, interventions, and the citizens that partake in policy change (Sheikh et al., 2011). In contrast, software involves the principles, values, roles, and duties of the institution enshrined within the system.

Sheikh et al. (2011) in Figure 2.6 gives an illustration of the hardware and software concepts in the system, complex system, and social construction. This shows the alternative complex health system formulations that can be affected by the economic theories of political organizations and markets. Thus, making conclusion to non-linear, and dynamic relationships between different parts of health systems, and to the role of software and hardware of systems (Sheikh et al., 2011). The mentioned key functions and building blocks have been used to study how to improve the health system of SA (Engelbrecht & Crisp, 2010).



**Figure 2.6:** Alternative perspective to health system performance



Sheikh et al (2011)

## 2.3 SA's public healthcare system

In 1994, SA became a democratic country, and its democratic government acquired a highly segmented health system that was based on differences in the access and quality of medical care between black and white people, urban and rural residents, and the public and private health sectors (Rispel et al., 2010). In SA, the right to healthcare is a basic human right for all citizens, and it is also the foundation of the current health system (Dambisi & Modipa, 2009; De Haan et al., 2005; South African Constitution 1996). The health system in SA provides the primary, secondary and tertiary levels of care, through the clinics, district, tertiary or academic hospitals (Van Rensburg et al., 2004).

It is the responsibility of the South African government to make sure that health services are accessible to all citizens using the primary healthcare (PHC) approach (Dennill et al., 1999). The public sector provides health services to approximately 84% of the population of whom the majority are black and poor people (Naidoo, 2012). SA's healthcare carries a large burden of diseases, and has poor returns on health when compared with other middle-income countries (Rispel et al., 2015).

### 2.3.1 Quadruple disease burden crippling SA's public healthcare system

The disease profile in SA is a complex one, and it is a quadruple burden of disease (Naidoo, 2012). It consists of HIV/ AIDS and TB, maternal and childhood diseases, non-communicable diseases (including obesity, diabetes, hypertension, non-infective respiratory

diseases, musculoskeletal disorders, and dermatological diseases), and violence and escalated risks of injuries (Naidoo, 2012; Rispel & Barron, 2010). Van Rensburg et al (2004) describe the three-fold challenge of infectious diseases, chronic lifestyle diseases, and trauma and injuries that place high demands on the insufficient health resources.

### **2.3.2 IC of communicable diseases as part of the burden crippling SA's public healthcare system**

The epidemic infectious diseases are occurring simultaneously with escalated non-communicable diseases in SA's healthcare system (Mayosi et al., 2009). HAIs affect hundreds of millions of people globally (Pittet et al., 2008). HAIs and their control are a global challenge (Alp et al., 2011), and it appears to be clear that IPC falls short in public health facilities in SA (Visser et al., 2011). Key reasons for this shortfall are a lack of IC practitioners, as well as a lack of training among practitioners (Visser et al., 2011). Other factors include overcrowding (due to lack of space) which influences the spread of HAIs (Kaier et al., 2012); lack of equipment (Tirivanhu et al., 2014), soap and disposable towels for good hygiene and PPE, particularly N95 masks (Engelbrecht et al., 2015). In addition, insufficient medical and medicinal resources hamper the implementation of basic IC programmes in healthcare facilities (Dusé, 2005).

#### **2.3.2.1 IC globally**

Regardless of the era of successful prevention and control efforts, infectious diseases are still a global problem in public health (Cohen, 2000). The prevalence of HAIs as reported by the WHO at any given time varies between 3.5 and 12 % in developed countries, and between 5.7 and 19.1 % in developing countries (Engelbrecht et al., 2016). These HAIs result in increased hospital stay, long-term disability, increased antimicrobial resistance (AMR), huge additional financial burden, high costs for patients and their family, and excess deaths (Pittet et al., 2008).

HAI rates lowering strategies are centralized particularly on expanding the implementation of standard IPC precautions (Edwards et al., 2012). To prevent and control these infections, it is necessary to have the suitable infrastructure as well as proper human and financial resources, which is country dependent in terms of allocation of these resources to such programmes (Cardo & Soule, 1999).

The WHO global initiatives to promote IC include:

(1) The collaborated Healthcare Epidemiology of America, Inc/Association for Professionals in IC, Inc/Centers for Disease Control and Prevention Consensus Panel Report initiative that comprises three goals for hospital IPC including (Cardo & Soule, 1999):

- Protection of patient; HCW protection,
- Protection of visitors of the healthcare environment, and
- To by all means achieve these two mentioned goals in a cost-effective manner, whenever possible.

(2) The “Clean Care is Safer Care” WHO Global Patient Safety Challenge (2004) that is meant to (Carlet et al., 2012):

- Provide guidance,
- Enhance hand hygiene support initiatives globally, including in developing countries.

(3) The Challenge “Clean Care is Safer Care” (2005–2006) aimed at (Pittet & Donaldson, 2005):

- Promoting awareness of the influence of HAIs and to promote country-based preventive strategies,
- To establish the commitment from countries to prioritize minimizing HAIs, and
- To evaluate the new WHO Guidelines on Hand Hygiene in HealthCare (advanced draft) implementation in certain districts globally as part of an incorporated package of activities derived from existing WHO strategies in the areas such as clean products, practices, equipment and the environment.

(4) The Joint WHO-ILO-UNAIDS Policy Guidelines (2010) aimed at enhancing (Yassi et al., 2016):

- HCWs access to HIV and TB Prevention,
- Treatment, care and support

to stress the significance of strengthening IC programmes, guaranteeing a work environment that is safe for health workers.

#### 2.3.2.2 IC SADAC

African developing countries rank the highest in infection rate (Ehlert et al., 2014) and SA is identified as having a huge burden of infectious disease in addition to HIV and TB (Ehlert et al., 2014; Pearse, 1997). Regardless of some challenges, there are promising signs that the significance of HAI is being recognized in Africa (Nejad et al., 2011). Even though many

African countries struggle with infrastructure to handle surveillance of the new resistant bacterial strains emerging from irrational use of antibiotics (Pearse, 1997), there is a progress in IPC.

- In Zimbabwe, IPC was shown to be possible and economical, through teaching the villagers the basic hygiene, home nursing, construction of fly-proof pit toilets, and a safe water supply (Pearse, 1997).
- The study conducted in Algeria (2001) has revealed how the introduction of a prevention programme at the facility level has decreased the prevalence of HAI hospital-wide over five successive years (2001–2005) (Nejad et al., 2011).
- The implemented standardized protocol for surgical wound management in Uganda has enormously decreased surgical site infection after caesarean section (Nejad et al., 2011).
- The improvement of infection prevention has been started nationally in some countries, such as Senegal, where a national programme to reduce HAI (*Programme national de lutte contre les infections nosocomiales [PRONALIN]*), was implemented in 2004, and has become a template for similar programmes in other neighbouring countries (Nejad et al., 2011).

The IPC Africa Network and the *Réseau international pour la planification et l'amélioration de la qualité et de la sécurité dans les systèmes de santé en Afrique* organize regional and international IPC efforts (Nejad et al., 2011), and the IC Association of Southern Africa provides information, standards, and a support base, and has the "IC Manual" which equips managers with the guidelines and basic knowledge for IPC (Pearse, 1997).

#### 2.3.2.3 IC SA

In SA, IPC is receiving more attention after being a neglected area in the medical field, and the national Minister of Health, Dr Aaron Motsoaledi identified it as one of the priorities in healthcare (Visser et al., 2011). The national and IC guidelines have been adapted in SA (Farley et al., 2012). The IPC guidelines cover topics like staffing, policies, training, additional resources, current problems and potential solutions (Visser et al., 2011). The SA guidelines are tailored to also cover five important challenges such as AMR, nosocomial pneumonia, bloodstream infections, urinary and intra-abdominal tract infections, and are meant to minimize the effect of these challenges on patient outcomes (Dusé, 2005).

The Infection Control Society of Southern Africa (ICSSA) was established to promote IC countrywide particularly through the establishment and support of local 'chapters', but it is

hard to sustain these local chapters (Visser et al., 2011). In 2011, there were three established local IC societies: Western Cape, Gauteng and Pretoria. In the Free State, communication with society members was conducted electronically, but the meetings were no longer held where individuals are able to attend. The Kwazulu-Natal chapter had trouble since the IPC practitioners were given the task of re-forming the chapter (Visser et al., 2011).

In an effort to protect HCWs from infectious diseases and promote safe working conditions, SA has formed a partnership with Canada (2006) where occupational health and IC experts formed collaboration with a nationwide mandate to undertake research and establish guidelines (Yassi et al., 2016).

#### *2.3.2.4 Lack of antimicrobial drugs and IC*

Drug shortages create a serious problem for institutions of healthcare, and frequently interfere with patient care. Since the early 2000s, drug shortages have been increasing and identified effects caused by these drug shortages include disability; the need for intervention; and deaths of patients (McLaughlin et al., 2013). Incorrect antibiotics use and antibiotic underuse increases AMR (Carlet et al., 2012; Odonkor & Addo, 2011). Inappropriate and irrational antimicrobial uses empower the emergence, spread and continuation of resistant microorganisms (Odonkor & Addo, 2011). Although antibiotic resistance may emerge through antibiotic selection pressure, it is worsened by risk factors such as poor IC (Essack, 2006). Therefore, coordination of IC with antibiotic stewardship must be strongly emphasized (Carlet et al., 2012).

#### *2.3.2.5 Lack of healthcare space and equipment and IC*

Patient overcrowding has been reported to be among the factors that increase infectious diseases transmission within hospitals (Kaier et al., 2012; Virtanen et al., 2011), but it is difficult to dispute against the probability of overcrowding being a result of the breakdown in IPC practices (Visser et al., 2011). At the public health facilities in SA, the poorly implemented IPC measures have been identified to include failure to separate patients with TB from those without it; and a lack of IC equipment (surgical masks and respirators) which are not always available at certain facilities (Engelbrecht & J van Rensburg, 2013).

#### *2.3.2.6 Poor treatment of patients by health workers, and IC*

Other problems faced by the health system in SA associated with the human resource is unprofessional behaviour, poor staff motivation, and poor treatment of patients by health

workers , as well as the insufficient human resource information system that is failing to notify human resources with regard to planning and training (Rispel, 2016). The human resource of the health system in SA is also burdened by communicable and non-communicable diseases which affect HCWs from clinical to laboratory staff, general assistants, and administrators, and there is a growing need to manage diseases in the HCWs of the South African health facilities (Naidoo et al., 2016).

### **2.3.3 Other challenges faced by SA's public healthcare system**

In an effort to combat problems that have long burdened the South African health system, the current health system reforms focus on enhancing health services and the health system performance (Rispel et al., 2015). SA, like other countries, had also adopted the WHO Millennium Development Goals (MDGs), and an overview of the key aspects of performance of the SA health system that are likely to influence the disease control priorities initiative has been performed (Rispel & Barron, 2010).

In assessing the performance of the South African health system, Rispel and Colleague (2010) examined the health system building blocks of service delivery, namely human resources, finances, medical products, vaccines and technology, information, and leadership and governance. They determined the key issues or challenges affecting service delivery associated with the health system building blocks, and they have highlighted that there is a need for good leadership that can prioritize the efforts needed to improve the health status and health system of SA. Zweigenthal et al (2016) have looked at the workforce and described the barriers to improved health services as the shortage of staff, insufficient numbers of training staff, career changing, and so forth.

The health system in SA also suffers in the area of leadership where the problem is described to be due to a lack of stewardship, exacerbated by a lack of accountability, incompetence, governance failures, and corruption (Rispel, 2015). Rispel et al (2015) have concluded that poor leadership has a common relationship with corruption, and that this contributes negatively to the morale of healthcare providers, and they further named one method of corruption detection called agent selection. When looking at financing as the building block of service delivery in the health system, the key challenges determined include financial management and accountability, as well as the costing of health sector services, which is poor (Rispel & Barron, 2010).

Rispel (2015) concludes that the answers to these problems in human resources, financing and leadership lie in the appointment of competent and qualified public service managers.

Effective governance is key and is required across the health system to enforce legislations and make public officials accountable, and the national reforms predicted by the National Health Insurance (NIH) could provide the change in the South African health system (Rispel, 2015).

## **2.4 Post-apartheid health service delivery reforms**

As mentioned earlier, SA went through several reforms of the end of apartheid. During its democratic era, several forms of restructuring took place, and the health system was formally set on a path to the delivery of care on primary, secondary, and tertiary levels of care. In this section, we will focus on these levels more closely.

### **2.4.1 Primary healthcare**

PHC is defined here as a crucial form of care focused on practical, scientifically based and socially approved methods and technology made widely available to members of the community, individuals, and families through their participation and at a cost that the community and the country can afford in order to maintain every development stage with the commitment of self-reliance and self-determination (De Haan et al., 2005). The PHC approach is an important part of the country's health system, and it is the main function and focus of the total social and economic development of the community (Dennill et al., 1999). According to the WHO (1988), the PHC is the first level where individuals, families, and communities come into contact with the HCS, close to where people live and work, and the beginning element of a continual healthcare service (Dennill et al., 1999). Importantly, it is underwritten by several important values. According to Dookie and Sigh (2012); Dennill et al. (1999) the PHC has to:

- Be implementation-based,
- Promote equitable access to basic health care services,
- Promote accessibility and availability to all people,
- Be affordable, and
- Promote justifiable effectiveness and efficiency based on the input in proportion to the effort, money, time and resources utilized.

The PHC is part of the global initiative established by the WHO of 2002, and its concept dates back to the early 1940s in SA in the rural Kwazulu-Natal (Kautzky & Tollman, 2008). However, the PHC approach is best described by the declaration of Alma-Ata which was developed at the PHC conference in September, 1978 (Drapper & Louw, 2007). This

conference was aimed at addressing the need to act quickly by all governments, all HCWs, and the entire community to promote and protect the health of all people globally, and the declaration states that “The Conference strongly reaffirms that health, which is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important worldwide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector” (Bryant & Richmond, 2008).

#### *2.4.1.1 Development of PHC in post-apartheid SA and current PHC structure*

Subsequently, PHC has become the cornerstone of HCS and the health policy in the Southern Africa region (Visagie & Schneider, 2014; De Haan, 2005). The idea of PHC is a commitment of the South African DoH which forms part of the White Paper for the Transformation of the Health System in SA in 1997, with the aim of developing an integrated HCS that is able to offer an equal quality healthcare to all citizens (Draper & Louw, 2007).

In SA, the primary level of care (Figure 2.7) and entry to the health services for citizens is divided into four grades, namely grade I PHC, mobile, satellite, and fixed clinics; grade II PHC, large clinics; grade III PHC, community health centres (CHCs), and district hospitals (Van Rensburg et al., 2012). The CHC and clinics operate at the district and community level providing the “preventive, promotive, curative and rehabilitation care” with the clinics contributing at a less specialized level (Cullinan, 2006).

A CHC, also known as a day hospital (Van Rensburg et al., 2012), is a facility that offers a broad range of PHC services including 24-hour maternity, accident and emergency services, and a maximum of 30 beds with patient observation of up to 48 hours. They open 24 hours per day and seven days a week (Van Rensburg et al., 2012). On the other hand, a clinic is a facility at which a narrow range of PHC services are offered for a maximum of 8 hours per day (Cullinan, 2006).

Stationary clinics may in some cases render maternal and obstetrical services on a 24-hour basis, and mobile clinics are the extension of the stationary PHC delivery system that uses vehicles to deliver healthcare services to patients or the community, mostly in rural, urban and peri-urban areas regularly at different times, whereas satellite clinics are an extension of fixed clinics operating as mobile clinics, taking health-care services to the community regularly on a non-continuous basis (Van Rensburg et al., 2012). In order for the



clinics to function there should be water, electricity, and a specific method of communication (Dennill et al., 1999).

**Figure 2.7:** Local clinic



<http://www.medicalcenter.virginia.edu/safetycenter/Internetsafetycenterimages/south-africa-rural-clinic-patients-waiting.gif/view/06/09/2016>

The PHC services offered in clinics and CHC as defined in the PHC package and comprehensive PHC service package for SA include child health, antenatal care, family planning and maternity, mental health, sexually transmitted infections, HIV/AIDS and TB, chronic NCDs, trauma and injuries, and disabilities (Van Rensburg et al., 2004). The first comprehensive package existed in 2000, and was to be implemented in 2004, whereas the PHC package was published in 2001, and both documents were accessible simultaneously. However, the timelines set seemed to be shorter as the packages were only implemented partially, and in most PHC facilities were not implemented at all (Van Rensburg et al., 2012).

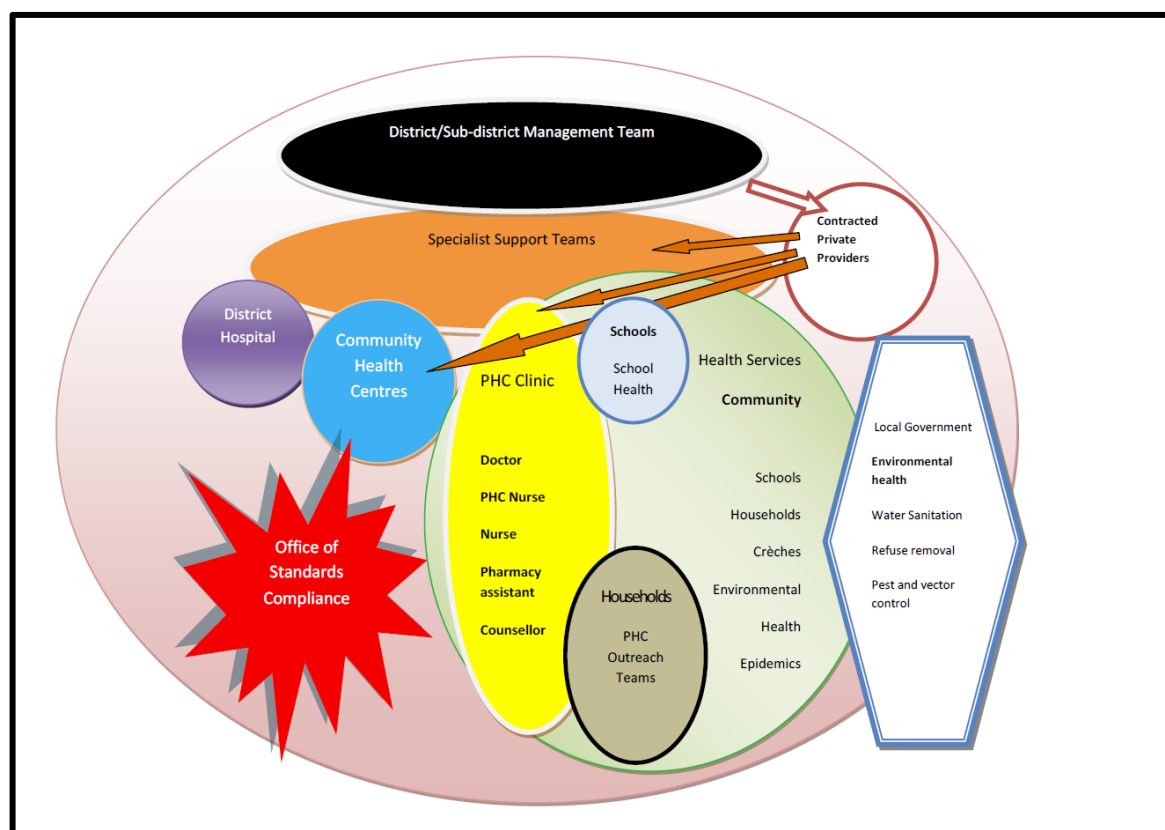
The packages were revised again and implemented in 2010. The revised documents present the layout of a comprehensive approach putting emphasis on prevention and promotion, and the service delivery targets were made available in the policy or current National Strategic Plan (Van Rensburg et al., 2012). The PHC team includes the patient, the community (De Haan et al., 2005), nurses and visiting doctors (Cullinan, 2006).

#### *2.4.1.2 Challenges that have plagued the PHC system during the past 2 decades*

There are challenges facing the implementation of the PHC, and Dookie and Sigh (2012) have highlighted the major setbacks as not having enough financial and human resources, failure of maximum utilization of resources at disposal, management changes such as

decentralization, effective community involvement, and intersectoral collaboration, which are coexisting with a quadruple disease burden.

**Figure 2.8:** A proposed model for PHC



Barron (2011)

According to Van Rensburg (2014), SA is still faced with human resource challenges for health (HRH), that the strategies to address this problem should entail efforts to rectify staff shortages, the unequal sharing of available resources, and scarce resources retention, and make possible the access and provision of equal healthcare to all citizens.. Furthermore, the post-1994 reforms have failed to make significant changes in the HRH and also in the access to healthcare, and this is affecting women, children and poor people, particularly from the rural areas. This state of affairs places their lives at risk due to less protection from health hazards and diseases caused by poverty, and consequently they depend more on the healthcare services that are compromised in quality and are less accessible due to poverty- associated obstacles (Van Rensburg, 2014).

