FACTORS INFLUENCING THE FINANCING OF SOUTH AFRICA'S NATIONAL HEALTH INSURANCE

by

SHENAAZ GANI

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SUPERVISOR: PROF J M P VENTER

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Declaration

I declare that FINANCING NATIONAL HEALTH INSURANCE IN SOUTH AFRICA is my
own work and that all the sources that I have used or quoted have been indicated and
acknowledged by means of complete references.

Signature:	Ms S. Gani
Student number:	3175-852-5
Date:	

Acknowledgements

In the name of Allah, Most Gracious, Most Merciful

First and foremost all recognition and thanks go to my Lord who is the reason for all and everything I have ever achieved, or not achieved. Both my successes and my failures are according to his divine will and I embrace both, in the knowledge that both success and failure are necessary for eternal success.

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Abstract

With the advent of the new National Health Act, health care in South Africa is at a critical point as this will be the first time in history that a National Health Insurance is being implemented in this country. Globally National Health Insurance has been around for more than a hundred years, however some countries with long established national health schemes are currently grappling with funding issues surrounding their health systems. South Africa should take note of these issues as it embarks on this journey.

The objective of this study was to perform a literature review on how South Africa's National Health Insurance can be funded taking cognisance of the history of the country and experiences of other countries.

It is imperative for each country to achieve optimal health care funding to ensure the success and long-term sustainability of National Health Insurance. The analysis of the problems experienced by other countries revealed that balancing the three main funding options namely, allocated from the national revenue fund, user charges and or donations or grants from international organisations, is critical as the funds needed in a system to achieve coverage at an affordable cost is dependent on the current state of health care in a country. Considering South Africa's history and current inequality in society and health care it is clear that the majority of funding for the National Health Insurance should be supplied by the national revenue fund. The required funds can either be raised by increasing existing taxes or introducing a new tax specifically aimed at financing the National Health Insurance. The use of user charges is important however, although not purely for a revenue collection point, but from a cost control point of view as well. Some studies have revealed that the lack of user charges results in a misuse of the system.

Key Terms

National Health Insurance; millennium development goals; universal coverage; World Health Organization; apartheid; South Africa; poverty; health system; sustainability.

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List of abbreviations and acronyms

AIDS Acquired Immune Deficiency Syndrome

ANC African National Congress

BRICS Brazil-Russia-India-China-South Africa

DOH Department of Health in South Africa

GDP Gross Domestic Product

GNI Gross National Income

ISDR International Strategy for Disaster Reduction

MDG Millennium Development Goals

ODA Official Development Assistance

OECD Organisation for Economic Co-operation and Development

SARS South African Revenue Services

StatsSA Statistics South Africa

TB Tuberculosis

UN United Nations

UNICEF United Nations Children's Fund

USAID United States Aid

WHO World Health Organization

UNDP United Nations Development Programme

Our lives are not determined by what happens to us but by how we react to what happens, not by what life brings to us, but by the attitude we bring to life. A positive attitude causes a chain reaction of positive thoughts, events, and outcomes. It is a catalyst, a spark that creates extraordinary results – Anon. (Quoteland.com, 2014)

CHAPTER 1 INTRODUCTION

1.1. BACKGROUND TO THE STUDY

Building an effective and affordable national health system is a major preoccupation of governments around the world as they attempt to bring together ... the necessary components that are needed to improve health status and provide accessible and responsive services to the needs of individuals, families and communities. (Goodwin, 2008:393)

South Africa is once again on the brink of change with the implementation of the National Health Insurance. This project holds many challenges but has potential for positive social implications. If carried out successfully, the 69.9 percent of South Africans who are dependent on public health stand to benefit (Statistics South Africa, 2013b). Recent international experience has indicated that developing a sustainable financing model for a national health system is complex but critical (De la Rosa & Scheil-Adlung, 2007; World Health Organization, 2013). Factors such as an above-inflation increase in medical cost, scarce resources, and technologically advanced equipment all have an impact on the sustainability of any national health system.

This introductory chapter contextualises the study by firstly outlining the research background, rationale, problem statement and guiding research question for the study. In addition, the chapter provides an overview of the research objectives and research design as well as the research methodology and data collection methods. Finally, the limitations of this study are presented as well as a brief synopsis of the following chapters.

In order to have an effective financing system we need to have the cost required to fund such a system and this study is aimed at providing insight into the optimal balance for the financing of a National Health Insurance, based on international evidence. The research began by presenting a theoretical framework for the financing of National Health Insurance and discussing the various financing options available for funding the required cost of National Health Insurance. The research then focused on gathering information from countries that are currently operating or introducing national health systems. Their experience was analysed in order to identify specific areas that should receive attention when developing and implementing a National Health Insurance system for South Africa.