Kautzky and Tollman (2008) discuss the obstacles that limit the PHC's full implementation as demonstrated by the HIV/AIDS pandemic, shortage of HCWs and difference in distribution of resources, the so-called health transition, as well as the pitfalls of health leadership in the political, public sector, and medical arenas. Based on the assessment conducted by the WHO in 2003, over 60% of South African healthcare institutions were

struggling to fill vacant posts and there were 4000 vacancies for general practitioners and over 32 000 vacancies for nurses in the sum of all provinces. When focusing on the public sector only, about 31% of posts were vacant and 40% of those posts were in the Free State whereas in Mpumalanga the percentage was 67%.

Furthermore, these important shortages of qualified HCWs and the failure to fill the vacant posts make up a major limitation to achieving the successful implementation of the district-based healthcare services in SA. Another problem in relation to the HCW shortages is the noteworthy loss due to international emigration (Nxumalo et al., 2016; Dookie & Sigh, 2012; Kautzky & Tollman, 2008). Other problems impacting on the successful implementation of the PHC include differences in the distribution of personnel in the public and private sector; skills levels that are low; staff that is poorly motivated; and lack of management skills (Dookie & Singh, 2012).

In an effort to provide a solution to the challenges faced by the HRH, Lehmann (2008) suggests that the following areas must be addressed in future: a way to fasten the production of professionals and middle-management cadres, overall or inclusive curriculum audits, the incorporation and control of community HCWs, and also the complete and incorporated reconfiguration of PHC teams.

#### *2.4.1.3 Current reforms in response to challenges and PHC re-engineering*

In general, the integration problems, which affect PHC implementation, are due to a lack of clear direction and accountability at the district and institutional levels. However, improving only the management of HRH will not eliminate other problems such as work performance, emigration by HRH, staff shortages, work burden, and challenging working conditions including the disease problem (Van Rensburg, 2014).

The solution lies in making an effort in the following areas: good leadership in policy formulation and implementation, establishment of tools that can monitor the health system taking into consideration disease burden, health services use, and usefulness of health interventions. Renewed political and policy efforts towards PHC delivery are required, and other requirements include: management skills improvement, appropriate coordination at all levels of the healthcare system, capacity building and development of problem-solving skills, networking and partnership building, and the incentives for staff motivation, as well as the establishment of career support (Dookie & Sigh, 2012).

According to Van Rensburg et al (2012), the efforts of re-engineering the PHC address the areas that were neglected such as delivering comprehensive services to the community

prioritizing disease prevention, promotion of health, community involvement, and collaboration with other sectors. The aim of re-engineering PHC is to make district health services stronger, to activate communities into action, and to prioritize outside factors that have an influence on health.

The intention is to use the PHC as the basic model of HCS delivery in the country placing the main focus on individual disease prevention rather than treatment, particularly educating the communities to take care of their health (Van Rensburg et al., 2012). Given that the district health system (DHS) is authorized as a means for implementing PHC at community level, but the implementation process together with the integration has been slow with contradictory results as some health units are operating well whereas others have segregated and form badly coordinated PHC delivery systems (Dookie & Sigh, 2012).

The WHO of 1984 describes a DHS that is based on PHC as a self-incorporated fragment of the national health system (NHS) that consists most importantly of a known population residing in a demarcated administrative and geographical region either urban or rural, and is comprised of all facilities and people providing healthcare in the governmental, district, private or traditional health arena, and the facilities including from the initial point of referral and the necessary laboratory, other methods of diagnosis and transport support services, and people including HRH. A DHS therefore, consists of related elements that impact on health at homes, workplaces, schools, and communities through health and other associated sectors (De Haan et al., 2005).

A district hospital has to contain at least 140 beds, a number of 3 to 4 doctors, provide specialist services including family medicine and PHC, basic surgery, obstetrics and gynaecology, psychiatry, optometry, rehabilitation, paediatrics and geriatrics, medical inpatient and outpatient care, blood supply and laboratory (Van Rensburg et al., 2012; Van Rensburg et al., 2004). Though the district hospital is part of the PHC package in a DHS the function of the district hospital is not explained as thoroughly such as that of the PHC clinic (Van Rensburg et al., 2004), but there is a DHS package (2002-2004) that guides the delivery of the DHS (Van Rensburg et al., 2004).

The DHS package gives guidelines and standards for nine programmes including maternal care and childhood diseases, trauma, surgical services, mental health, oral health, rehabilitation, emergency and pharmaceutical services (Van Rensburg et al., 2012). The DHS is also faced with problems such as a lack of sufficient finance, capital and human resources, constant inequalities in conditions of services and salaries of HCWs working at

different sectors, as well as the absence of required rules and guidelines (De Haan et al., 2005).

Other challenges include the human resource crisis, differences in district competence, and a lack of attractive opportunities for staff (Oboirien et al., 2015). Moving forward, the process of reforming SA's health system by strengthening PHC implementation promotes the notion of the "re-engineering" of PHC. The community-based PHC is divided into district health specialists, school-based PHC, ward-based PHC outreach teams, mainly comprised of community HCWs and directed by a nurse (Nxumalo et al., 2016).

The model of PHC "re-engineering" shown in Figure 2.8 is predicted to offer integrated health and social care to families, and is aimed at forming the relationship between the government, other services and poor communities (Nxumalo et al., 2016). In view of the fact that the district hospital provides entry into specialist care (Couper et al., 2005); the next section continues the discussion on the secondary level of care.

#### **2.4.2 Secondary and tertiary level of care**

The secondary level of care provides services for patients with clinically more complicated health conditions that cannot be treated at PHC level. Secondary healthcare consists of services that are offered by general specialists at regional hospitals and it operates 24-hour casualty units along with intensive care units (ICU) (Van Rensburg et al., 2012). On the other hand, tertiary level of care receives referrals from regional hospitals and provides multi-disciplinary sub-specialist and super specialist services. Such services are offered at tertiary or academic hospitals (Van Rensburg et al., 2012).

According to Cullinan (2006), there are 63 secondary levels of care facilities in the country and 64 tertiary levels of care facilities. In 2005, there were 388 hospitals in the South African public sector (Cullinan, 2006), and in 2009, the number had already increased to 428 public hospitals, and 3390 facilities of PHC (Van Rensburg et al., 2012). Of the total number of 388 hospitals, 64% were district hospitals, whereas secondary and tertiary hospitals together were about 16%, and provincial and national hospitals made up less than 4% of all public sector hospitals (Cullinan, 2006).

When the first democratically elected South African government inherited the health system in 1994, the many challenges faced by the hospitals included the following (Van Rensburg et al., 2004):

- Chronic supply shortage,
- Poor service delivery,

- No framework in place to manage the interaction of the public and private sector,
- A need for the restructuring of hospital boards,
- No significant or well-functioning hospital information system, and
- A lack of legal and institutional alterations that promote decentralization.

In an effort to provide solutions to those problems, the DoH developed policies and programmes such as the Hospital Revitalization Programme (2000-2001), the Hospital Strategy Project, the Health Sector Strategic Framework (Van Rensburg et al., 2004), Policy on the Management of Public Hospitals (2011) and the Green Paper on National Health Insurance (NHI; 2011) (Van Rensburg et al., 2012). Despite the development of frameworks as early as 2000 and 2001, observations made by Cullinan (2006) in 2005 had shown that even the hospitals that are thought to be managed well are still battling with the HIV/AIDS problem. The crisis of staff shortage and the perpetrator problems to these challenges were bad management; patient negligence; poor healthcare comprised of poor hygiene and poor IC; and no accountability to patients in many hospitals and healthcare institutions.

The NHI has ambitious goals, which include promoting equity and equality between rural/ urban/ public/ private and racial lines, addressing the aforementioned quadruple disease burden, staff shortages, and poor performance of public sector facilities (Jobson, 2015). Nevertheless, the NHI programme has been critiqued as a form of political rhetoric which lacks tacit change mechanisms (Francis et al., 2012).

To avoid challenges associated with hospitals, Van Rensburg et al (2012) argue that it is crucial to have a well operating and balanced PHC system since its functioning is not restricted to first level only. For the system to function properly, all three levels of care should have excellent and well-functioning referral systems, with minimal referral interruption (Van Rensburg et al., 2012).

A further challenge relates to inter-departmental role conflict. Hospital provisioning is a function of the Department of Public Works (DPW) while facility operations are performed by DoH. This often causes challenges in the governance of hospitals, for an example if there is a need for the repair of equipment, the hospital manager cannot communicate directly with the suppliers as the communication should be done through DPW (Dookie & Singh, 2012).

The issue of hospital management decentralization which forms part of the White Paper on Health Services Transformation is still a problem since it remains to be implemented, and this makes the notion of accountability and power-based institutional culture impossible

(Dookie & Singh, 2012). Given the fact that PHC is the most crucial aspect of the health transformation process in SA, the optimally functioning DHS is mandatory for the successful PHC re-engineering, and there is therefore a need for strong leadership (Dookie & Singh, 2012). The next section continues on the role that leadership plays in the public health sector in SA.

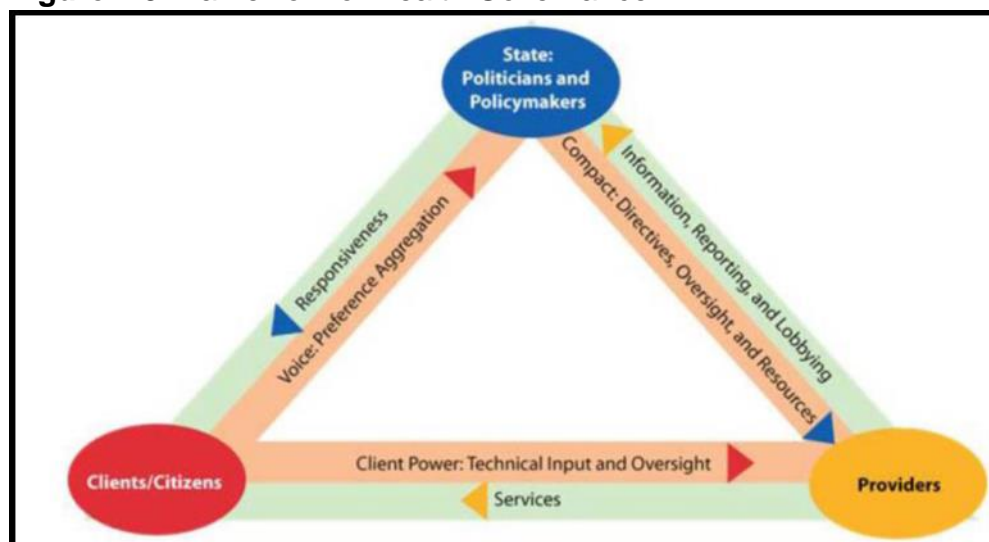
## **2.5 Structures of governance in the South African health system**

Governance is a major growth driver of the economy, social improvement, full development, and the achievement of the MDGs in low- and middle-income countries (Siddiqi et al., 2009). In essence, good governance is important for the development of a country and it is a vehicle for accomplishing the MDGs, whereas poor governance demonstrated by lack of accountability and transparency, corruption and restricted involvement of communities in health, results in failing health systems (Dieleman et al., 2011). Good governance is essential in health systems in that it enhances the attaining of successful health services delivery (Lewis & Pettersson, 2009).

Good stewardship and management are necessary across every level of the health system as they will help in identifying areas that require improving and would contribute to effective performance and health status (Engelbrechti & Crisp, 2010). Both leadership and management are important in the development of the health system, but complicated demands of making a difference require leadership within health systems (Gilson & Dairei, 2011).

Health system governance is described as a function of state that ensures that the strategic plans are available, and are coupled to vital knowledge, partnership building, and the delivery of the correct policies and inducements, system design focus and accountability (Scott et al., 2014). Health governance entails three types of actors and their interactions (Shown in Figure 2.9), first: state actors (such as politicians, policymakers, and other government officials), second: health service providers (a combination of public, private, and voluntary sector providers), and third: the beneficiaries, service users, and the general public (Brinkerhoff & Bossert, 2008). The role of governance here is to provide guidelines that distribute the roles and responsibilities among government, providers and beneficiaries and that outline the relationships among them (Dieleman et al., 2011).

**Figure 2.9** Framework of Health Governance



Brinkerhoff & Bossert (2008)

Healthcare management in SA is structured as follows (Gilson & Dairei, 2011):

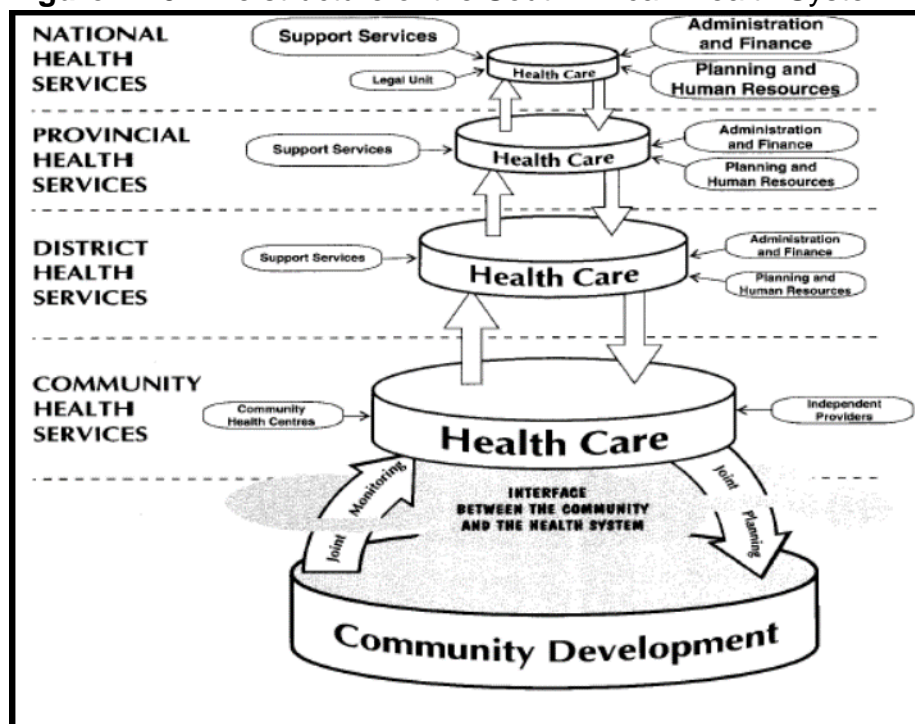
- On facility level: PHC facility managers, hospital CEOs,
- On government level: sub-district, district, provincial and national programme and sector managers.

The NDoH is led by the Director-General for Health and reports to the Minister of Health, and the department has three main levels, namely the delivery of health services, the health programmes plan and finance, and the main functions of the department including those of the hospitals are overseen by the chief directorates and directorates (Van Rensburg et al., 2004).

The NDoH is closely associated with the National Health Management Committee (NHMC), which is formed by the national Director-General of Health and is made up of the Deputy Director-General of Health at national level, the head of South African Military Health Services, and representatives from the health districts. The role of the NHMC is to coordinate health policy implementation, to ascertain the incorporation of the national and provincial health strategies, and to ensure the implementation of the National Health Act. There is also another committee, the National Health Council (NHC), which is made up of the Minister and Deputy Minister of Health, the Health Members of Executive Council (MECs) in each province, one municipal councillor, and a member appointed as stipulated in section 163(a) of the Constitution.



**Figure 2.10:** The structure of the South African Health System



Heywood (2014)

The NHC, as promulgated in the National Health Act (No. 61 of 2003) has to develop policy rules that ascertain sufficient human resource distribution, and the availability of qualified staff at all NHS levels, and this was supposed to make an important contribution to district hospitals, particularly in rural areas since there is a legal stipulation in place to ascertain proper allocation of HCWs and health service providers (Couper et al., 2005). Additionally, there is also the National Consultative Health Forum that oversees communication, relationship, and the distribution of information among the participating stakeholders (Van Rensburg et al., 2012).

SA is challenged by poor governance and corruption at national level, and there is a tendency of public resource misuse, and SA is battling with a way to find solutions to these problems (Madonsela, 2010). As far as the hospitals are concerned, the academic hospitals are under the control of the National Health Authority, and they are the vital part of the national resource necessary for the health referral system, and the provision of research facilities and human resources for training and development (Dennill et al., 1999).

At the provincial level, there is a health governance body called the Provincial Health Council (PHC) that is comprised of the MEC for Health as the chairperson and one councillor from metropolitan or district municipalities, the head of provincial health, and representatives from the local government (Van Rensburg et al., 2012). Section 25 of the National Health Act 2003 stipulates that the duty of the MEC for Health in the province is to guarantee the

implementation of the national health policy, custom and principles in that province, whereas that of the PHC is to advise the MEC on strategies to be used to ensure the national and provincial policies' implementation and health district management (Hall et al., 2005).

Other governance bodies at the provincial level include the Provincial Consultation Bodies on Health, that has the function to encourage and assist in relationship forming, communication and information distribution among the concerned provincial and municipal actors in the province; and the Provincial Health Management Committee, which is a part of the NHS, and is responsible for coordination of planning and health service delivery in the province, as well as advising the PHC, district and metropolitan councils in that province (Van Rensburg et al., 2012).

At the district level, there is a District Health Council (DHC) that has to ensure efficient municipal health service delivery and the District Health forums that are voluntary and established by the DHC to oversee information exchange and communications pertaining to health service delivery in that specific district (Van Rensburg et al., 2012). The Health Act stipulates that the yearly district health strategies must be made under the authority of the district or metropolitan health manager, and the plans include human resources and budget plans (Hall et al., 2005).

At the local community level, there are governance teams including the hospital boards and CHC or clinic committees (Van Rensburg et al., 2012). According to section 42 of the Health Act, the CHC or clinic committees must consist of one local government councillor, one member of the community residing in the area of the health facility, the head of that particular clinic or health centre, and there are also Ward committees formed according to the Municipal Structures Act that are responsible for finding solutions connected to health issues (Hall et al., 2005).

Despite all the recommendations made in the National Health Act 2003 concerning the governance healthcare committees required for the successful delivery of the Health system from national to community level, there are still problems pertaining to leadership. Dookie and Singh (2012) recommend that management skills should be improved and Van Rensburg (2014) focuses on the need of human resource management by stressing that lack of governance and management can cripple the NIH implementation if not addressed. In summary, all the problems faced by the South African public health-care sector are associated with policy implementation, and that is blamed mainly on the lack of good

governance, lack of clear direction, corruption, and lack of accountability (Rispel, 2015; Rispel & Barron, 2010; Cullinan, 2006).

## **2.6 Summary**

The literature review has covered the public health sector, its governance, and the challenges faced by healthcare such as the quadruple disease burden, HAIs, lack of antibiotics, AMR, overcrowding, poor patient treatment by HCWs, and lack of governance. This chapter has also covered the IPC globally, SADAC and in SA, and the policies prior the formulation of NIPCPS (2007) and the NIPCPS itself. The next chapter focuses on the research methodology relating to the study.

## **Chapter 3: Research methodology**

### **3. Introduction**

To achieve the study objectives, a specific research methodology must be followed. The methodology of research channels the tools which a researcher selects. It is an overall approach that a researcher uses in undertaking the research project (Leedy & Ormrod, 2010). This study is aimed at exploring how governance plays a role in the implementation of NIPCPS (2007) in SA's public healthcare sector. To understand this, the research methodology described in this chapter is focused on the qualitative research approach employing an exploratory multiple case study. The data collection and analysis tools used are described here, as well as the research ethics that guided the study.

### **3.1 Research approach and design**

Qualitative research uses characteristics, or qualities that cannot be reduced to numerical data, and is aimed at analyzing the differences and complexities of a certain event or process (Leedy & Ormrod, 2010). It explores the processes that involve human behaviours but are not limited to human beings only, and uses exploratory techniques such as interviews, surveys, case studies, and so on (Salkind, 2009).

This approach was selected for this study because the study sought to describe, interpret, verify, and evaluate (Leedy & Ormrod, 2010) public healthcare, NIPCPS implementation, and the concept of governance. Secondly, there was a need to gain an understanding of the role that governance plays in the implementation of the NIPCPS (2007) by analyzing HCWs' behaviour towards patients with infectious diseases, and the governance in terms of complying with drug availability, space and equipment for patient isolation.

This qualitative approach employed the use of an exploratory multiple-case study design. The multiple-case study is the study of two or more cases that are somehow different to make comparisons, build theory or propose generalization (Leedy & Ormrod, 2010). It was relevant for the study in that the chosen cases could predict similar results (Yin, 2014). Exploratory case studies are used to investigate circumstances that have not been extensively explored or researched before and those for which no theories have been developed or established (Rule & John, 2011). The use of the exploratory case study was relevant for this study as the issue of governance in healthcare, as well as in the implementation of the NIPCPS has not really been explored before, and there are no currently established theories.

### **3.2 Data collection**

The data in qualitative research is often in the form of people's words and actions, and therefore involves the use of methods that enable the researcher to capture language and behaviour (Maykut & Morehouse, 1994). Case study research data can be located in numerous media such as documents, film or photographs, and in artifacts such as clothes or buildings (Rule & John, 2011).

Data for this study was collected from (1) policy documents and, (2) from media reports in newspapers, the Internet, and a range of articles. All these sources of evidence are easily available, stable, and specific as compared to interviews and direct observations, which are time-consuming, and costly (Yin, 2014).

#### **3.2.1 Sampling**

Policy documents that are mentioned in the NIPCPS document as documents that were used in the formulation of the NIPCPS were collected from the Internet. Three or more cases from different newspaper articles on (1) shortage of antimicrobials, (2) shortage of space and equipment and, (3) maltreatment of patients with infectious diseases by HCWs in the public healthcare sector in SA were collected, based on the objectives of the study. This is because case study researchers are advised to use more than one method, and collect data from more than one source for triangulation purposes (Rule & John, 2011).

Prior to the actual analysis, newspaper documents were collected, which included printing, copying, and placing them into the case file by means of a combination of case categories, and this assisted the analysis and made documentation retrieving easy as described by Rule and John (2011).

### **3.3 Data analysis**

Thematic analysis is a basic method for qualitative analysis (Braun & Clarke, 2006). It is a method of extraction of meanings and ideas from data and includes locating, examining and recording of themes (Javadi & Zarea, 2016). The current study employed the thematic approach, drawing from both deductive and inductive coding. Deductive codes were developed based on the Siddiqi et al. (2009) framework and inductive codes were developed after reading three or more newspaper articles. Together, this coding device formed a heuristic device that assisted the researcher in the interpretation of the data. Themes were produced and negotiated between the researcher and the study supervisor, and changed accordingly.

### **3.4 Data quality**

In case study research, quality comprises both the criteria for measuring quality and the tactics for ensuring it (Rule & John, 2011). The quality of the qualitative tradition is measured using trustworthiness, triangulation and crystallization (Rule & John, 2011).

#### **3.4.1 Trustworthiness**

Trustworthiness is a qualitative alternative to reliability and validity. It promotes principles such as openness and ethics for the interest of a qualitative research, thereby gaining trust and loyalty. The trustworthiness of qualitative studies is obtained by looking at the study's transferability, credibility, dependability, and conformability (Rule & John, 2011).

Transferability that requires the study to be able to give similar results when other methods are used (Yin, 2014) was tested by applying inductive and deductive thematic analysis using governance and multi-case analysis. The term dependability is seen as a substitute for reliability, a measure of replicability, where one researcher should be able to use the same method and get the same results as that of a previous researcher (Rule & John, 2011). This was ensured by using more than one case per objective and by documentation of the case studies as described by Yin (2014). Confirmability addresses the impact and confusion that might be caused by a researcher and this was resolved by disclosing the limitations of the study (section 5.7), researcher positionality, ethical requirements in this chapter (sections 3.5) as described by Rule and John (2011).

#### **3.4.2 Triangulation**

Triangulation on the other hand is described as a way to obtaining respectable research of high standard (Rule & John, 2011). It is referred to as an approach of utilizing multiple sources and methods to justify the outcomes generated in a case study (Rule & John, 2011). The types of triangulation include theory, researcher, data and methodological triangulation (Yin, 2014).

Data triangulation supports construct validity of the case in that multiple sources increase the confidence in the case study that the study has reported the event accurately (Yin, 2014). In this study data triangulation was done by collecting data from different newspaper articles and from different internet sources and this led to the same outcomes. Data triangulation was also ensured by the study supervisor who tested the relevance of the data and the connection between various sources of data.

### **3.5 Ethics**

Ethics also called "morality" is described as what we perceive to be right and wrong in terms of the acceptable behaviour (Farrimond, 2012). Ethical relationships and practices are very

important contributors to the quality of research in that they enhance it, and add to its trustworthiness (Rule & John, 2011). Ethical clearance and informed consent were not applicable for the study, and relevant ethical principles such as non-maleficence, beneficence, fidelity, and academic freedom were considered and applied during the course of the study.

Non-maleficence, which stipulates that the researcher must not cause any harm (Rule & John, 2011), was ensured. The researcher considered the possible reputational risk to the HCWs and the public healthcare sector in SA that might be imposed by the findings of the study and decided to focus on public healthcare in general, and not a specific institution.

Beneficence which means that research must benefit the public (Farrimond, 2012; Rule & John, 2011) was applied. The research adds to the successful implementation of the NIPCPS, which will benefit public healthcare in SA and the community. The researcher is currently the employee of the DoH, Universitas academic hospital. The topic has been chosen as it fits into the contemporary health discourse in relation to public service delivery in the country.

Fidelity which requires honesty (Farrimond, 2012) was also taken into consideration. The study problem is the original idea of the researcher, and the cases used to extract the data for findings are included to support the evidence.

### **3.6 Summary**

A qualitative research approach was used to achieve the objectives of this study. The study was explorative, and involved the collection of cases from various sources. The data collected from cases was inductively analyzed, and the governance theory was applied, which led to the findings of the research. Finally, the ethical considerations were discussed

## Chapter 4: Study findings

### 4. Introduction

The findings of the current study are presented according to the themes that emerged during analysis. The themes derived from inductive and deductive approaches are integrated in order to form a coherent narrative. First, the findings from the deductive analysis are presented, according to Siddiqi et al.'s *Framework for assessing governance of the health system in developing countries* (2009). Second, themes that were inductively derived from the raw data that did not necessarily fall into the themes of the governance theoretical framework are presented. This section is supported with direct quotations from the media articles that were read for the study.

### 4.1 Application of the health system framework by Siddiqi et al. (2009) to assess the implementation of the NIPCPS at the public health facilities in SA

Assessment for the application of the governance framework by Siddiqi et al. (2009) is presented in this section. Governance principles that are adopted from the framework and used to assess the implementation of the NIPCPS include strategic vision, participation and consensus orientation, accountability, ethics, effectiveness and efficiency, and Rule of Law.

#### 4.1.1 Strategic vision

*Strategic vision* for health is the broad and long-term plan on health and human development with a sense of strategic direction required by the leaders. It is grounded in the understanding of the historical, cultural and social involvedness in health (Siddiqi et al., 2009).

The NIPCPS has a section on strategic vision, which in relation to the objectives of the study only accommodates antimicrobial drugs, space and equipment. There is no information recorded on strategic vision that is related to the treatment of patients by HCWs. The policy question on strategic vision is: "Are the implementation mechanisms in line with the stated objective of health policy?" The NIPCPS answers with the following: "A robust national strategic plan addressing the prevention and control of HAIs at national, provincial, district and facility level ensuring rational use of antimicrobials is essential". This statement indicates that there will be a follow-up at all the mentioned health levels to ensure the rational use of antimicrobial drugs. The NIPCPS is a policy that is made to ensure the prevention and control of infections, and part of the measures prescribed include the use of antimicrobial drugs.



Yes, the implementation mechanisms are in line with the objectives of the policy. In terms of the space and equipment, the policy states “Healthcare facilities to adhere to standards for the prevention and control of infection standards including protective clothing, disinfectants, and other barrier techniques are available and are used correctly when required” and “Adequate structural capacity for airborne isolation is created”. The availability of personal equipment and enough space to enable patient isolation are the mechanisms relevant to ensure prevention and control of infections. To understand the implementation of the strategic vision of the NIPCPS, a question from the framework was asked: “What is the extent of the implementation?” The study is only limited to looking at the media cases, which are described in sections 4.1 and 4.2, and these selected cases do not directly talk about the implementation of strategic vision. However, the report on the lack of antimicrobial drugs, space, and equipment in numerous public health facilities in SA that is important for IPC might suggest that the strategic vision has not been fully implemented in public healthcare in SA.

#### **4.1.2 Participation and consensus orientation**

*Participation in health* involves people having a voice in a decision-making process for health, either directly or through legal intermediate institutions that represent their interests. It is built into the ability to associate and to have freedom of speech, and to be able to reach broad consensus that accommodates the best interest of a group on health policies and procedures, demonstrating good governance of the health system (Siddiqi et al., 2009).

The framework uses the following questions in assessing the application of participation and consensus orientation in the implementation of NIPCPS: “What is the level of decentralization in decision-making?” and “What is the extent of community participation in health service provision?” The NIPCPS does not directly address the issue of decentralization but answers: “The national, provincial, and local tiers of government and civil society at large have very specific roles to take on when preventing and managing infections”. The statement indicates that the local government and civil society have certain roles in IPC but these roles are not clearly outlined in the policy. However, the statement could suggest the involvement of community participation because civil society can represent the voice of the community.

With regard to the level of decentralization in relation to antimicrobial drugs, space, equipment, and the treatment of patients by HCWs: the only roles mentioned in terms of the decision for the availability and rational use of antimicrobial drugs are those of the hospital pharmacist and physician, indicating decentralization at the institutional level. The NIPCPS

states, “The role/ responsibility of the hospital pharmacist is to dispense antimicrobial drugs” and “Physicians’ role is to institute appropriate treatment for any infections”. On the issue of space, the policy states, “The role/ responsibility of the healthcare facility IPC Committee is to identify structural needs”. This suggests that the decision-making roles about the space requirements are institutional. The NIPCPS mentions that “Implementation of patient care practices for IPC is the responsibility of all nursing staff”. This statement suggests that the decision-making concerning patients’ treatment in healthcare is institutional. However, the selected newspaper articles for the study mentioned in sections 4.1 to 4.3 do not directly indicate the level of decentralization. Although the shortages of antimicrobial drugs, space and equipment and alleged patient mistreatment by HCWs are reported at hospitals and clinics in SA, the captured media reactions to the responses of the DoH have been at the provincial and institutional levels. Civil society organizations’ (CSOs) involvement was also reported. However, the participation of CSOs cannot be strongly supported by the NIPCPS because their roles remain unclear in the NIPCPS and the involvement of the mentioned HCWs, such as pharmacists, physicians, nurses and so forth, might not be enough to truly indicate their roles in policy-making and implementation strategy formulation, which is not clear.

#### **4.1.3 Accountability**

All stakeholders responsible for decision-making in health, such as government officials, the private sector and CSOs are accountable to the public (Siddiqi et al., 2009). To evaluate the role of governance in the implementation of NIPCPS through looking at accountability the framework prescribes the question: “What evidence is present about the effective enforcement of the accountability process?” As answer to the question, the only statement made by the NIPCPS about accountability is:

“In the interest of accountability, there is need to improve practices to ensure that healthcare costs are not duly inflated by preventable HAIs and their resultant complications. The need to develop well-functioning IPC programmes at national, provincial, district, and facility level, for effective prevention and control of known, and other diseases that may arise, for which medication may not be readily available, have become an imperative. These programmes must address all the essential areas of IPC such as sanitation, HCW protection, and isolation protocols for specific infectious diseases, IC protocols for high-risk settings, rational use of antimicrobials...”

Although the statement does not provide anything on the evidence of accountability but indicates that programmes will be designed to cover the rational use of antibiotics and isolation protocols to ensure IPC. The NIPCPS does not cover anything on accountability related to patients' maltreatment by HCWs.

The media cases reported in sections 4.1 to 4.3 do not directly cover the issue of accountability by the stakeholders in health but the response of various stakeholders such as civil society and the DoH could be indicative of whether or not they are accountable to the public. Even though the NIPCPS indicates programme design, it is not clear whether there is evidence of their implementation since the media newspaper articles still report the shortage of antimicrobial drugs and space to enable isolation at the public healthcare sector in SA. This could be an indication that accountability in the actual implementation of the policy objectives might still be lacking.

#### **4.1.4 Ethics**

*Healthcare ethics* include respect for autonomy, non-maleficence, beneficence and justice and are important in protecting the interest and the rights of the patient (Siddiqi et al., 2009). In assessing the application of ethics in policy implementation the framework makes use of the question: "What are the institutional mechanisms to promote and enforce high ethical standards in health research and healthcare?" The NIPCPS does not directly answer the question on ethics but prescribes the following: "Monitoring and evaluation, which includes surveillance, data management and analysis, reporting, risk assessment, conducting research, measuring compliance and accreditation". Although this statement is not about ethics, the mentioned measures could ensure the best healthcare services for patients in terms of the IPC.

The above NIPCPS statement also does not give any indication of what ethics are relevant to issues such as antimicrobial drugs, healthcare space and equipment, and patients' treatment by HCWs. However, the policy further lays down prescriptions on non-compliance, which could be helpful in enforcing the application of ethical principles in healthcare settings. "Failure to comply with the IPC policies and guidelines may result in the following:

- Successful litigation against the state for damages suffered by patients or their families as a result of illness or death arising from inadequate IPC procedures; and

- Disciplinary action by professional health councils or criminal and/ or civil prosecution of individual employee whose negligent actions caused the infections and subsequent death of a patient”.

This statement indicates that both the state and HCWs could face the law should they be found guilty of exposing patients to infections and death. Although the NIPCPS does not directly use the term ethics, these points can be used as relevant standards to enforce ethics in health institutions as a deterrent to the mentioned consequences. However, the evidence of implementation of these standards is not clear since the reports by the media as mentioned in sections 4.1 to 4.3 describe the shortage of antimicrobial drugs, space and equipment that might expose patients to infections as well as the harm or deaths that might be caused by HCWs in the public healthcare sector. Nowhere in the cases presented is there any mention of disciplinary action, civil or criminal prosecution taken against the healthcare sector or HCWs.

#### **4.1.5 Effectiveness and efficiency**

*Effectiveness and efficiency* is the ability of processes and instructions to produce results that meet the needs of the population, influencing health outcomes, while making the maximum use of allocated resources (Siddiqi et al., 2009). To evaluate the role of governance in the implementation of NIPCPS using effectiveness and efficiency, the framework asks the questions: “Is there an in-service training programme for staff” and “Are job descriptions available and followed by staff?” The NIPCPS answers by providing the following statement: “Annual in-service IPC training programmes for the relevant categories of HCWs and disciplines are developed and executed”. This statement indicates that there is relevant training for the staff involved in IPC. The NIPCPS also provides the roles or responsibilities of all staff involved in the IPC from the directorate to the cleaner. These responsibilities are an indication of the job description which provides the answer to the second question. Although job descriptions are available for all staff, the staff do not seem to follow them.

#### **4.1.6 Rule of Law**

*The Rule of Law for health* is about the legal frameworks associated with health that promotes human rights related to health (Siddiqi et al., 2009). The framework assessing the role of governance in the implementation of the NIPCPS using the Rule of Law asks the following questions: “Are laws/regulations related to health service, infrastructure and pharmaceuticals in place?” and “What procedures are in place for redressing grievances of consumers?” The NIPCPS provides the following legal framework: “The South African

Constitution, Act 108 of 1996 [sections 2, 24, 27, 36 and 39]; The National Health Act of 2003, Act No 61 of 2003; The Environmental Conservation Act of 1989, Act No 73 of 1989, and The Foodstuffs, Cosmetics, and Disinfectants Act of 1972, Act No 54 of 1972. These acts are relevant to the health rights of the patients, providing them with access to health services and treatment, as well as to the environment free from infectious hazards. The NIPCPS further states, “The rights of patients and HCWs to privacy and confidentiality will be upheld within the constraints of safe practice”. This suggests that the laws related to health service provision are in place and accommodate patients’ rights. The policy does not provide the procedures to address grievances with the consumers of the Health Department, or the patients, only the consequences of non-compliance are mentioned as discussed in section 4.5.5. Further, it is not mentioned in the policy how non-compliances are investigated or verified.

#### **4.2 Summary**

The assessment of the role of governance in the implementation of NIPCPS using governance principles such as strategic vision, participation and consensus orientation, accountability, ethics, effectiveness and efficiency, and Rule of Law has revealed the following:

- The NIPCPS describes the strategic vision that accommodates the drafting of programmes that will ensure the rational use of antibiotics and the isolation protocols, but the extent to which mentioned efforts are implemented is unclear.
- In terms of participation and consensus orientation, the policy indicates the level of decision-making to be at the institutional level, especially when focusing on antimicrobial drugs and space at the healthcare facility. The policy mentions the involvement of CSOs in IPC but their roles are not mentioned.
- The policy covers the issue of accountability on antimicrobial drugs and space but does not include anything on the treatment of patients by HCWs. Further, the policy does not provide the existing evidence on the enforcement of accountability.
- The issue of ethics is not clear in the policy, however, there are non-compliance consequences for failing to adhere to IPC that bear serious implications that HCWs and the health facility can face.
- On effectiveness and efficiency, there are training processes for staff and job descriptions but it is not clear whether the staff follow them.

- Assessing the Rule of Law indicates that there are legal frameworks that protect patients but it is not mentioned in the policy how the grievances between the HCWs and patients are addressed.

The selected cases do not directly mention the governance principles used to assess the role of governance of the NIPCPS. However, they can be used to determine whether or not the governance principles are implemented to some extent.

#### 4.3 Multiple-case analysis

All the data sets for inductive analysis were derived based on three study objectives, namely (1) To conduct a multiple-case analysis of the shortage of antimicrobial drugs, (2) the shortage of space and equipment, and (3) the maltreatment of patients with infectious diseases by HCWs.

#### CASE STUDY A (OBJECTIVE 1: MULTIPLE-CASE ANALYSIS ON THE SHORTAGE OF ANTIMICROBIAL DRUGS IN THE PUBLIC HEALTHCARE IN SA)-See Appendix A

##### **Case A1: Alarm raised about lack of AIDS drugs (*Business Day* 19 June 2013)**

This newspaper article reports the shortage of HIV/AIDS drugs affecting hospitals in the Eastern Cape, Gauteng, Limpopo and hospitals across the country. Treatment Action Campaign (TAC), Southern Africa Clinicians and The Rural Health Advocacy Project director commented on how this shortage affects the patients. The Department of Health described the cause of shortage as largely due to depot management

##### **Case A2: Survey suggests dire shortage of drugs in SA (*Business Day* 29 November 2013)**

This newspaper article reports on the survey released by Stop Stock Out Project (SSP) (A coalition of Health and Civil Society Organizations, and counts Medicins Sans Frontiers (MSF), TAC, and the Southern Africa HIV Clinicians), which indicates shortage of antimicrobial drugs including anti-retroviral and anti-tuberculosis (TB) drugs. However, the Department of Health rejects survey reports.

##### **Case A3: Patients protest poor service at Daveyton clinic after man dies in queue (*The South African Health News* 25 July 2014)**

This newspaper article reports on a march held by about 100 protestors to Gauteng Department of Health following the death of the patient who died while queueing at one of the clinics in Gauteng. The protestors were complaining about the shortage of anti-retrovirals, the poor attitudes of HCWs and the shortage of space. The TAC raised their concern on how these issues affect patients. The Heath District representative received the memorandum and the Gauteng Department of Health did not respond to the reported issues until the article was printed.

##### **Case A4: SA's drug supply shortage dire (*Medical Brief* 19 May 2015)**

This newspaper article reports the shortage of medicines in South Africa's public hospitals and clinics. Drugs which are in short supply include antibiotics, TB medicines, anti-fungal drugs and many more. The SSP raised their concern on this issue. The HCW explained how the issue complicates their jobs as medical practitioners and the Department of Health spokesman could not provide any reason for drug shortages.

#### **4.3.1 Multiple-case analysis of the shortage of antimicrobial drugs at public healthcare facilities in SA**

The data extracts were selected from four different cases (summarized above) in which shortages of antimicrobial drugs were reported. The following patterns or themes that were repeated across the cases were selected and used for analysis:

##### *4.3.1.1 Shortage of antimicrobial drugs at public healthcare facilities in SA*

The media cases have revealed the shortages of among other drugs, antimicrobials at the various public healthcare facilities in SA.

*“Eight times out of 10, patients are simply told to come back later, with no guarantee the drugs will be available” (Case A1).*

*“One in five public healthcare facilities has experienced shortages of HIV/AIDS or tuberculosis (TB) medication in the past three months” (Case A2).*

*“The clinic also experiences shortages of treatment, especially anti-retrovirals (ARV)” (Case A3)*

*“The current list of medicines that are out of stock or in short supply around the country runs to six pages. It includes antibiotics, TB medicine...” (Case A4).*

According to media reports, there has been a shortage of anti-retroviral, anti-TB and antibiotics in various public healthcare facilities across the country. The patients are reported to have been sent home without medications.

##### *4.3.1.2 Civil society’s response to reported shortages of drugs*

CSOs are non-governmental organizations that represent the interest and desires of citizens. The media have reported on how the shortages of antimicrobial drugs in the public healthcare facilities in SA have attracted the attention of South African civil society.

*“Activists at the sixth SA AIDS Conference in Durban yesterday sounded the alarm over extensive drug shortages at clinics and hospitals supplied by the Eastern Cape's Mthatha depot, saying that the stockouts were putting patients' lives at risk” (Case A1).*

*“We were surprised by the extent of the stock-outs and didn’t expect it to be so bad. Tens of thousands of patients are affected; said the MSF coordinator of SA and Lesotho” (Case A2).*

*“It’s a silent, yet chronic crisis, with more and more concrete evidence emerging of how big the problem of stock-outs and medicine availability is; says spokesperson Bella Huang” (Case A4).*

*“Eastern Cape doctor, who represents rural doctors at SSP, said shortages were demotivating for doctors and nurses, if you take away one of their biggest tools, medicines, they leave rural hospitals and then patients suffer more” (Case A4).*

According to CSOs, the drug shortages in SA are a continuing challenge, and endanger the lives of the patients. It does not only affect patients but also the doctors who have to provide treatment without essential or first line medicines. The reports indicate that the alleged shortages of antimicrobials have shocked the CSOs and encouraged them to represent both patients and HCWs, thereby putting the DoH under pressure.

#### *4.3.1.3 HCW’s response to reported shortages of drugs*

The cases revealed that some HCWs have also confirmed the shortages of antimicrobial drugs in their public health facilities and have explained how the issue affects them.

*“There is not a month that goes by without a critical item out of stock, you don’t have to be a qualified pharmacist to work here, you have to be a procurement specialist, because you spend most of your time trying to find stock; said an Eastern Cape pharmacist working in the state sector” (Case A1).*

*“Staff said they were forced to send patients home without drugs or ration short supplies among them. Patients were frequently referred to other facilities with no guarantee that they had stock available” (Case A2).*

*“Doctor-who asked not to be named due to explicit warnings against speaking to the media that the Department of Health had given to all doctors- said because of the severe shortages of first line antibiotics, they had to use much more potent and expensive ones to treat simple infections. This is bad practice and can lead to antibiotic resistance. But clinicians have no choice. It’s terribly frustrating” (Case A4).*

Statements made by HCWs to the media indicate high levels of frustration in working in public healthcare facilities without the availability of the correct antimicrobial drugs. They indicate that they have to compromise their integrity and succumb to bad practices, which they know may put patients’ lives at risk. The reports by HCWs also indicate that they are forced to operate outside their scope of practice, namely looking for medications, which is not in their job description, because it is not the responsibility of the pharmacists, nurses



and doctors to ensure that drugs are available at the hospitals' pharmacies. The reports also reveal that HCWs are forced to refer patients to other healthcare facilities without any proof that they will receive medications at the referred institutions.

#### *4.3.1.4 DoH's response to reported shortages of drugs*

The media have reported the DoH's response to the shortages of antimicrobial drugs in the public healthcare facilities in SA.

*"The Department of Health's head of procurement said that the shortages facing hospitals and clinics were largely due to depot management issues, and there was no evidence that pharmaceutical manufacturers could not meet demand" (Case A1).*

*"The Health Minister has acknowledged issues with the provincial medicine depots" (Case A1).*

*"However, the spokesman for the Health Minister rejected the survey's findings, saying they were exaggerated. We are not saying there are not challenges, but there is no crisis. We are doing everything we can to ensure patients have the medicines they need; he said by phone" (Case A2).*

*"Ekurhuleni Health District representative arrived four hours after the start of the protest to receive a memorandum from the AIDS lobby group. The Gauteng Department of Health had not returned requests for comment at the time of going to print" (Case A3).*

*"The Department of Health says it is negotiating with drug suppliers to address the shortages" (Case A4).*

*"The Health Department spokesperson said no suppliers had indicated nonpayment was the reason for supply challenges" (Case A4).*

According to media reports, there have been varying responses from the DoH on the issue of drug shortages, and in some cases, there were no responses at all. The reports revealed that the DoH rejected the survey results showing the crisis of drug shortages, indicating that the situation was under control. In other instances, the reports show the DoH indicating that drug shortages were due to depot management problems, and other reports indicated that the DoH was having problems with drug suppliers.

## **CASE STUDY B (OBJECTIVE 2: MULTIPLE-CASE ANALYSIS OF THE SHORTAGE OF SPACE AND EQUIPMENT IN PUBLIC HEALTHCARE IN SA) - See Appendix B**

### **Case B1: No beds, so patients are dying (*The New Age* 19 March 2013)**

This newspaper article reports a shortage of beds in the public healthcare facility. Two Eastern Cape families are reported to have lost their loved ones because they were turned away from the Butterworth hospital due to a shortage of beds. The Provincial Department of Health spokesperson described the increasing number of sick people as the main reason for a lack of beds in some hospitals.

### **Case B2: Poor conditions violate patients' human rights (*The South African Health News Service* 21 February 2013)**

This newspaper article reports poor conditions of one of the public healthcare facilities in Lusikisiki, a village in the Eastern Cape. Community members, HCWs, and activists were all displeased with the conditions of the clinic. The patients are said to have been queueing outside the tents while waiting for consultations, with no privacy, no toilets and no water. The HCWs also reported the shortage of storage for medications and lack of refrigerators. The TB Care Association spokesperson described the conditions as a violation of human rights. However, the response from the Department of Health's senior management is not recorded in this article.

### **Case B3: Healthcare in paralysis (*Sowetan* 26 June 2014)**

This newspaper article reports a lack of life-saving equipment, proper theatre operating tables, enough space to accommodate patients, leaking roofs, dysfunctional boilers and ageing infrastructure in public healthcare facilities in Mpumalanga. A probe by the SA Human Rights Commission revealed that the Department of Health violated patients' rights to health access and right to dignity. The Premier has admitted that the situation at 33 hospitals in the province was extremely bad.

### **Case B4: Patients protest poor service at Daveyton clinic after man dies in queue (*The South African Health News Service* 25 July 2014)**

This newspaper article reports a protest of about 100 people who demanded the expansion of the Daveyton main clinic. The patients were complaining about the shortage of space and the need for queueing outside. The TAC Gauteng chairperson explained that patients stand in long queues outside the clinic regardless of weather conditions. The Ekurhuleni Health District representative is reported to have arrived four hours after the start of the protest to receive the memo from the AIDS lobby group and the Gauteng Department of Health had not returned a request for comment at the time of the article going to print.

### **Case B5: Hospital strike spreads in Free State (*The South African Health News Service* 19 September 2016)**

This newspaper article reports hospitals being shut down, patients being turned away from full and overcrowded facilities, where maternity wards were said to be filled with women on floors, shutdown in overfull casualty and trauma units because of the strike in Free State hospitals. The TAC explained the situation as untenable and the need to address it as an emergency. The strike was explained to be due to unpaid overtime, shortage of staff, questionable hiring of security and kitchen staff, and unfair outsourcing of ambulances. The unions encouraged the strike and the CEO of Manapo hospital described the unpleasant state of the hospital.

## **4.3.2 Multiple-case analysis of the shortage of space and equipment in public healthcare in SA**

The data extracts were selected from five different cases (summarized above) in

which shortages of medical equipment and space in the public health sector were reported. The following patterns or themes that were repeated across the cases were selected and used for analysis:

#### *4.3.2.1 Shortage of medical equipment at public healthcare facilities in SA*

The media have reported shortages of essential medical equipment including beds, refrigerators, life-saving equipment, and operating tables at the public healthcare facilities in SA. This was indicated as follows:

*“Two Eastern Cape families lost their loved ones who were turned away from Butterworth hospital due to a shortage of beds” (Case B1).*

*“I can only vaccinate 10 children a day because we do not have a refrigerator (vaccinations need to be stored below a certain temperature)” (Case B2).*

*“Lack of life-saving equipment, proper operating tables....this is the sorry state of hospitals in Mpumalanga” (Case B3).*

#### *4.3.2.2 Shortage of space (overcrowding) at public healthcare facilities in SA*

Cases revealed the shortage of space at public healthcare facilities in SA, where patients had to be subjected to queueing outside, irrespective of weather conditions, in other instances patients had to be crowded in a full ward. Patients also had to consult without privacy, access to toilets and water. In other hospitals, the infrastructure was also terrible, accommodating patients in hospitals with leaking roofs. The reports have also revealed that because of the limited storage space, the HCWs were forced to give patients many medications in order to take them out of cupboards to generate space for the new medicine supplies.

*“The clinic is in shambles and people have to stand in queues outside these tents waiting for consultations- there is no privacy, no toilets, and no water” (Case B2).*

*“Storage of medication is also a problem at the facilities and healthcare staff were dispensing more than a month’s supply of anti-retroviral medication to make space in their cupboards for the arrival of a new shipment of medication” (Case B2).*

*“Lack of enough space to accommodate patients, leaking roofs...and ageing infrastructure...this is the sorry state of hospitals in Mpumalanga”. (Case B3).*

*“Patients complain that a shortage of space means they are often left queueing outside” (Case B4).*

*“We are receiving reports of entire hospitals being shut down, patients turned away from full and overcrowded facilities, maternity wards filled with women on floors, shut down in overfull casualty and trauma units” (Case B5).*

#### *4.3.2.3 Civil society’s response to reported shortages of medical equipment and space*

Media reports have revealed how the shortage of space and medical equipment at the public healthcare facilities in SA has attracted the attention of civil societies. Civil societies have called the shortage conditions a crisis and emergency, which not only require immediate attention but also constitute a serious violation of human rights, and a violation of the right to healthcare access and the right to dignity. Civil societies were reported to have also lost hope in the DoH in some provinces due to a lack of intervention by the department.

*“The TB Care Association representative said: this is a violation of human rights and people are not supposed to be consulted under these bad conditions” (Case B2).*

*“A probe by the SA Human Rights Commission revealed that the Department violated patients’ rights to health access and their right to dignity” (Case B3).*

*“It is sad that patients stand in long queues outside the clinic when they come to collect their medication; TAC Gauteng Chairperson told OurHealth. Regardless of weather conditions, they have to stand outside for long hours...” (Case B4).*

*“The situation is untenable and must be addressed as an emergency, the TAC and SECTION27 stated, after first hearing of the growing crisis” (Case B5).*

*“We have no faith in the provincial department to address this emergency adequately or rapidly. We demand urgent intervention by the President and the Premier to fix the Free State Health system, said the TAC” (Case B5).*

#### *4.3.2.4 HCW’s response to reported shortages of medical equipment and space*

Reports by the media have revealed that an HCW has responded on the issue of shortages of space at public healthcare facilities, indicating how stressful it is to work with patients under such conditions. The shortages affect both the patients and HCWs.

*“Said a professional nurse at the Village Clinic who prefers to remain anonymous, ‘Consulting patients in these tents is stressful. It seems the Department of Health does not care about people’s wellbeing’” (Case B2).*

#### *4.3.2.5 DoH's response to reported shortages of medical equipment and space*

Media cases have reported the response of the DoH to alleged shortages of medical equipment and space in the public healthcare facilities in SA. In some Provinces, the DoH's management has acknowledged the bad conditions of hospitals; and in other areas there was no response, whereas in other areas the reasons given by the DoH for shortages were not convincing. Other provincial departments were stating a growing number of patients as the reason for the lack of space while others admitted that the infrastructure needs attention and their Health departments were behaving poorly, others blamed their poor conditions on staff members.

*"The Provincial Health Spokesperson told The New Age yesterday that all hospitals across the province were overwhelmed with increasing numbers of sick people. He said this was the main reason for a lack of beds in some hospitals. (Case B1).*

*"Even the Premier admitted after a meeting with chief executives from the provinces 33 hospitals that the situation was extremely bad. The chief executives said all the hospitals had infrastructure problems. Indeed, it is bad. We cannot always be regarded as a bad province when it comes to health matters" (Case B3).*

*"The CEO of Manapo Hospital said there were currently no nurses, no cleaners and no porters available to transport patients. No emergencies could be handled, the hospital was dirty and about 70% staff had failed to report for duty. This was despite a request by health officials for staff to report at work" (Case B5).*

**CASE STUDY C (OBJECTIVE 3 :MULTIPLE-CASE ANALYSIS OF MALTREATMENT OF PATIENTS WITH INFECTIOUS DISEASES BY HCWs IN THE PUBLIC HEALTHCARE SECTOR IN SA) – See Appendix C**

**Case C1: Teen hangs herself ‘after row at TB clinic’ (*Cape Argus* 19 March 2010)**

This newspaper article reports the death of a teen who committed suicide following a confrontation with a Polar Park Clinic nurse. Mbekweni Police Spokesman said police were investigating a case of suicide. Provincial Health Authorities said they were investigating allegations that a nursing sister in Mbekweni Park refused treatment to a teenager with multidrug-resistant tuberculosis (MDR-TB). The spokesperson for the Department of Health in the Winelands region denied that the patient was refused treatment. The TAC Western Cape coordinator described the incident as unfortunate.

**Case C2: “They let my son die” (*Diamond Fields Advertiser* 30 December 2010)**

This newspaper article reports the death of a 43-year-old man who died of an AIDS-related illness in the Kimberley Hospital’s M2. The man was reported to have undergone three rounds of therapy before he was considered eligible for the anti-retroviral treatment. Nurses were reported to have laughed at the patient while he was begging for the treatment and refused to bring him a bedpan when he needed to relieve himself. The patient’s father also reported shortages of staff in this particular hospital. A spokesperson for the Northern Cape Department of Health said the institution was experiencing staff shortages but that the staff did all they could to care for the patients. The Northern Cape Town Department of Health issued a detailed response to the patient’s story.

**Case C3: Patients protest poor service at the Daveyton Clinic after man dies in queue (*The South African Health News Service* 25 July 2014)**

This newspaper article reports the protest of about 100 people following the death of a patient who died while waiting in line at the Daveyton clinic. Patients were complaining about poor attitudes of HCWs. The TAC told OurHealth that patients had to stand outside for long hours only to be served with bad attitudes. The Ekurhuleni Health District representative is reported to have arrived four hours after the start of the protest to receive the memo from the AIDS lobby group and the Gauteng Department of Health had not returned the request for comment at the time of the article going to press.

**Case C4: An agonizing choice: go deaf or die! (*The South African Health News Service* 16 September 2016)**

This newspaper article reports about a 23-year-old MDRTB patient who lost her hearing following treatment with kanamycin at the Carletonville Hospital. The patient has reported that HCWs did not care and continued injecting her every day with the drug despite the fact that she told them that she was starting to lose her hearing. The patient also reported that the HCWs called her a burden and her mom used to come to the hospital to change and bath her. The Clinical Research Advisor at the Department of Medicine at University of the Witwatersrand explained that they measure hearing loss every two to four weeks to determine the signs of hearing loss in patients using kanamycin and that the drug is changed immediately when hearing loss is determined. The Department of Health denied allegations made by the patient and her mother. The Department’s spokesperson said the patient responded well to treatment and signed the refusal hospital treatment form prior to the hospital being given the opportunity to address her hearing loss complication.

#### **4.3.3 Multiple-case analysis of maltreatment of patients who have infectious diseases by HCWs at public healthcare facilities in SA**

The data extracts were selected from four different cases (summarized above) in which the maltreatment of patients with infectious diseases by HCWs in the public healthcare facilities

in SA was reported. The following patterns or themes that were repeated across the cases were selected and used for analysis:

#### *4.3.3.1 Maltreatment of patients by HCWs at public healthcare facilities in SA*

Reports by the media have revealed the poor treatment of patients with infectious diseases by HCWs. According to the alleged reports the HCWs in different public healthcare facilities had bad attitudes towards patients and did not take a good care of them.

*“Joy’s mother said her daughter was so upset with the treatment she received from the nurse that she returned home in tears, and vowed never to return to the clinic” (Case C1).*

*“He asked the nurses, must I die before you give me ARVs?, Isaac said. The nurses apparently laughed at Eric” (Case C2).*

*“Isaac told a nurse about the sores. She allegedly responded and said: How must I know what’s wrong with him if he doesn’t tell me?” Eric then said he needed to relieve himself and Isaac asked a nurse to bring a bedpan. The nurse apparently said that she didn’t know where to find one” (Case C2).*

*“Linah told Health-e-News that while she was at the Carletonville Hospital the staff appeared not to care about her condition and continued injecting her every day” (Case C4).*

*“My mother used to come to the hospital to change and bath me, then give me food, Linah said, explaining that staff would tell her she was a burden” (Case C4).*

The cases revealed that the patient infected by MDRTB had promised to never return to the healthcare facility because of the bad treatment she had received from the HCW. A patient who had a co-infection of TB and HIV was reported to have begged for antiretroviral treatment but was only mocked by the HCWs in the public healthcare facility he was admitted to.. Another MDR-TB patient was reported to have been called a burden by the HCWs who were reported to also never changed and bathed her.

#### *4.3.3.2 Death and injury of patients at the public healthcare facility in SA as a result of reported maltreatment*

The media have reported cases in which patients had died or become injured or disabled as a result of bad treatment by HCWs at public healthcare facilities. The reports suggest ignorance of the physical and emotional state of the patients by the HCWs.

*“The teenager committed suicide following a confrontation with the Polar Park Clinic nurse” (Case C1).*

*“Eric died of an Aids-related illness in the Kimberley Hospital M2 Ward less than an*

*hour after he was given the go-ahead to start ARV treatment. He waited seven months for this news, but by then it was too late” (Case C2).*

*“I couldn’t believe my eyes when it happened, he said, I still think that man could have been saved if the staff was more attentive and there were more nurses on duty” (Case C3).*

*“Linah has lost her hearing because of the MDR-TB treatment. She has lost her education, her ability to communicate, her friends, radio, and TV in fact, her life as she knew it” (Case C4).*

Media reports revealed that one of the patients was forced to commit suicide by the horrible treatment she had received from the HCW in the public healthcare facility. Another patient was reported to have had the antiretroviral treatment delayed and lost his life in the process. Reports also revealed the death of the patient who lost his life while waiting in a queue for consultation while the HCWs did not attend him. A patient who was receiving an MDR-TB treatment was reported to have been injured by the treatment and permanently lost the hearing ability.

#### *4.3.3.3 Civil society’s response to reported maltreatment of patients at public healthcare facilities in SA*

Media reports have revealed that the maltreatment of patients by HCWs at public healthcare facilities in SA has attracted the attention of civil society.

*“TAC Western Cape coordinator said health workers are supposed to work together with TB patients and be there for them. Yet you’ve got health workers who have such a bad attitude that they drive patients into situations where they end up killing themselves” (Case C1).*

*“TAC Gauteng Chairperson told OurHealth that patients wait outside for long hours only to be served by staff with bad attitudes” (Case C3).*

Reports have shown that CSOs revealed that the role of the HCWs is to motivate patients and not to encourage them to commit suicide, and that the patients who endure long waiting in queues for consultations must be assisted by HCWs and not treated badly.

#### *4.3.3.4 The DoH’s response to reported maltreatment of patients at public healthcare facilities in SA*

The media have reported the responses of the DoH to allegations of maltreatment of patients at public healthcare facilities. The DoH has in most cases denied allegations made by the patients, whereas in one instance the department promised to investigate the issue which another colleague in the same department had denied.



*“Provincial Health authorities say they are investigating allegations that a nursing sister refused treatment to a teenager with MDR-TB” (Case C1).*

*“Spokeswoman for the Department of Health denied that Skrish was refused treatment” (Case C1).*

*“The Northern Cape Department of Health issued a detailed response to Eric’s story yesterday, citing why he was not given ARV treatment: The department sympathizes with the family on the loss of their son due to AIDS. It is clear that the family is grappling with their loss, and is seeking to blame people and circumstances for Eric’s death that has no scientific basis” (Case C2).*

*“The Department of Health has meanwhile denied the allegations made by Linah and her mother” (Case C4).*

The media reports revealed that while the Provincial Health authorities were said to have been investigating the allegations that the MDR-TB patient was refused treatment, the DoH spokesperson denied the allegations. The reports also indicated that the DoH reported the family of the patient, who had lost his life, as battling to accept their loss and was blaming the department for the patient’s death based on a non-scientific basis.

#### **4.4 Summary**

The governance principles described in the health system framework by Siddiqi et al. (2009) are not fully described in the NIPCPS and their implementation in the public health-care sector in SA is therefore not clear. Selected cases for the study have reported shortages of antimicrobial drugs, equipment and space as well as the maltreatment of patients by HCWs in the public health-care sector in SA. They further indicated the participation by CSOs, DoH and the HCWs.

*The next section provides the discussion of the findings from the cases and the framework application, providing the link between the results of two assessments and their meanings (implications?). It further provides the conclusion and prescribes the necessary recommendations for further study.*

## **Chapter 5: Discussion, conclusion, recommendations and study limitations**

### **5. Introduction**

The purpose of this study was to investigate whether governance plays a role in the implementation of NIPCPS in the public healthcare sector in SA. To this end, the governance framework for health system analysis that is described by Sidiqqi et al. (2009) proved to be a useful tool with which to interrogate relevant governance principles that are described in the NIPCPS. Whereas the implementation of these principles, such as health care ethics, was unclear, the findings revealed that there were still shortages of antimicrobial drugs, equipment and space in the public healthcare sector in SA several years after the launch of the NIPCPS.

The analysis also revealed that patients with infectious diseases were still mistreated by HCWs irrespective of the fact that the policy mentions legal and disciplinary action that HCWs might face for being found guilty. This section brings the findings of the governance framework and case analysis into an integrated broad perspective to determine what they mean concerning the implementation of NIPCPS and the consequences of findings for IPC in the public healthcare sector in SA.

### **5.1 The role of governance in the implementation of the NIPCPS in the public healthcare sector in SA**

Assessing health system governance entails several policy recommendations and points to the direction of good health governance (Sidiqqi et al., 2009). First, it makes health policymakers aware of the importance of governance as part of the health system and its influence on both the health system functions and health outcomes. Second, it enables the investigation of governance principles such as strategic vision, Rule of Law, equity and inclusiveness, transparency or ethics for developing solutions to improve the health system that has a certain financial cost (Sidiqqi et al., 2009). Here, the findings that resulted from assessing the NIPCPS implementation are discussed by using six governance principles including strategic vision, participation and consensus orientation, accountability, ethics, effectiveness and efficiency and, the Rule of Law.

#### **5.1.1 Strategic vision**

The NIPCPS strategic vision is in line with its stated objectives and covers the rational use of antimicrobials, protective clothing, availability of other barrier methods and enough space to allow airborne isolation. However, the extent of the implementation of this governance principle is not clear. The study analysis was limited to a few cases which do not talk directly about the strategic vision but rather about the fact that although such strategies were

mentioned in the NIPCPS, there is still a reported shortage of antimicrobials, space and equipment in the public healthcare sector in SA. There is no information on literature that supports the fact that the lack of antimicrobial drugs, space and equipment in the public healthcare sector in SA is influenced by the failure to implement the strategic objectives of the NIPCPS. However, further research can be done on the issue to determine whether or not all the shortages are due to the inability of the public healthcare sector in SA to implement IPC strategic objectives.

### **5.1.2 Participation and consensus orientation**

The level of participation or decentralization regarding instituting and dispensing of antimicrobial drugs, structural needs and patient care practices is institutional in the public healthcare sector in SA. Public health services are decentralized from national and provincial levels to district levels in SA, and health goals' planning, administration and implementation are executed at district level (Human et al., 2010). The study conducted by Berhanu et al. (2016) has revealed that the decentralization of TB treatment and diagnosis has resulted in faster diagnosis and treatment initiation. A policy on the decentralization of MDR-TB was recommended in 2011 and it made immediate changes because the long-period admissions of MDR-TB patients in specialized hospitals was not practical (Salie et al., 2017). The literature agrees that IPC is decentralized and services are rendered at district and institutional levels. The literature has revealed that the decentralization of services has improved the service delivery, especially the diagnosis and treatment of TB.

Although the roles of numerous stakeholders are mentioned in the NIPCPS, the role of CSOs is not clearly mentioned. TAC and its allies have published stories of people dying from AIDS, which forced the government, pharmaceutical companies and World Trade organizations to come to an agreement to allow low- and middle-income countries to access generic medicines (Smith et al., 2016). Civil societies have engaged in war and won the fight to sit at tables around the world to propose alternative policy options (Smith et al., 2016). Civil society is an entity that stands between the private component and the state, which expresses the interests, passions, and ideas of citizens and holds state officials accountable (Sabie & Rieker, 2017). The literature has revealed that the main reason for the existence of CSOs is to hold government accountable, in this instance their main reason for participation is to hold the government accountable for the implementation of the NIPCPS strategic objectives.

### **5.1.3 Accountability**

The policy mentions accountability regarding the issue of antimicrobial drugs and space, but does not say anything about how this accountability is going to be assured. It also does not mention how staff must be accountable when working with patients who have infectious diseases. Newspaper articles used in the study have revealed a lack of antimicrobial drugs, space and equipment, and the mistreatment of patients by HCWs, which might be due to a lack of accountability. Violence has become common in the public healthcare sector of SA due to the absence of local accountability in respect of services and the inability of managers to take action against nurses who abuse patients (Jewkes et al., 1998). Bateman (2013) regards the reasons for shortages of drugs to be complicated but all point to supply chain management. He further mentions that national Health Departments blame provincial departments, which he considers as having very limited accountability. There is no literature that supports the notion that the lack of space and equipment in SA is due to government's lack of accountability. However, literature is in agreement with the fact that HCWs who abuse patients are not punished and that is a reflection of government management lacking accountability. It also shows that lack of antimicrobial drugs indicates a lack of accountability.

### **5.1.4 Effectiveness and efficiency**

The policy mentions the availability of staff training and job descriptions, but there is no clear indication or proof that staff follow them. In-service training in the management of TB is conducted frequently in SA (Human et al., 2010). The main reasons for failure to practise IPC in SA are poor job descriptions, the absence of training opportunities, especially in the past, and having no time to receive training (Visser et al., 2011). Research conducted on TB IPC has revealed that professional nurses and community HCWs lack IC training and they poorly comply with the levels of IC prescribed by the WHO (Engelbrecht & J van Rensburg, 2013). The findings of the study on the availability of training are only in line with the statements by Human et al (2010). Other studies have reported that IPC is failing in the public healthcare sector in SA because of poor job descriptions, a lack of training and the inability by HCWs to comply with global IC practices. It is clear that IC is failing due to a lack of knowledge because HCWs are not properly trained to execute their job description requirements. It is also mentioned that they do not have enough time because they are probably overloaded with work.

### **5.1.5 Rule of Law**

Policies are available that support the NIPCPS and they involve the Constitution and right of patients to healthcare. The study conducted by Engelbrecht and Janse van Rensburg (2013) has revealed that half of 127 public healthcare facilities in three districts, Alfred Nzo,

OR Tambo and John Taolo Gaetsewe, lacked clinic-specific IC policy. However, national IC was present in many clinics (Engelbrecht & J van Rensburg, 2013). Many public sector healthcare facilities write their own IC policies but it is not clear whether those policies are in agreement with the national guidelines. It is also not known whether the staff have access to the policies and how frequently the policies are updated (Visser et al., 2011). The study conducted by Tshitangano et al. (2013) has revealed that there were no TB IC guidelines at the hospital in the Vhembe district. Literature is in agreement with the findings of this study that national IPC policies are available at the public healthcare institutions in SA. However, other studies have found that not all healthcare institutions in SA have institutional guidelines. The studies also mention that the content of the institutional policies is unknown, but the study has revealed that other district and provincial healthcare institutions use the national policy document as a model. However, the NIPCPS does not include the information on how the grievances between the staff responsible for IPC and patients, who have infectious diseases, may be handled.

## **5.2 Shortages of antimicrobial drugs and their consequences for IPC in public healthcare in SA**

Shortages of antimicrobial drugs were reported at various public healthcare institutions at different provinces in SA several years after the launch of the NIPCPS. Shortages of drugs are a crucial issue in public health and the delivery of medical care (Quadri et al., 2015). The shortages of drugs had become a national crisis that affected districts in all nine provinces between May and November 2011 (Bateman, 2013). In January 2012, 24% of patients were turned away from 300 healthcare facilities across 17 districts of Oliver Tambo, while 53 clinics and hospitals were affected by ARV and anti-TB stock-outs (Bateman, 2013). Shortages of ARVs, especially the nucleoside reverse transcriptase inhibitors, abacavir and tenofovir were reported across SA from 29 March 2012 (Schowalter & Conradie, 2012). Literature is in agreement with the findings of this study that there had been shortages of drugs in SA despite the fact that the NIPCPS was introduced to address this issue by encouraging the rational use of antibiotics as part of its strategic vision.

HCWs were affected by the shortages of antimicrobial drugs and this state of affairs makes their job quite a challenge. Shortages of drug supplies may force physicians to stop or delay important medical procedures, as well as causing them to use less effective alternatives (Friske, 2013). It also puts the physicians at a risk of using alternative drugs that they are not knowledgeable about, increasing their probability for dosing errors and preventable adverse effects between medications (Friske, 2013). The truth is that medical practitioners of today do not have time to study about antibiotic pharmacodynamics and as a result

inappropriate prescribing practices are observed (Visser et al., 2011). Literature is in agreement with the findings of the study that shortages of antimicrobial drugs hinder medical practitioners from doing their job correctly. It also exposes them to the risk of incorrect prescriptions which could cause problems for them should the patient be harmed. Section 6 of the NIPCPS describes the legal or disciplinary action that HCWs might face should they be found guilty. Therefore, shortages of drugs not only affect the work of HCWs but threaten their future in the medical field as well.

Shortages of antimicrobial drugs affect patients and put their lives at the risk of drug resistance. The reports mentioned that some patients were sent home without medications, while others were treated with more potent drugs due to drug shortages. Limited or interrupted drug supplies and poor drug quality are some of the programmatic factors related to development of drug resistance (Rifat et al., 2015). Evolution of drug resistance can be delayed by the appropriate choice of drug treatment (Laxminarayan et al., 2013). Choosing a correct antibiotic and using sufficient dosage is important in controlling the development of resistance (Visser et al., 2011). Shortages of drugs usually interfere with patient care, and a common practice is choosing an alternative drug that may create safety concerns such as patient harm in the form of adverse events and medication errors (McLaughlin et al., 2013). The findings of this study are in agreement with the literature reports that shortages of antimicrobial drugs expose patients to drug resistance and adverse effects due to medication errors.

### **5.3 Shortages of equipment and space, and their consequences for IPC in public healthcare in SA**

The findings of the study have revealed shortages of equipment at different public healthcare institutions in SA several years following the launch of the NIPCPS. Shortages of equipment and resources were observed at the public healthcare sector in the Western Cape, SA (Scheffler et al., 2015). The DoH models indicated the deterioration of medical equipment at many public healthcare institutions and reported a need for urgent replacement of that equipment (Manyisa & Janse. van Aswegen, 2017). The study conducted by Engelbrecht and Janse van Rensburg (2013) revealed the terrible shortages of N95 respirators at the clinics. Another study conducted by Andrews et al. (2007) has revealed that N95 respiratory masks are not available for the staff in SA in public healthcare institutions. Literature reports are in agreement with the findings of the current study that medical equipment essential for IPC is not available in public healthcare in SA. The NIPCPS describes in their strategic objectives that the availability of personal protection such as N95 masks will be assured, but

this has not happened, thereby placing HCWs at risk of contacting infectious diseases such as TB.

Findings of the study have revealed shortages of space in the public healthcare sector in SA. Shortages of space deny patients' rights to privacy (Manyisa & Janse. van Aswegen, 2017). The reports have indicated that many institutions were identified as too small to accommodate patients; other institutions were too old, falling apart and had collapsing ceilings, and cracked walls. Whereas other institutions in rural areas had no running water and electricity (Manyisa & Janse. van Asegen, 2017). Literature reports also demonstrate a shortage of space and problems with the public healthcare infrastructure in SA.

The study showed that shortages of space affected patients, causing overcrowding in other public health institutions in SA, thereby not allowing airborne isolation as reported by NIPCPS and having a negative impact on IPC. Overcrowding in clinics has negative effects, for example the study revealed that HAIs resulting from *Methicillin resistant staphylococcus aureus* were reported to be due to overcrowding combined with HCW shortages (Bahadori et al., 2017). Overcrowding has been discussed in outbreak investigations including the occurrence at a Gauteng hospital that comprised an outbreak of *klebsiella* sepsis and necrotizing enterocolitis (Visser et al., 2011). The outbreak that occurred between May and June 2005 resulted in the death of twenty-two babies due to *klebsiella* infection at Mahtma Gandhi Memorial hospital in Kwazulu-Natal, SA. The outbreak was reported to be due to overcrowding among other factors (Moodley et al., 2005). Although it is not easy to prove that overcrowding alone can result in an outbreak, it is difficult to dispute that there is a probability that overcrowding causes an interruption in IPC (Visser et al., 2011). The findings of this study are in agreement with literature reports in that shortage of space, which leads to overcrowding, has a negative impact on patients. It breaks down IPC measures leading to NIs outbreaks and the death of patients.

#### **5.4 Maltreatment of patients with infectious diseases by HCWs and its consequences on IPC in public healthcare in SA**

Findings of the study have revealed that patients who have infectious diseases were mistreated by HCWs at the public healthcare institutions in SA. SA's HCWs have been reported to have bad attitudes towards TB patients and this contributes to the spread of TB (Human et al., 2010). The study conducted by Human et al. (2010) revealed that 24% of the patients reported that they were afraid of the clinic staff, and therefore did not return to the clinic after interrupting their TB treatment. Poor patient management is one of programmatic factors related to drug resistance development (Rifat et al., 2015). Nurses in the public

sector have been reported to humiliate patients (Jewkes et al., 1998). Reports have revealed that HCWs in SA have refused to care for XDR-TB infected patients, have asked for new positions, and in other cases have left their posts (Andrew et al., 2007). The findings of this study are in agreement with the literature. Literature reports have revealed that the mistreatment of patients in public healthcare in SA has a negative effect on the control of infectious diseases. Patients are reported to be afraid to return to healthcare institutions and as a result interrupt or stop treatments prematurely, which contributes to the further spread of infectious diseases.

There is no evidence of the DoH taking responsibility to take action against HCWs who mistreat patients who have infectious diseases. Reported cases have revealed that the DOH has denied allegations of mistreatment and in some cases, they rejected the claims without any investigation. The findings of the study conducted by Jekes et al. (1998) have demonstrated that the problems between nurses and patients in SA are related to the lack of sanctions against HCWs who abuse patients. This report is in agreement with the findings of the current study that the DoH does not take any action against HCWs who abuse patients irrespective of the NIPCPS's insistence that legal or disciplinary action can be taken against HCWs who are found guilty of harming patients.

## **5.5 Conclusion**

There had been shortages of antimicrobial drugs, space and equipment, and maltreatment of patients with infectious diseases by HCWs in the public healthcare institutions in SA a number of years after the launch of NIPCPS. Shortages of antimicrobial drugs might indicate a failed strategic objective of the NIPCPS and is due to a lack of accountability by the DoH. It indicates failure to apply IPC measures as it exposes patients to antimicrobial drug resistance and adverse effects, and hinders the job of HCWs and puts them at risk of medical errors. Shortage of medical and personal equipment prevents IPC in that it exposes patients and HCWs to infectious diseases. Shortages of space deny patients their right to privacy and causes overcrowding of patients in wards, leading to an interruption of IPC measures, which in turn causes outbreaks of NIs and patients' death.. The mistreatment of patients has a negative impact on IPC in that it makes patients afraid to go into healthcare institutions, and they stop treatments prematurely, which subjects them to further infections. The mistreatment of patients is due to the lack of the DoH enforcing accountability. The HCWs were still not properly trained, the roles of HCWs in the handling of patients with infectious diseases were not clearly mentioned, there is a poor description of responsibilities, no measures in the policy to handle grievances between HCWs and patients, no



improvement in the delivery of services irrespective of the decentralization of health services, and unavailability of IPC institutional guidelines in other healthcare institutions. All these factors indicate failure to implement NIPCPS in public healthcare in SA and, the reason may be mainly the lack of governance in policymaking and implementation. However, further research to explore this should be undertaken.

## **5.6 Recommendations**

- Given the limited scope of the present study, both in terms of size and method, more research is required to illuminate the ways in which governance influences the implementation of the NIPCPS.
- The strategic vision of the NIPCPS does not cover the treatment or any information on mistreatment of patients who have infectious diseases by HCWs. It is important for the strategic objectives of the NIPCPS to mention how patients must be treated by HCWs because literature has shown that bad treatment makes patients afraid to return to public healthcare and that results in their stopping the treatment prematurely and this also contributes to further spreading of infections.
- The extent of involvement of other stakeholders such as CSOs, pharmacists, nurses, physicians and so forth, in policy-making and implementation strategy formulation is not clear and only the responsibilities that must be carried out are listed in their job descriptions. The literature has described poor description of duties and lack of training to be the reasons for the failure of IPC, meaning that the HCWs must be trained and policy-makers must make sure that they involve them so that they understand what their roles are.
- The policy ought to indicate how accountability must be enforced, and include the statement of accountability on the issue involving patient care.
- Studies must be conducted that can determine whether or not the lack of antimicrobial drugs, space and equipment in the public healthcare sector in SA is due to a lack of accountability.
- HCWs must be allowed time to receive training because reports show that they do not have enough time to train. The DoH must make sure that HCWs receive proper training before carrying out any duties related to IPC because working with infectious diseases is not only harmful to patients but to HCWs as well.
- The NIPCPS must have a section on the role of HCWs on IPC, and how the grievances between HCWs and patients must be handled in order to allow patients to have access to health services without fear of mistreatment.

### **5.7 Study limitations**

Considering the factors such as the fact that all research is about deciding which sites, samples, methods, and data collection procedures to use; and that sometimes research doesn't follow the original plan, research has certain limitations (Rule & John, 2011). This study was exploratory, and involved investigating the role of governance in the implementation of the NIPCPS (2007) in the public healthcare sector of SA. The literature is limited as defining governance within the health sector is still a new concept (Mikkelsen-Lopez et al., 2011). The study was also limited to the collection of cases from newspaper articles, the internet and a limited number of websites. This limited the data to the information provided by the source that could have been expanded by other data collection methods such as the interview and questionnaires. However, due to time constraints given by the study programme, it was not possible to use interviews and questionnaires because such methods require the ethical approval by the university, which takes some time. The current study findings were limited to a few cases on the shortages of antimicrobial drugs, space and equipment, and the mistreatment of patients who have infectious diseases by HCWs. While the study was under way, the healthcare facilities of mentioned in the cases might have implemented their IC measures and these changes would not be reflected in this study. Future investigations should consider employing more in-depth methods such as interviews for data collection because such methods will ensure the collection of recent data.

## References

- Abdool-Karim S.S., Churchyard G.J., Abdool-Karim Q., Lawn S.D., (2009). HIV infection and tuberculosis in South Africa: an urgent need to escalate the public health response. *Lancet*, 374(9693): 921-933.
- Alp E., Leblebicioglu H., Doganay M., Voss A., (2011). Infection control practice in countries with limited resources. *Annals of Clinical Microbiology and Antimicrobials*, 10(1): 36-39.
- Alvarez-Rosete A., (2008). The state in public health, Role of. *Elsevier Incorporation*, 2008: 51-58.
- Andrews J.R., Shah N.S., Gandhi N., Moll T., Friedland G., (2007). Multidrug-resistant and extensively drug-resistant tuberculosis: implications for the HIV epidemic and antiretroviral therapy rollout in South Africa. *The Journal of Infectious Diseases*, 196: S482–90.
- Bahadori M., Teymourzadeh E., Ravangard R., Raadabadi M., (2017). Factors affecting the overcrowding in outpatient healthcare. *Journal of Education and Health Promotion*, 6(21): 1-20.
- Barron P., (2011). The implementation of PHC re-engineering in South Africa. *Public Health Association of South Africa*, 2011:1-6.
- Bateman C., (2013). Drug stock-outs: inept supply-chain management and corruption. *South African Medical Journal*, 103(9): 600-602.
- Berhanu R., Schnippel K., Mohr E., Hirasen K., Evans D., Rosen S., Sanne I., (2016). Early outcomes of decentralized care for rifampicin-resistant tuberculosis in Johannesburg, South Africa: an Observational Cohort Study. *PloS one*, 11(11): 1-14.
- Biermann J., (2006). South Africa's health care under threat. Health policy unit. *Birks M, and Mills Journal*, 2011:15-16.
- Braun V., Clarke V., (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2): 77-101.
- Brinkerhoff D.W., Bossert T.J., (2008). Health governance: concepts, experience, and programming options. *Health Systems*, 2008: 3-4.
- Bryant J.H., Richmond J.B., (2008). Alma-Ata and primary healthcare: an evolving story.
- Buse K., Mays N., Walt G., (2005). Making health policy. *McGraw-Hill Education (UK)*.
- Business day*, (2013). Alarm raised about lack of AIDS drugs, 19 June.

- Business day.*, (2013). Survey suggests dire shortages of drugs in SA, 29 November.
- Cape Argus.*, (2010). Teen hangs herself 'after row at TB clinic', 19 March.
- Cardo D.M., Soule B.M., (1999). Hospital infection prevention and control: a global perspective. *American Journal of Infection Control*, 27(3): 233-235.
- Carlet J., Jarlier V., Harbarth S., Voss A., Goossens H., Pittet D., (2012). Ready for a world without antibiotics? The penicillins antibiotic resistance call to action. *Biomedical Central*, 1: 1-13.
- Carrin C., Buse K., Heggenhougen H.K., Quah S.R., (2008). Health system policy, finance, and organization. *San Diego: Elsevier and Academic press*.
- Churchyard G.J., Mazmetja L.D., Mvusi L., Ndjeka N., Hesselning A.C., Reid A., Babatunde S., Pillay Y., (2014). Tuberculosis control in South Africa: successes, challenges and recommendations. *South African Medical Journal*, 104(3): 244-248.
- Cohen M.L., (2000). Changing patterns of infectious disease. *Nature*, 406(6797): 762-767.
- Corder C.K., (2005). The reconstruction and development programme: success or failure? *Social Indicators Research Series*, 60: 183-203.
- Couper I., de Villiers M., Sondzabai N., (2005). Human resources: district hospitals. *South African Health Review*, 9:119.
- Cullinan K., (2006). Health services in South Africa: a basic introduction. *Health-e News Services*.
- Dambisa Y.M., Modipe S.I., (2009). Capital flows in the health sector in South Africa: implications for equity and access to healthcare. *Equinet Discussion Paper*, 76: 1-40.
- de Haan M., (2005). The health of Southern Africa, 9th edition. *Juta and Co. Ltd pp.3*
- Dennill K., King L., Swanepoel T., (1999). Aspects of primary healthcare: community healthcare in Southern Africa, second edition. *Oxford University Press Southern Africa, Cape Town, South Africa*.
- Diamond Fields Advertiser.*, (2010). 'They let my son die', 30 December.
- Dieleman M., Shaw D.M.P., Zwanikken P., (2011). Improving the implementation of health workforce policies through governance: a review of case studies. *Human Resources for Health*, 9: 1-10.

- Dookie S., Singh S., (2012). Primary health services at district level in South Africa: a critique of the primary healthcare approach. *Biomedical Central Family Practice*, 13(67): 2-4.
- Draper C.E., Louw G., (2007). Primary healthcare in the South African context –medical students' perspectives. *South African Family Practice*, 49(10): 6-11.
- Dusé A.G., (2005). Infection control in developing countries with particular emphasis on South Africa. *Southern African Journal of Epidemiology and Infection*, 20(2): 37-41.
- Edwards R., Charani E., Sevdalis N., Alexandrou B., Sibley E., Mullett D., Loveday H.P., Drumright L.N., Holmes A., (2012). Optimisation of infection prevention and control in acute healthcare by use of behaviour change: a systematic review. *The Lancet Infectious Diseases*, 12(4): 318-329.
- Engelbrecht M., van Rensburg A.J., Kigozi G., van Rensburg H.D., (2016). Factors associated with good TB infection control practices among primary healthcare workers in the Free State province, South Africa. *Biomedical Central Infectious Diseases*, 16(1): 633-641.
- Engelbrecht M.C., Yassi A., Spiegel J.M., van Rensburg A.J., O'Hara L.M., Bryce E.A., Nophale L.E., Rau A., (2015). Tuberculosis and blood-borne infectious diseases: workplace conditions and practices of healthcare workers at three public hospitals in the Free State. *South African Journal of Infectious Diseases*, 30(1): 23-28.
- Engelbrecht M.C., J van Rensburg A.J., (2013). Tuberculosis infection control practices in primary healthcare facilities in three districts of South Africa. *Southern African Journal of Epidemiology and Infection*, 28(4): 221-226.
- Engelbrecht B., Crisp N., (2010). Improving the performance of the health system. *South African Health Review* 19:195-203.
- Environment Conservation No. 73 of 1989:35. Government Gazette of the Republic of South Africa, Cape Town, 9 June 1989.
- Essack S.Y., (2006). Strategies for the prevention and containment of antibiotic resistance. *South African family practice*, 48(1): 51-51d.
- Farley J.E., Tudor C., Mphahlele M., Franz K., Perrin N.A., Dorman S., Van der Walt M., (2012). A national infection control evaluation of drug-resistant tuberculosis hospitals in South Africa. *The International Journal of Tuberculosis and Lung Disease*, 16(1): 82-89.
- Farrimond H., (2012). Doing ethical research. *Palgrave Macmillan*.

Foodstuffs, Cosmetics and Disinfectants Act, 1972 (ACT No.54 OF 1972). Regulations relating to the labelling and advertising of foods: Amendment. Department of Health, Government Gazette No: 37695, 29 May 2014.

Francis K., Edmeston M., (2012). Beyond band-aids: reflections on public and private healthcare in South Africa. *Journal of the Helen Suzman Foundation*, 67: 41–51.

Ehlert K., Naude A.M., (2014). Infection prevention and control measures currently applied in South African audiology. *South African Journal of Communication Disorders*, 61(1): 1-10.

Friske E., (2013). Addressing looming prescription drug shortages through legislative and regulatory approaches. *Minnesota Journal of Law, Science and Technology*, 14: 521-544.

Gilson L., (2012). Health policy and system research: a methodology reader. *World Health Organization*.

Gilson L., Dairei J., (2011). Leadership and Governance within the South African Health System. *South African Health Review* chapter, 6: 70.

Glassman A., Buse K., (2008). Politics, and public health policy reform. *Elsevier Incorporation*, 2008: 23-29.

Grant C., Osanloo A., (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: creating the blueprint for your “house”. *Administrative Issues Journal*, 4(2): 12-26.

Gray A., Jack C., (2008). Health legislation and policy. *South African Health Review*, 2008: 31-49.

Griffith M.M., Patel J.A., Sutton S.H., Bolon M.K., Esterly J.S., Gross A.E., Postelnick M.J., Zembower T.R., Scheetz, M.H., (2012). Prospective approach to managing antimicrobial drug shortages. *Infection Control and Hospital Epidemiology*, 33(7): 745-752.

Gumede V., (2008). Public policy-making in a post-apartheid South Africa: A preliminary perspective. *Africanus* 38 (2): 7-23.

Hall W., Ford-Ngomane T., Barron P., (2005). The health act and the district health system. *South African Health Review*, 2005: 4:46.

*Health-E-News.*, (2016). Hospital strike spreads in Free State, 19 September.

*Health-E-News.*, (2016). An agonizing choice. Go deaf or die!, 16 September.

*Health-E-News.*, (2014). Patients protests poor service at Daveyton clinic after man dies in queue, 25 July.

*Health-E-News.*, (2013). Poor conditions violate patients' human rights, 21 February.

<http://www.medicalcenter.virginia.edu/safetycenter/InternetsaFetycenterimages/south-africa-rural-clinic-patients-waiting.gif/view/06/09/2016>

Heywood M., (2014). The broken thread: primary healthcare, Social Justice and the Dignity of the health worker. *WiSER, History Workshop and Wits Political Studies Department* (available at [https://www.wits.ac.za/media/news migration/files/Heywood%20Public%20Positions.pdf/cited/24/10/16](https://www.wits.ac.za/media/news%20migration/files/Heywood%20Public%20Positions.pdf/cited/24/10/16)).

Hosein I.K., Hill D.W., Jenkins L.E., Magee J.T., (2002). Clinical significance of the emergence of bacterial resistance in the hospital environment. *Journal of Applied Microbiology Symposium Supplement*, 92: 90S–97S.

Human S.P., Smith J.E., Tshabalala D.L., (2010). Factors influencing tuberculosis treatment interruptions. *Africa Journal of Nursing and Midwifery*, 12(2): 48-57.

Hunter D.J., (2008). The health debate. *The Policy Press pp3, University of Bistol, Bistol. Jamaica Observer*, 03 January 2015. Not all obese people prone to poor health: study.

Hunter D.J., Killoran A., (2004). Tackling health inequalities: turning policy into practice?. *Health Development Agency*.

Hussein J., Mavalankar D.V., Sharma S., DÁmbrosio L., (2011). A review of health system infection control measures in developing countries: what can be learned to reduce maternal mortality. *Biomedical Central Globalization and Health*, 7(14): 1-9.

Javadi M., Zarea K., (2016). Understanding thematic analysis and its Pitfall. *Journal of Client Care*, 1(1): 33-39.

Jewkes R., Abrahams N., Mvo Z., (1998). Why do nurses abuse patients? Reflections from South African obstetric services. *Social science and medicine*, 47(11): 1781-1795.

Jobson M., (2015). Structure of the health system in South Africa. (available at [file:///C:/Documents%20and%20Settings/uvp/My%20Documents/Downloads/M\\_Jobson\\_Khulumani\\_Health\\_paper\\_-\\_Structure\\_of\\_the\\_health\\_system\\_in\\_South\\_Africa\\_-\\_Oct\\_2015.pdf/23/10/16](file:///C:/Documents%20and%20Settings/uvp/My%20Documents/Downloads/M_Jobson_Khulumani_Health_paper_-_Structure_of_the_health_system_in_South_Africa_-_Oct_2015.pdf/23/10/16)).

Kaier K., Mutters N.T., Frank U., (2012). Bed occupancy rates and hospital-acquired infections-should beds be kept empty. *Clinical Microbiology and Infection*, 18: 941-945.

Kautzky K., Tollman S.M., (2008). A perspective on primary healthcare in South Africa. *South African Health Review*, 2:17.

Laxminarayan R., Duse A., Wattal C., Zaidi A.K., Wertheim H.F., Sumpradit N., Vlieghe E., Hara G.L., Gould I.M., Goossens H., Greko C., (2013). Antibiotic resistance-the need for global solutions. *The Lancet Infectious Diseases*, 13(12):1057-1098.

Leedy P.D., Ormrod J.E., (2010). Practical research. Planning and design. *Pearson International Edition*.

Lehmann U., (2008). Strengthening human resources for primary healthcare II. *South African Health Review*, 11:163.

Lewis M., Pettersson G., (2009). Governance in healthcare delivery: raising performance (C:\Governance & Corruption\Corporate paper on GAC and health\Governance in health master 17 September 2009.docx).

Madonsela T.N., (2010). Corruption and governance challenges: the South African experience. In *Corruption and Governance Challenges in Nigeria Conference Proceedings, Cleen Foundation Monograph Series*, 7: 43-60.

McLaughlin M., Kotis D., Thomson K., Harrison M., Fennessy G., Postelnick M., Scheetz M.H., (2013). Effects on patient care caused by drug shortages: a survey. *Journal of Managed Care Pharmacy*, 19(9): 783-788.

Manyisa Z.M., van Aswegen E.J., (2017). Factors affecting working conditions in public hospitals: a literature review. *International Journal of Africa Nursing Sciences*, 6: 28-38.

Maykut P., Maykut P.S., Morehouse R., (1994). Beginning qualitative research: a philosophic and practical guide. *Psychology Press*, 6.

Mayosi B.M., Flisher A.J., Lalloo U.G., Sitas F., Tollman S.M., Bradshaw D., (2009). The burden of non-communicable diseases in South Africa. *The Lancet*, 374(9693): 934-947.

Maxwell J.A., (2005). Conceptual framework: What do you think is going on. *Qualitative Research Design: An Interactive Approach*, 41: 33-63.

*Medical Brief.*, (2015). SA's drug supply shortages dire, 19 May.



- Mikkelsen-Lopez I., Wyss K., de Savigny D., (2011). An approach to addressing governance from a health system framework perspective. *Biomedical Central International Health and Human Rights*, 11(13): 1-11.
- Moodley P., Coovadia Y.M., Sturm A.W., (2005). Intravenous glucose preparation as the source of an outbreak of extended-spectrum  $\beta$ -lactamase-producing *Klebsiella pneumoniae* infections in the neonatal unit of a regional hospital in KwaZulu Natal. *South African Medical Journal*, 95(11): 861-864.
- Naidoo S., (2012). The South African national health insurance: a revolution in healthcare delivery! *Journal of Public Health*, 34(1): 149-150.
- Nejad S.B., Allegranzi B., Syed S.B., Ellis B., Pittet, D., (2011). Healthcare-associated infection in Africa: a systematic review. *Bulletin of the World Health Organization*, 89(10): 757-765.
- National Infection Prevention and Control Policy and Strategy, 2007.
- Nxumalo N., Goudge J., Manderson L., (2016). Community health workers, recipients' experiences and constraints to care in South Africa - a pathway to trust. *Aids Care*, 28(S4): 61-71.
- Oboirieni k.o., Eyles J., McIntyre D., Harris C.B., Orgillii M., Goudge N.J., (2015). Understanding roles, enablers and challenges of District Clinical Specialist Teams in strengthening primary healthcare in South Africa. *South African Health Review* 2014/15, 46.
- Occupational Health and Safety Act 85 of 1993. Hazardous Biological Agents Regulations. (also cited at <http://www.kznhealth.gov.za/occhealth/hba.pdf>).
- Odonkor S.T., Addo, K.K., (2011). Bacteria resistance to antibiotics: recent trends and challenges. *International Journal of Biological and Medical Research*, 2(4): 1204-1210.
- Paton C., (2008). Health Policy: overview. *Elsevier Incorporation*, 2008: 2-15.
- Pearse J., (1997). Infection control in Africa. Nosocomial infection. *Africa health*, 19(6):1-10.
- Perovic O., Singh A., (2011). Nosocomial Infections in patients with human immunodeficiency virus (HIV). *Intech*, 9:151-164. (cited at [www.intechopen.com/2011/16](http://www.intechopen.com/2011/16)).
- Pittet D., Allegranzi B., Storr J., Nejad S.B., Dziekan G., Leotsakos A., Donaldson, L., (2008). Infection control as a major World Health Organization priority for developing countries. *Journal of Hospital Infection*, 68(4): 285-292.

Pittet D., Donaldson L., (2005). Clean care is safer care: the first global challenge of the WHO World Alliance for patient safety. *Infection Control and Hospital Epidemiology*, 26(11): 891-894.

Petrosillo N., Nicastrì E., Viale P., (2005). Nosocomial pulmonary Infections in HIV-positive patients. *Current Opinion in Pulmonary Medicine*, 11 (3), 231-235.

Pillay Y., Marawa N., Proudlock P., (2002). Health legislation. *Health Systems Trust*, 2002: 3-39.

Quadri F., Mazer-Amirshahi M., Fox E.R., Hawley K.L., Pines J.M., Zocchi M.S., May L., (2015). Antibacterial drug shortages from 2001 to 2013: implications for clinical practice. *Clinical Infectious Diseases*, 60(12): 1737-1742.

Rifat M., Hall J., Oldmeadow C., Husain A., Hinderaker S.G., Milton A.H., (2015). Factors related to previous tuberculosis treatment of patients with multidrug-resistant tuberculosis in Bangladesh. *British Medical Journal Open*, 5(9): 1-10.

Rispel L., (2016). Analysing the progress and fault lines of health sector transformation in South Africa. *South African Health Review*, 2016: 17-23.

Rispel L.C., de Jager P., Fonn S., (2015). Exploring corruption in the South African Health Sector. *Health Policy and Planning*, 0:1-11.

Rispel L.A., (2015). Faultlines in delivering good healthcare to poor people in South Africa. *The conversation*, 30 September 2015.

Rispel L.C., Barron P., (2010). Health policies and practices: can disease control priorities improve health systems performance in South Africa? *South African Medical Journal*, 100(12): 801-806.

Rispel L., Moorman J., Chersich M., Goudge J., Nxumalo N., Ndou T., (2010). Revitalising primary healthcare in South Africa: review of primary healthcare package, norms and standards. Johannesburg: centre for health policy, School of Public Health, University of the Witwatersrand. Rule P., John V., (2011). Your guide to case study research. *Van Schaik*.

Roux N.L., (2002). Public policy-making and policy analysis in South Africa amidst transformation, change and globalisation: views on participants and role players in the policy analytic procedure. *Journal of Public Administration*, 37(4): 418-437.

Rule P, John V, (2011). Your guide to case study research. *Van Schaik*.

- Sabi S.C., Rieker M., (2017). The role of civil society in health policy-making in South Africa: a review of the strategies adopted by the Treatment Action Campaign. *African Journal of AIDS Research*, 16(1): 57-64.
- Saiman L., Siegel J., (2004). Infection control in cystic fibrosis. *Clinical Microbiology Reviews*, 17(1): 57–71.
- Salie F., Douglas T.S., Saidi T., (2017). Towards understanding the drivers of policy change: a case study of infection control policies for multi-drug resistant tuberculosis in South Africa. *Health Research Policy and Systems*, 15(1): 41-51.
- Salkind N.J., (2009). Exploring Research. *Pearson International Edition*.
- Scheffler E., Visagie S., Schneider M., (2015). The impact of health service variables on healthcare access in a low resourced urban setting in the Western Cape, South Africa. *African Journal of Primary Healthcare and Family Medicine*, 7(1): 1-11.
- Schowalter L., Conradie F., (2012). Approaches to tenofovir and abacavir drug shortages in South Africa: a guide for clinicians. *Southern African Journal of HIV Medicine*, 13(2): 56-57.
- Scott V., Schaay N., Olckers P., Nqana N., Lehmann U., Gilson L., (2014). Exploring the nature of governance at the level of implementation for health system strengthening: the DIALHS experience. *Health Policy and Planning* 29:ii59–ii70.
- Sheikh K., Gilson L., Agyepong I.A., Hanson K., Sengooba F., Bennett S., (2011). Building the field of health policy and system research: framing the questions. *Plos Medicine*, 8(8): 1-6.
- Shiffman J., (2008). Agenda Setting in public health policy. *Elsevier Incorporation*, 2008: 17-22.
- Sibaya W., Muller M., (2000). Transformation management of primary healthcare services in two selected local authorities in Gauteng. *Curationis*, 2000: 6-14.
- Siddiqi S., Masud T.I., Nishtar S., PetersD.H., Sabri B., Bile K.M., Jama M.A., (2009). Framework for assessing governance of the health system in developing countries: gateway to good governance. *Elsivier*,90: 13-25.
- Sieberhagen C., Rothmann S., Pienaar J., (2009). Employee health and wellness in South Africa: the role of legislation and management standards. *South African Journal of Human Resource Management*, 7 (1): 18-26.

Smith J., Buse K., Gordon C., (2016). Civil society: the catalyst for ensuring health in the age of sustainable development. *Globalization and Health*, 12(1): 40-46.

*Sowetan.*, (2014). Healthcare in paralysis, 26 June.

Sutcliffe S., Court J., (2005). Evidence-based policymaking: what is it? How does it work? What relevance for developing countries? *Overseas Development Institute*, 2008: 1-50.

The draft national infection prevention and control policy for TB, MDRTB and XDR-TB, 2007. Department of Health, Republic of South Africa.

*The New Age.*, (2013). No beds, so patients are dying, 19 March.

Tshabalala-Msimang N., (2008), National Health Act, 2003 (ACT NO. 61 OF 2003 Regulations Regarding Communicable Diseases<sup>37</sup> (Cited at [http://www.gov.za/sites/www.gov.za/files/30681\\_27.pdf](http://www.gov.za/sites/www.gov.za/files/30681_27.pdf)/17/11/16)

Tshitangano T.G., Maputle S.M., Netshikweta L.M., (2013). Availability of tuberculosis infection control plans at rural hospitals of Vhembe district, Limpopo Province of South Africa. *African Journal of Primary Health Care and Family Medicine*, 5(1):1-6.

van Rensburg H.C.J., (2014). South Africa's protracted struggle for equal distribution and equitable access – still not there. *Biomedical Central Journal*, 12(26): 1-16.

van Rensburg H.C.J., Ataguba J.E., Benatar S.R., Doherty J.E., Engelbrecht M.C., Heunis J.C., Janse van Rensburg A.P., Kigozi N.G., McIntyre D.E., Pelser A.J., Pretorius E., Redelinghuys N., Steyn F., Wouters E., (2012). Health and healthcare in South Africa, second edition, pp1-2. *Van Schaik Publishers, Pretoria, South Africa*.

van Rensburg H.C.J., Doherty J.E., Heunis J.C., McIntyre D.E., Ngwenya C.G., Pelser A.J., Pretorius E., Redelinghuys N., Summerton J.V., (2004). Health and healthcare in South Africa, first edition. *Van Schaik Publishers, Pretoria, South Africa*.

van Rensburg H.C.J., Fourie A., Pretorius E., (1992). Healthcare in South Africa: structure and dynamics. *Academic pp.* 1.

Venturino M., (2013). Healthcare reform in the US and in South Africa: does new policy cure the disease or merely alleviate the symptoms? *Africa Institute of South Africa, Policy Brief*, 90: 1-4.

- Virtanen M., Terho K., Oksanen T., Kurvinen T., Pentti J., Routamaa M., Vartti A.M., Peltonen R., Vahtera J., Kivimäki M., (2011). Patients with infectious diseases, overcrowding, and health in hospital staff. *Archives of Internal Medicine*, 171(14): 1296-1298.
- Visagie S., Schneider M., (2014). Implementation of the principles of primary healthcare in a rural area of South Africa. *African Journal of Primary Health Care and Family Medicine*, 6(1):1-10.
- Visser A., Moore D.P., Whitelaw A., Lowman W., Kantor G., Hoosen A., Madhi S., Brink A., Van den Bergh D., Devenish L., Moodley P., (2011). Part VII: interventions. *South African Medical Journal*, 101(8): 587-595.
- Wessels D., (1999). South Africa's reconstruction and development programme: "A better life for all". *Journal of Social Sciences*, 3(4): 235-243.
- World Health Organization., (2008). Health service delivery. *WHO Press, World Health Organization, Geneva, Switzerland*.
- World Health Organization (2003). Practical guidelines for infection control in healthcare facilities.
- Yassi A., Zungu M., Spiegel J.M., Kistnasamy B., Lockhart K., Jones D., O'Hara L.M., Nophale L., Bryce E.A., Darwin L., (2016). Protecting health workers from infectious disease transmission: an exploration of a Canadian-South African partnership of partnerships. *Globalization and Health*, 12(1): 10-24.
- Yin R.K., (2014). Case study research. Design and methods. *SAGE Publications, Inc*.
- Zweigenthal V., London L., Pick W., (2016). The contribution of specialist training programmes to the development of a public health workforce in South Africa. *South African Health Review*, 2016: 45-59.

# Appendix A

## Case A1

SA Media - The University of the Free State

Page: 1

Source: BUSINESS DAY

Date: 19-Jun-2013

Topic: 10

Ref No: 2241



1

ID: 04174672-01 Source Page: 4

## SA AIDS CONFERENCE

# Alarm raised about lack of AIDS drugs

TAMAR KAHN  
Science and Health Editor

CAPE TOWN -- Activists at the sixth SA AIDS Conference in Durban yesterday sounded the alarm over extensive drug shortages at clinics and hospitals supplied by the Eastern Cape's Mthatha depot, saying that the stock-outs were putting patients' lives at risk.

The problems are not confined to the Eastern Cape, however, with the Southern African HIV Clinicians Society reporting widespread shortages of essential drugs in Gauteng and other provinces. "There are drug shortages across the country, but it's particularly bad in the Eastern Cape, Gauteng and Limpopo," said the society's CEO, Lauren Jankelowitz. "Eight times out of 10, patients are simply told to come back later, with no guarantee the drugs will be available," she said.

Health Minister Aaron Motsoaledi has acknowledged issues with the provincial medicine depots, and his officials have two initiatives under way that bypass the depot system altogether. But these are in their early stages, focusing only on drugs for HIV/AIDS and cancer, and most patients in SA continue to depend on hospitals and clinics that are unable to consistently obtain the drugs they need.

"There is not a month that goes by without a critical item out of stock," said an Eastern Cape pharmacist working in the state sector, who asked not to be named for fear of reprisal. "You don't have to be a qualified pharmacist to work here, you have to be a procurement specialist, because

you spend most of your time trying to find stock."

Forty percent of 70 health facilities in the Mthatha depot catchment area surveyed by Medecins Sans Frontieres and the Treatment Action Campaign (TAC) reported stock-outs of HIV or tuberculosis drugs.

At a quarter of the facilities, staff had to send patients home without treatment because they had no available alternative. On average, the stock-outs lasted more than 45 days.

TAC Eastern Cape district organiser Vuyokazi Gonyela said activists were worried the situation at the Mthatha depot had not improved since activists stepped in to try help clear a major backlog after 29 staff were suspended last year. "We have been engaging with other civil society organisations and the Eastern Cape health department to understand the underlying issues, but we still don't have answers," she said.

Rural Health Advocacy Project director Marije Versteeg said patients in rural areas were particularly hard hit by stock-outs, as they had to travel large distances at great expense to reach clinics.

The Department of Health's head of procurement, Gavin Steel, said the shortages facing hospitals and clinics were largely due to depot management issues, and there was no evidence that pharmaceutical manufacturers could not meet demand.

Mr Steel said that the Department of Health had set up a central procurement unit for HIV/AIDS drugs in Gauteng, which kept buffer stock that could be sent directly to large facilities with high demand.

kahn1@bdlm.co.za

Source: BUSINESS DAY

Date: 29-Nov-2013

Topic: 10

Ref No: 4710



1

ID: 04216626-01

Source Page: 2

## Survey suggests dire shortages of drugs in SA

TAMAR KAHN  
Science and Health Editor

CAPE TOWN — One in five public health facilities has experienced shortages of HIV/AIDS or tuberculosis (TB) medication in the past three months, a survey released yesterday by health activists shows.

The national survey calls into question the efficacy of the government's HIV/AIDS treatment programme, which with 2.4-million patients is the world's biggest.

However, spokesman for the health minister Joe Maila rejected the survey's findings, saying they were exaggerated.

"We are not saying there are not challenges, but there is no crisis. We are doing everything we can to ensure patients have the medicines they need," he said by phone.

The survey, based on phone interviews with staff from 2,149 health facilities, was biased and overstated the problem, he said.

The survey was conducted by the Stop Stock Outs Project (SSP) during September and last month, and respondents were asked if their facilities had experienced shortages or stock-outs of HIV/AIDS or TB medication in the past three months.

The SSP is a coalition of health and civil society organisations, and counts Medicines Sans Frontieres (MSF), the Treatment Action Campaign and the Southern African HIV Clinicians among its members.

It found that 459 (21%) of the facilities had experienced shortages or stock-outs in the three months before the survey, and more than half (242) of these institutions were still unable to provide adequate supplies to their patients.

Staff said they were forced to send patients home without drugs or ration short supplies among them. Patients were frequently referred to other facilities with no guarantee that they had stock available.

"We were surprised by the extent of the stock-outs. We didn't expect it to be so bad," said the MSF co-ordinator for SA and Lesotho, Gilles van Cutsem. "Tens of thousands of patients are affected," he said.

Dr van Cutsem said the survey did not explore the reasons for the shortages, but he speculated that there were likely to be problems at multiple stages in the supply chain, from factory gate to clinic shelf.

Southern African HIV Clinicians Society president Francesca Conradie said one of the problems appeared to be the fact that the health department had failed to communicate new treatment guidelines to clinics, yet provincial pharmacy depots had already begun replacing single pills with the new fixed dose combination — a three-in-one pill.

Clinic nurses could not switch patients to the fixed-dose combinations until they received instructions to do so, she said.

kahnt@bdfm.co.za

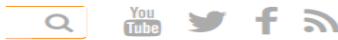


## Case A3

Navigation



The South African Health News Service



You are here: [Home](#) > [Health Management](#) > [HIV - Antiretrovirals \(ARVs\)](#) > [Human Resources](#) > [OurHealth](#) > Patients protest poor service at Daveyton clinic after man dies in queue

# Patients protest poor service at Daveyton clinic after man dies in queue

by [Sibongile Nkosi](#) and [James Thabo Molelekwa](#). on [July 25, 2014](#) in [Health Management](#), [HIV – Antiretrovirals \(ARVs\)](#), [Human Resources](#), [OurHealth](#)

About 100 protestors took to the streets yesterday to demand the expansion of Daveyton Main Clinic and an end to recurring HIV drug stock outs. The protest is the second in two years.



Collen Mathe once arrived at clinic at 7 pm suffering from stomach ulcers. While he queued, he watched a man die while waiting in line.

The picket was the latest organised by the [Treatment Action Campaign \(TAC\)](#). Following a 2013 protest former MEC for Health Hope Papo vowed to expand the small 24-hour clinic, which serves five heavily populated wards surrounding the East Rand township, according to TAC District Organiser Portia Serote.

Patients complain of health workers' poor attitudes and that a shortage of space means they are often left queuing outside.

"It is sad that patients stand in long queues outside the clinic when they come to collect their medication," TAC Gauteng Chairperson Sbongile Tshabalala told [OurHealth](#). "Regardless of weather conditions, they

have to stand outside for long hours only to be served by staff with bad attitudes."

Collen Mathe once arrived at the clinic at 7 pm suffering from stomach ulcers. While he queued, he watched a man die while waiting in line.

"I couldn't believe my eyes when it happened," he said. "I still think that man could have been saved if the staff was more attentive and there were more nurses on duty."

**The clinic also experiences shortages of treatment, especially antiretrovirals (ARV).**

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Busi Nhlapho, is HIV positive and currently on ARVs to help ensure her unborn baby will be [born HIV negative](#). She says she is often given a week's supply of treatment.

Typically, patients should be given at least one month of treatment at time.

"ARV shortages are a norm here," she said. "We are often given a treatment which only lasts for a week, and are told to come back and fill up."

Nhlapho also receives [antenatal care](#) at the clinic and added that nurses only see up to 30 expecting mothers a day.

"You have to arrive at the clinic at least half past five so that when registration starts at 7:30 am, you can make...the 30 people that they will serve," she said. "Registration only happens for 30 minutes and if you didn't make it to the list by 8:00 am, you know you have to come back the following day."

**Ekurhuleni Health District representative Mthuthuzeli Sboza arrived four hours after the start of the protest to receive a memorandum from the AIDS lobby group.**

**The Gauteng Department of Health had not returned requests for comment at the time of going to print.**

Additional reporting by citizen journalist Thabo Molelekwa

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## SA's drug supply shortages dire

MAY 19TH, 2015

NEWS UPDATE

Dire shortages of medicines at **South Africa's** public hospitals and clinics are giving rise to fears of increased drug resistance among patients. The Times reports that the current list of medicines that are out of stock or in short supply around the country runs to six pages. It includes antibiotics, TB medicine, anti-psychotics, antiretrovirals for adults and children, and drugs to treat high blood pressure, anxiety, depression, bipolar disorder, epilepsy, constipation, fungal infections and pain.

The **Department of Health** says it is negotiating with drug suppliers to address the shortages. But the **Stop Stockouts** NGO warns the short supply is of crisis proportions. "It's a silent, yet chronic crisis, with more and more concrete evidence emerging of how big the problem of stockouts and medicine availability is," says spokesperson Bella Huang.

One of the medicines in short supply is abacavir, prescribed for HIV-positive children and not easily substituted with other drugs. Stavros Nicolau, senior executive for the manufacturer of the drug, **Aspen**, said the current shortages were due to a shortage of the active pharmaceutical ingredient, produced abroad. This should be corrected by 10 June, he said. In the interim, the drug was being imported from a different supplier, under a special licence. But, the report says, a paediatrician warned that an inconsistent supply could lead to children becoming resistant to the drug, and substitute drugs had severe side effects.

A doctor at a **Gauteng** hospital said though shortages were common, he was concerned that many "first line" antibiotics used for simple everyday infections were unavailable at present. The report says the doctor – who asked not to be named due to explicit warnings against speaking to the media that the Department of Health had given to all doctors – said because of the "severe" shortages of first-line antibiotics, they had to use much more potent and expensive ones to treat simple infections. "This is bad practice and can lead to antibiotic resistance. But clinicians have no choice. (It's) terribly frustrating."

The report says the antibiotics have run short at the same time that the government and doctors have officially committed to reducing misuse of antibiotics and so prevent resistance. The head of the programme to counter antibiotic misuse, **University of Cape Town** professor Marc Mendelson, said substitutes were available for the first-line antibiotics, but whether a hospital or clinic received them depended on their location and level. "At some district-level hospitals with a very limited list of drugs available, it is possible that patients would be treated with the incorrect antibiotic," he said.

**Eastern Cape** doctor Karl le Roux, who represents rural doctors at Stop Stockouts, said shortages were demotivating for doctors and nurses: "If you take away one of their biggest tools, medicines, they leave rural hospitals and then patients to suffer more."

Fifteen pharmaceutical companies supply the drugs on the shortage list. The report says only three responded to queries. They indicated three reasons for medicine shortages: orders for the drugs dropped drastically, leading to decreased production; payment to smaller suppliers was delayed by some provinces; or there was an international shortage of the active ingredients.

Health Department spokesperson Popo Maja said no suppliers had indicated that non-payment was the reason for supply challenges.

Full report in The Times

# Appendix B

## Case B1

SA Media - The University of the Free State

Page: 1

Source: THE NEW AGE

Date: 19-Mar-2013

Topic: 10

Ref No: 708



1

ID: 04136013-01 Source Page: 25

# No beds, so patients are dying

Too many people are sick, department says

SITHANDIWE VELAPHI

TWO Eastern Cape families have lost their loved ones who were turned away from Butterworth Hospital due to a shortage of beds.

"Alukho uhoyo esibhedlele eGcuwa, abantu bayabhubha (there is no care at Butterworth Hospital, people are just dying)," said a sibling of Nomfundiso Matiwane who died a day after she was discharged from the hospital.

Matiwane was sent to Butterworth Hospital on February 23. She was looking frail with a swollen and aching body. Matiwane's family said she could barely walk and speak at the time. "We were admitted to casualty and we were then informed that there was no bed available for her to sleep.

"We really could not understand that and we waited until our sister was given pain tablets and we were told to go home.

"We took the hospital wheelchair and placed her next to the gate and waited for the car we had hired.

"Then, a day later, on February 24, our sister died at our home. We are so disappointed about the treatment she received there," said the sibling, who asked not to be named because she feared her employer would find out she had been to the hospital.

Matiwane was buried on February 24 at her home in Ngqamakhwe.

Another family, from Dutywa, has lamented bad treatment against one of their own at the same hospital.

Nozizwe Sotomela, 78, of Emngcwe village visited the hospital on March

12 after complaining of shortness of breath and an aching body.

Sotomela could hardly speak and her face was swollen when she was admitted at the hospital, her family said.

But the Sotomela family said they were shocked to be told that their granny would be discharged the same day she was admitted because of the lack of beds.

"We were told by the doctor that she (Sotomela) should come after two weeks. They told us that there were no beds to accommodate her," said Sotomela's daughter, Noluthando Sotomela.

A nurse in the maternity ward, whose name is known to The New Age, saw how bad Sotomela's health was and decided to help by placing an extra bed in maternity to accommodate her.

Sotomela was then admitted but died two days later, on March 14, at the hospital. She will be buried on March 23.

Provincial health spokesperson Sizwe Kupelo told The New Age yesterday that all hospitals across the province were overwhelmed with increasing numbers of sick people.

He said this was the main reason for a lack of beds in some hospitals.

"It is difficult when a doctor discharges a patient to allocate room for another.

"If families are not happy with how their relatives were treated they can lodge a complaint on 08000 32364," Kupelo said.

provinces@thenewage.co.za

## Case B2



Navigation



The South African Health News Service



You are here: [Home](#) > [OurHealth](#) > Poor conditions violate patients' human rights

# Poor conditions violate patients' human rights

by **Health-E News** on February 21, 2013 in **OurHealth**

**LUSIKISIKI. ' Community members, health care staff and activists from this Eastern Cape village were up in arms about the poor conditions at the local Village Clinic.**

The original clinic was closed down last year because the provincial Department of Health failed to pay rent for the property. A makeshift clinic has been opened in a cargo container at a nearby site but lacks even the most basic facilities such as ablution and running water.

"I don't like it. The clinic is in shambles and people have to stand in queues outside these tents waiting for consultations – there is no privacy, no toilets and no water," said a local community member, Mrs Mfolozi from the Hombe location who has been taking her granddaughter to the clinic for epilepsy treatment for the past eight years.

Not just patients are affected by the poor conditions at the clinic and health care staff are becoming fed up too. "I can only vaccinate 10 children a day because we do not have a refrigerator (vaccinations need to be stored below a certain temperature)," said a professional nurse at the Village Clinic who prefers to remain anonymous. "Consulting patients in these tents are stressful. It seems the Department of Health does not care about people's wellbeing."

Storage of medication is also a problem at the facilities and health care staff were dispensing more than a month's supply of antiretroviral medication to make space in their cupboards for the arrival of a new shipment of medication.

Sthembiso Mabasa working at the TB Care Association at the site said: "This is a violation of human rights and people are not supposed to be consulted under these bad conditions."

Activists are planning a "sit in" at the sub-district health offices if the Department of Health does not provide a speedy solution.

Tandeka Vinjwa-Hlongwane is an OurHealth Citizen Journalist reporting from Lusikisiki in the OR Tambo health district in the Eastern Cape

Source: SOWETAN

Date: 26-Jun-2014

Topic: 10

Ref No: 1499



1



ID: 04277316-01

Source Page: 11

# Healthcare in paralysis

## PREMIER TO ACT ON HOSPITALS

**Sibongile Mashaba**  
Mpumalanga Correspondent

**LACK of life-saving equipment, proper operating theatre tables, enough space to accommodate patients, leaking roofs, dysfunctional boilers and ageing infrastructure.**

This is the sorry state of hospitals in Mpumalanga.

Even premier David Mabuza admitted after a meeting with chief executives from the province's 33 hospitals on Monday that the situation was "extremely bad". They met Mabuza in a bid to find solutions to the ailing health system.

The chief executives said all the hospitals had infrastructure problems.

"Indeed, it is bad. We cannot always be regarded as a bad province when it comes to health matters," said Mabuza. "There should be progress in the people's lives, otherwise, if we cannot work we must simply just go to the graves."

Mabuza said the chief executives also highlighted that, in some instances, employees' compensation had been

exhausted due to staff shortages that led to continuous overtime work. Some of the problems highlighted include lack of transport for patients who were referred to other hospitals for specialist treatment.

In some hospitals, budgets were not enough for operation and grocery suppliers, for example, could not be paid.

Mabuza promised to rework the entire budget structures and intervene with immediate effect in terms of infrastructure.

"We will work on some certain powers which we think

should be delegated to the chief executives. However, they must not abuse them.

"We want to ensure that they get certain delegations and they must be able to handle the finances."

Last year, Sowetan reported that patients were forced to sleep in the corridors at Rob Ferreira Hospital in Mbombela. Another article highlighted food shortages at Embhuleni Hospital in Manzana, formerly Badplaas.

Visitors were allegedly told to bring food for patients "or take them [patients] home".

At the weekend, Mabuza announced that the provincial health department had been placed under curatorship with immediate effect due to the "collapsing health system".

Last year, he ordered that a team of experts be dispatched to the department to help with financial operations.

A probe by the SA Human Rights Commission revealed that the department violated patients' rights to health access and right to dignity.

The commission is monitoring hospitals in the province. ■ [mashabas@sowetan.co.za](mailto:mashabas@sowetan.co.za)





You are here: [Home](#) > [Health Management](#) > [HIV - Antiretrovirals \(ARVs\)](#) > [Human Resources](#) > [OurHealth](#) > Patients protest poor service at Daveyton clinic after man dies in queue

## Patients protest poor service at Daveyton clinic after man dies in queue

by **Sibongile Nkosi** and **James Thabo Molelekwa**. on July 25, 2014 in [Health Management](#), [HIV – Antiretrovirals \(ARVs\)](#), [Human Resources](#), [OurHealth](#)

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The clinic also experiences **shortages of treatment**, especially antiretrovirals (ARV).

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Busi Nhlapho, is HIV positive and currently on ARVs to help ensure her unborn baby will be **born HIV negative**. She says she is often given a week's supply of treatment.

Typically, patients should be given at least one month of treatment at time.

"ARV shortages are a norm here," she said. "We are often given a treatment which only lasts for a week, and are told to come back and fill up."

Nhlapho also receives **antenatal care** at the clinic and added that nurses only see up to 30 expecting mothers a day.

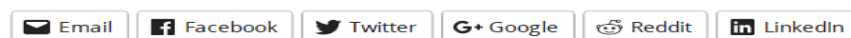
"You have to arrive at the clinic at least half past five so that when registration starts at 7:30 am, you can make...the 30 people that they will serve," she said. "Registration only happens for 30 minutes and if you didn't make it to the list by 8:00 am, you know you have to come back the following day."

Ekurhuleni Health District representative Mthuthuzeli Sboza arrived four hours after the start of the protest to receive a memorandum from the AIDS lobby group.

The Gauteng Department of Health had not returned requests for comment at the time of going to print.

Additional reporting by citizen journalist Thabo Molelekwa

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You are here: [Home](#) > [News](#) > [Public Health & Health Systems](#) > [Hospital strike spreads in Free State](#)

## Hospital strike spreads in Free State

by **Bontle Motsoeneng** on [September 19, 2016](#) in [News](#), [Public Health & Health Systems](#)

A week after workers at the Monapo Hospital in Phuthaditjhaba, in Qwa Qwa in the Free State began their strike, healthworkers at other hospitals are joining the action – in a crisis that is set to bring the healthcare sector in the province to its knees.



Striking workers outside the Monapo Hospital.

Unpaid overtime seems to be the main spark for the strike by healthworkers in the Free State that has spread from **Monapo Hospital** to others in the Free State.

“We are receiving reports of entire hospitals being shut down, patients being turned away from full and overcrowded facilities, maternity wards filled with women on floors, shut down in overfull casualty and trauma units. The situation is untenable and must be addressed as an emergency,” the Treatment Action Campaign and SECTION27 stated, after first hearing of

the growing crisis.

By late Friday tensions had eased and an uneasy truce was underway. Night shift workers agreed to go back to work that same day, and an agreement was reached that saw the strike action lifted for the weekend.

### Threat of continued strike

But the unions have said that if the Free State’s MEC for Health, Dr **Benny Malakoane**, does not meet with them to negotiate a satisfactory solution to their demands very soon, the strike will continue again.

The difficulties began when most staff at Monapo Hospital embarked on a strike last Monday co-ordinated by the National Health, Education and Allied Workers Union (**Nehawu**), and has continued ever since. Critically ill patients had to quickly be transferred to other hospitals.

Tsoleli Mosikili, head of communication for Monapo Hospital, said there were several reasons for the strike action. These included the fact that kitchen and security staff were insourced, there was a general staff shortage and staff were not paid for overtime worked, with nurses and doctors who have worked up to 16 hours on a shift only being paid for 10 hours. There were also complaints against the appointment of Buthelezi Ambulances which are suspected to have been acquired irregularly.

### Tensions over overtime unresolved

Complaints of overtime payments for hospital staff have been an ongoing problem at many government hospitals for over a year.

Recently the Free State Health MEC, Dr Malakoane, said in a public statement that he would cut overtime by a third – yet ongoing tensions suggest this has not been resolved. Many doctors in the Free State have worked more than 80 hours of overtime each month this year. Yet because this was not approved, they have not been paid for the time worked.

Nehawu is also demanding that more fulltime staff to be permanently appointed at Monapo, and that money used for mobile toilets at the hospital is instead be used to pay staff. The temporary toilets have been stationed at the hospital because ongoing drought conditions in QwaQwa mean that there is no water, and so toilets in the hospital are not working.

### Staff shortages lead to crisis situation

Only about 30 percent of Monapo Hospital staff have been working – only the staff who are not members of Nehawu, and all those on leave have been called back to help with the crisis situation.

Patients at Monapo Hospital were battling as they were not receiving enough food as kitchen staff had joined the strike.

“It’s a sad situation. Our lives depend on nurses and now there are no nurses around to help us, we don’t know what to expect next,” said one patient.

"We do have a shortage of staff," Mosikili said, explaining that these were due to issues like staff being transferred to other hospitals, some going on pension and some dying.

Mosikili said the hospital was anxious to see all the challenges raised by the union resolved, and called on staff to return to work while negotiations continued.

All emergencies were being redirected to the already overcrowded **Dihlabeng Hospital** in Bethlehem, more than 50 kilometers away.

## NO staff available to transfer patients

*"It's a sad situation. Our lives depend on nurses and now there are no nurses around to help us, we don't know what to expect next." – patient*

Sibongile Mtinkulu, CEO of Manapo Hospital, said there were currently no nurses, no cleaners and no porters available to transport patients. No emergencies could be handled, the hospital was dirty and about 70% of staff had failed to report for duty, she said. This was despite a request by health officials for staff to report to work.

Nehawu regional secretary Maurice Mopeli said workers would continue striking until their demands were adequately met.

Their action has since stepped up, with other QwaQwa hospitals now also going on strike.

"We are receiving reports of entire hospitals being shut down, patients being turned away from full and overcrowded facilities, maternity wards filled with women on floors, shut down in overfull casualty and trauma units. The situation is untenable and must be addressed as an emergency," claimed a joint statement sent out by the Treatment Action Campaign (TAC) and social justice organisation SECTION 27.

## Surrounding hospitals struggle with extra patients

By late last week Dihlabeng Hospital was almost full, the maternity wards were over capacity and women were lying across the floors. The casualty and trauma unit was unable to respond to at least one road accident due to lack of capacity as nurses were in discussions about striking.

Monapo's district hospitals – Thebe Hospital and EL Ross Hospital – are both over-full. Thebe Hospital reported being unable to accept any caesarians due to no theatre lights and too few doctors on call to operate. More beds were having to be made for patients on the floor.

At Reitz Hospital, only the maternity and emergency wards were open, meaning that the spreading dysfunction was impacting on the Reitz catchment area and the functioning of Bethlehem Hospital.

Specialists at Bongani Hospital were reportedly also threatening to resign and nurses were in discussions to decide about imminent strike action and the hospital clinic was shut down.

## Calls for President Zuma to intervene

"We have no faith in the provincial department to address this emergency adequately or rapidly. We demand urgent intervention by President Jacob Zuma and Premier Ace Magashule to fix the Free State health system, to pay people for outstanding overtime, and to fire the Health MEC," said the TAC.

"In the upcoming weeks TAC and SECTION27 will engage in a fact finding mission in the province. We will be mobilising communities affected by these crises, collecting testimonies, and visiting affected facilities. All evidence will be shared publicly with the media," the organisations said.

In the meantime, the crisis situation rages on, and the worries of those most in need of healthcare deepen. – Health-e News.

An edited version of this story first appeared on the **Daily Maverick**

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### About Bontle Motsoeneng

Bontle Motsoeneng is an OurHealth Citizen Journalist reporting from the Free State's Thabo Mofutsanyane Health District.  
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# Appendix C

## Case C1

SA Media - The University of the Free State

Page: 1

Source: CAPE ARGUS

Date: 19-Mar-2010

Topic: 10

Ref No: 1305



1

ID: 03824708-01 Source Page: 7

# Teen hangs herself 'after row at TB clinic'

## Department to investigate

**SIPOKAZI MAPOSA**  
Health Writer



*SMS the Argus*

SMS your views to 32027  
Each SMS cost R1

PROVINCIAL health authorities say they are investigating allegations that a nursing sister in Mbekweni, Paarl, refused treatment to a teenager with multidrug-resistant tuberculosis because she had missed her clinic appointment by three days.

The family of 15-year-old Joy Skrish allege that the teenager committed suicide last week following a confrontation with the Polar Park Clinic nurse.

Joy was a Grade 9 pupil at Hlumelo Junior Secondary School.

According to the family, when the teenager arrived at the clinic on Monday last week, the nurse got so angry with her that she threw her sputum into the rubbish bin, then threatened to disclose the girl's MDR-TB status to her school.

Joy had been supposed to deliver the sputum the previous Friday.

The family said the nurse also refused to give the girl her daily tablets.

Jo-Anne Otto, spokeswoman for the Department of Health in the Winelands region, denied that Skrish was refused treatment. She confirmed that the 15-year-old was an MDR patient.

She said the nurse was still working at the clinic and had not been suspended.

"The department and its personnel would not refuse to provide health care, treatment or medication to any member of the public requiring it.

"The allegations against the nurse are seen in a very serious light, however. She has not been suspended, but the matter is being investigated," Otto said, offering the department's condolences to the family.

Mbekweni police spokesman Captain Flip Linnert said police were investigating a case of suicide.

Meanwhile, the alleged incident has drawn heavy criticism from the Treatment Action Campaign (TAC).

TAC Western Cape co-ordinator Fredaline Booysen described the incident as "unfortunate", especially given the fact that it was happening during TB Month, designed to high-

light the plight of patients battling the disease.

"The healthworkers are suppose to work together with TB patients and be there for them. Yet you've got healthworkers who have such a bad attitude that they drive their patients into situations where they end up killing themselves. That is so sad and unacceptable," she said.

Lulama Skrish, Joy's mother, said her daughter was so upset with the treatment she received from the nurse that she returned home in tears, and vowed never to return to the clinic.

Then, three days later, Skrish said she got a call from the nurse asking where her daughter was, and why she was no longer collecting her treatment.

"I then asked her why she threw Joy's sputum in the bin and refused her treatment? She told me she did so because she felt like it, and that it was because Joy had brought her sputum very late.

"She then told me that she would go to Joy's school and blacklist her from going to the school again by disclosing to everyone that she was an MDR patient, and she must not be allowed to be with other pupils as she would give them TB. She also told me that she would book Joy in a TB hospital very far away from us where we couldn't have access to her," she said.

Skrish then convinced her daughter to return to the clinic with a new sputum sample. But, again the girl returned home in tears.

"The only thing she told me this time was that she would rather not go back to school ever again than be treated badly by that nurse.

"She then went into one of the bedrooms and slammed the door behind her."

Her mother went to check on her later, only to find Joy dead. She had hanged herself with a rope in the bathroom.

sipokazi.maposa@inl.co.za



Source: DIAMOND FIELDS ADVERTISER Date: 30-Dec-2010

Topic: 10

Ref No: 6752



1

ID: 03923652-01 Source Page: 2

# 'They let my son die'

SARAH EVANS  
STAFF REPORTER

ERIC de Wee died of an Aids-related illness in the Kimberley Hospital's M2 ward less than an hour after he was given the go-ahead to start anti-retroviral (ARVs) treatment. He waited seven months for this news, but by then it was too late.

The 43-year-old man was diagnosed with tuberculosis (TB) approximately seven months ago and after completing a treatment course, it was discovered that he had Aids.

Eric was advised to start counselling so that he could be given the ARVs. He underwent three rounds of therapy before he was considered eligible for the treatment.

Eric's father, Isaac de Wee, has now come forward to tell the story of Eric's last months after reading the story published in the DFA which details allegations of gross understaffing over the festive season in the ward where Eric died.

At the time Eric was diagnosed, he had just moved from Johannesburg to Kimberley and was living with his sister.

"One day she (Eric's sister) called me and said that he's in the ambulance on his way to the Kimberley Hospital," Isaac said.

This was around the time that De Wee learnt that his son was suffering from Aids.

"I gave the nurses my contact number and told them to call me at any time. They called a week later to say that I could come and fetch him.

"Eric told me that the treatment he received in the hospital was very bad. At this stage, he was weak but he could still wash himself."

After being released from the hospital, Eric went to the clinic for a check-up and was told that they

needed to do more blood tests. He asked to be given ARVs but was told that he needed to go for more counselling.

"He asked the nurses, 'Must I die before you give me ARVs?' " Isaac said. The nurses apparently laughed at Eric.

However, Eric went for more counselling because his condition was deteriorating. Frustrated by the fact that he was not receiving treatment and was now wheelchair-bound, Eric went to a new doctor who suspected that the TB had returned.

During that first consultation, the doctor wanted Eric to have X-rays done as a matter of urgency and called an ambulance to take him to hospital. The ambulance never arrived.

De Wee said he took Eric to the hospital in his own car that day and personally pushed his son up to the radiology department.

Three days later, on a Monday, Isaac noticed that Eric's condition had deteriorated even further.

"That Monday I prayed to God. I prayed to God to help me," De Wee said. "I took him to the clinic and left him in the car while I went to call a nurse. Eric was too weak to get out of the car so a nurse came to him and asked him to spit in a cup. They said they would know if it was TB in two week's time."

Eric did not live long enough to learn the outcome of the tests.

That day, a health-care worker came to see Eric as part of her routine home visits. When she saw his condition, she contacted the clinic and two nurses were sent to the De Wees' home. They called an ambulance which took him back to the Kimberley Hospital.

While Eric was being admitted,

the hospital staff asked Isaac where the X-rays were. He told them that he left the file with the nurse who took the X-rays.

"To this day I don't know what happened to that file."

After Eric was admitted, a doctor drained fluid from his lungs. By now Eric was unable to eat or drink anything.

Isaac noticed only two nurses working in the ward. There are currently 42 patients in the ward, which caters for patients suffering from Aids, TB and meningitis. At times, over the festive season, there were apparently only two or three nurses on duty in the ward and some of these nurses are often not qualified to administer medication.

When Isaac went to see Eric on Tuesday, he noticed blood on his lips and teeth. "I also saw sores all over his mouth."

Isaac told a nurse about the sores. She allegedly responded and said: "How must I know what's wrong with him if he doesn't tell me?"

Eric then said he needed to relieve himself and Isaac asked a nurse to bring a bedpan. The nurse apparently said that she didn't know where to find one.

Isaac and his daughter then searched the ward for something for Eric to use. When they returned with an empty bottle, Eric had relieved himself in the bed.

The other patients then began complaining about the incident, saying that they were not being properly cared for.

The nurses then apparently called security guards to remove Isaac and his daughter while a sister cleaned Eric. The security guards refused to remove Isaac and his daughter.

Eric died at 11.45am on Wednesday.

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day, December 7. At 11am, just 45 minutes earlier, a sister from the clinic called Isaac and said: "We have the pills (ARVs) for him now."

"I told them that it was too late," Isaac said.

Isaac is considering legal action against the Department of Health.

"Everything they said about the M2 ward is true. I'm talking the gospel truth here and I'm not scared to talk about it."

A spokesman for the Northern Cape Department of Health, Dr Ferdinand Booysens, said the "institution" was experiencing staff shortages but that the staff did all they could to care for the patients.

"A 43-year-old male patient was admitted in Ward M2 on November 30 2010 as a readmission within a short space of time.

"He was managed for the condition he was admitted for. The appropriate measures necessary for his day-to-day care were put in place. He died peacefully on December 7 while still in the ward.

"The institution is experiencing a shortage of nursing personnel just like all other institutions in the country. Despite this, staff members in the ward are doing everything within their power to care for all patients in their unit," he said.

Back at Isaac's Collville home he points to three houses in his neighbourhood.

"There's an old man dying of Aids at the back there. There's another lady who has Aids and there's a man down there."

He points to a different house. "Seven people living in that house have already died of Aids.

"How do I feel? I can't even begin to explain how I feel. It's like, you see him now and now you see him no more... it's my son."

## THE DEPARTMENT'S RESPONSE ...

THE Northern Cape Department of Health issued a detailed response to Eric's story yesterday, citing the reasons why he was not given ARV treatment:

"The department sympathises with the De Wee family on the loss of their son due to Aids. It is clear that the family is grappling with their loss, and is seeking to blame people and circumstances for Eric's death that has no scientific basis."

According to Dr Lizaan Koning at Kimberley Hospital, a month prior to his death Eric's CD4 count was only three.

"The CD4 count is used to measure the severity of HIV/Aids. A person without HIV will have a CD4 count of more than 750. A person with HIV will be considered for ARV treatment if the CD4 count drops to below 200.

"ARV treatment is never given as emergency treatment and can cause serious side-effects and even death if given to patients before proper investigation and stabilisation of other concurrent diseases like TB.

"Eric's disease was so advanced

that the initiation of ARV treatment would not have saved his life. In fact, if it was given in the presence of untreated TB, it could have actually contributed to his death.

"The staffing at Kimberley Hospital Complex (KHC) over the festive period is not less than any other time of the year. In fact, we have extra staff on standby, and have contingency plans in place should a disaster situation develop.

"Our staff is committed to their patients and work long hours away from their families to ensure that

the community receives the best possible care.

"It is unfortunate that the De Wee family did not bring their concerns to the management of Kimberley Hospital while Eric was still alive. We encourage our clients to follow the internal complaints procedure immediately when an incident arises, so that it can be investigated, and resolved.

"We pride ourselves in the fact that all complaints are immediately acted upon, and resolved within seven days."





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## Patients protest poor service at Daveyton clinic after man dies in queue

by [Sibongile Nkosi](#) and [James Thabo Molelekwa](#), on [July 25, 2014](#) in [Health Management](#), [HIV – Antiretrovirals \(ARVs\)](#), [Human Resources](#), [OurHealth](#)

About 100 protestors took to the streets yesterday to demand the expansion of Daveyton Main Clinic and an end to recurring HIV drug stock outs. The protest is the second in two years.



Collen Mathe once arrived at clinic at 7 pm suffering from stomach ulcers. While he queued, he watched a man die while waiting in line.

The picket was the latest organised by the [Treatment Action Campaign \(TAC\)](#). Following a 2013 protest former MEC for Health Hope Papo vowed to expand the small 24-hour clinic, which serves five heavily populated wards surrounding the East Rand township, according to TAC District Organiser Portia Serote.

Patients complain of health workers' poor attitudes and that a shortage of space means they are often left queuing outside.

"It is sad that patients stand in long queues outside the clinic when they come to collect their medication," [TAC Gauteng Chairperson Sbongile Tshabalala told OurHealth](#). "Regardless of weather conditions, they have to stand outside for long hours only to be served by staff with bad attitudes."

Collen Mathe once arrived at the clinic at 7 pm suffering from stomach ulcers. While he queued, he watched a man die while waiting in line.

"I couldn't believe my eyes when it happened," he said. "I still think that man could have been saved if the staff was more attentive and there were more nurses on duty."

The clinic also experiences shortages of treatment, especially antiretrovirals (ARV).

*"I still think that man could have been saved if the staff was more attentive and there were more nurses on duty."*

Busi Nhlapho, is HIV positive and currently on ARVs to help ensure her unborn baby will be born HIV negative. She says she is often given a week's supply of treatment.

Typically, patients should be given at least one month of treatment at a time.

"ARV shortages are a norm here," she said. "We are often given a treatment which only lasts for a week, and are told to come back and fill up."

Nhlapho also receives [antenatal care](#) at the clinic and added that nurses only see up to 30 expecting mothers a day.

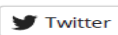
"You have to arrive at the clinic at least half past five so that when registration starts at 7:30 am, you can make... the 30 people that they will serve," she said. "Registration only happens for 30 minutes and if you didn't make it to the list by 8:00 am, you know you have to come back the following day."

Ekurhuleni Health District representative Mthuthuzeli Sboza arrived four hours after the start of the protest to receive a memorandum from the AIDS lobby group.

The Gauteng Department of Health had not returned requests for comment at the time of going to print.

Additional reporting by citizen journalist Thabo Molelekwa

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## An agonising choice: go deaf or die!

by James Thabo Molelekwa. on September 16, 2016 in [News](#), [OurHealth](#), [Public Health & Health Systems](#)

Like other Multi Drug Resistant TB patients, Linah Choene (23) faced a terrible decision: either give up her treatment and die, or continue with it and go deaf.

Two years later, Linah has lost more than just her hearing. She has lost her education, her ability to communicate normally, her friends, radio and TV ... In fact, her life as she knew it.

In 2014 Linah was diagnosed with MDR TB and was initiated on treatment in May that same year. According to Linah, when diagnosed she was never counselled. She was never given a consent form before taking the treatment, and she was not warned of the effects. And so she went ahead without knowing that it would cause the loss of her hearing.



Linah Choene, who has lost her hearing because of the MDR tuberculosis treatment she was on, is now forced to write messages down when she wants to communicate with her mother Martha.

"I was shocked to find out that when a person is initiated on treatment they must fill in and sign certain forms."

She said that she was admitted to hospital at one stage, but her complaints were not addressed.

"I told the hospital that I am starting to lose my hearing. But they said there is no other treatment they can give me."

### No choice

Linah told Health-e News that while she was at Carletonville Hospital, the staff appeared not to care about her condition and continued injecting her everyday.

"My mother used to come to the hospital to change and bath me, then give me food," Linah said, explaining that staff would tell her she was a burden.

According to Linah, when the hospital realised she was deaf, she was told she could go to a school for the deaf where she could learn sign language and finish high school. But this never happened, and she remains at home, her schooling unfinished.

"It feels so painful, and I am always crying when I see other children in their school uniforms going to school," said Linah, adding that she dreamed of finishing grade 12 and having a career.

### Writing in a diary

Sitting outside her purple brick home, she now writes in a diary as her way of communicating with her family. She spends her whole day with her mother – the one person who seems to understand her better than any other. She watches TV programmes with subtitles.

"I can do other things like cooking and laundry, my only problem is ears."

Martha Choene, Linah's mother, said it has become extremely difficult to communicate with her daughter.

"When we talk to her we write down using a phone or her diary."

*When we talk to her we write down using a phone or her diary.*

She told Health-e News that when Linah began her treatment she started to complain about headaches and itchy eyes. Doctors told her Linah's body needed to get used to the injections and that she would be fine.

But Linah wasn't fine, and Martha ended up leaving her job painting RDP houses to take care of her daughter after she lost hearing.

### Living on social grants



"We are a family of seven and survive on social grants for three children."

Martha remains traumatised by the advice one nurse gave her two years ago – to feed Linah rat poison and in that way get rid of her burden.

"All I want is to see my child living a normal life. I will accept any help that can be provided for her," she said.

According to Dr Francesca Conradie Clinical Research Advisor at Department of Medicine in University of Witwatersrand, **MDR consists of five medications**, one of which is the kanamycin injection.

"Kanamycin is one of our core drugs to treat MDR and it can make patients go deaf," said Conradie. "We doctors hate making patients go deaf. It is not something we do lightly, but until recently we had no choice. It's either you go deaf or you die."

## Hearing loss

Conradie said that now when they pick up that the patient is starting to lose hearing due to Kanamycin, they are able to substitute it with Bedaquiline, a new medication registered in October 2013. She told health-e News that all patients diagnosed with MDR start on the standard treatment.

"We measure their hearing every two to four weeks, depending on which facility they are in. If we see signs of hearing loss, we immediately change."

She added that there are currently about 2 800 patients in South Africa who are getting **Bedaquiline**.

## Hard to cure

According to a report released by Doctors Without Borders in 2015, MDR-TB is very hard to cure, and treatment lasts two years. Patients take up to 14,600 pills and have hundreds of injections. The treatment is successful in only 50% of cases, with severe side effects.

Dr Maureen Kamene, deputy head of the National TB, Leprosy and Lung Disease Programme of Kenya said recent drug resistance surveys indicate that the cases in Africa are higher than previously estimated, and added that if **TB goes untreated** it can cause serious complications.

"The patient with MDR TB will get complications such as heart failure, fluid in the chest or pleural effusion, breathing difficulties and eventually die," said Kamene.

"Worse still, the patient will transmit disease to close family and friends, increasing the cost of treatment and diagnosis as more people now require treatment."

**The Department of Health has meanwhile denied the allegations made by Linah and her mother.**

## Sign language

"During her stay at the hospital, she responded well to treatment. She returned to hospital on 3 July complaining of hearing loss. Treatment was immediately stopped," said Steve Mabona, spokesperson for the Department.

He said Linah had never been promised a place at a sign language school.

"Please note that the patient signed the refusal of hospital treatment form prior to the hospital being given the opportunity to address the complication of her hearing loss."

An edited version of this story appeared in **The Star**.

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### About James Thabo Molelekwa.

James Thabo Molelekwa is a Health-e News citizen journalist and intern. He is also a 2016 International Centre for Journalists HIV Prevention Reporting Fellow. You can follow him on @molelekwa98

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