For any of these analyses to be of value, an overview of historical developments of the South African health care system was required in order to consider the successes and failures within the South African context. This information could provide the South African Department of Health with valuable information to ensure universal coverage (Engelbrecht & Crisp, 2010). According to Tanner (2008), important lessons can be drawn from reviewing and analysing the data and problems experienced in other countries.

When considering the implementation of a National Health Insurance, two important components must be kept in mind: firstly, the funds required to, enable the services to be delivered, and secondly, the cost that must be incurred to provide the services.

There are two principal functions to financing: (1) revenue collection, the process by which a national health system receives money, and (2) pooling resources, the process by which this revenue is managed to ensure that individual contributors are not exposed to the high costs of having to pay for health care. (Carrin, Buse, Heggenhougen & Quah, 2010, p. 394)

Goodwin (2008) further clarifies that "National Health systems are often defined by their dominant revenue collection", and there are many different forms of revenue collection, including taxation, social health insurance, out-of-pocket payments, loans, grants and donations. In South Africa, the National Treasury is responsible for managing government finances (South Africa Info, 2012). This includes introducing legislation to collect taxes and levies as well as the allocation of revenue to different government departments for spending on budget items. At the first phase of implementation in 2011/2012 it was stated that the majority of funds required to fund National Health Insurance would be allocated to the Department of Health from the national revenue fund. In certain funding models a portion of the required funds are also collected in the form of user charges (so-called payas-you-go) or donations or grants from international organisations (refer to Figure 1.1 below).



Figure 1.1: Model for the financing of health care

Source: Own.

As can be seen from Figure 1.1, the first part of the equation deals with the funds required to fund the National Health Insurance, and a brief overview will be given and more detail will be provided later in the study. The first option is funding from National Revenue, with funds that are generated by way of various forms of taxation and levies. These funds are pooled into a general fund, and it is the decision of the government as to how these funds will be allocated across the various sectors of government in order to provide services to its citizens.

The new National Health Insurance will increase expenditure required by the Department of Health and thus place additional strain on the revenue collected if option one is selected. The second option to fund the National Health Insurance is the introduction of user charges. In this situation, the users pay for the services they use. The third insignificant form of funding in the global economy would be loans, grants and donations. Reliance on this form of funding is decreasing owing to the global economic crisis that has placed all nations under strain, thereby limiting the funding available to provide as loans, grants or donations. This component of financing is further complicated in that foreign donations would normally carry conditions and domestic donations would have an opportunity cost attached. Loans by their very nature impose a burden for future generations in that they would have to be paid back and many attract interest, which only increases the debt problem in countries that are already over indebted.

It is also necessary to understand the reality of donations and grants: they can be stopped at any time, if for instance the conditions for qualification are no longer met, and in countries where there has been heavy reliance on this form of funding, the sustainability of health becomes questionable.

The second half of the equation is the cost of providing services under the National Health Insurance. Internationally the high and rising cost of providing medical services and procedures as well as overspending on medical services have been identified as key elements that need to be controlled (Mossialos, Dixon, Figueras & Kutzin, 2002). The cost required to fund the system needs to be in place and this deals with the second half of the equation, which is primarily the management of the funds allocated. It is important to bear in mind that inefficiencies in the system lead to an increase in cost, which in turn requires additional funding. Costing issues will also be discussed in this dissertation.

1.2. HEALTH CARE IN SOUTH AFRICA: PROFILE, HISTORY, AND HEALTH STATISTICS

The World Health Report 2010 was commissioned in response to a need, "expressed by rich and poor countries alike, for practical guidance on ways to finance health care". In 2005 member states of the World Health Organisation committed themselves to "developing their health systems so that all people would have access to services and [did] not suffer financial hardship paying for them". This goal was defined as universal health coverage (World Health Organization, 2010a).

Three fundamental, interrelated problems have been identified: (1) the availability of resources; (2) overreliance on direct payment at the time people need care; and (3) the inefficient and inequitable use of resources.

According to the 2010 World Health Report (World Health Organization, 2010a), low-income countries currently spend approximately US \$32 per capita, considerably less than the US \$60 per capita required to reach the Health Millennium Development Goals by 2015. More recently, according to the 2012 World Bank Statistics, low-income countries spent approximately US \$31 per capita, which indicates a decrease in spending by low-income countries (World Bank, 2012).

It is interesting to note that South Africa spends US \$645 per capita (World Bank, 2012), which means that South Africa is spending far in excess of what the WHO is recommending for low-income countries; yet, we are still not achieving universal coverage.

Despite not having a National Health Insurance, South Africa currently spends 8.8 percent of its GDP on health, significantly more than any other African country (World Bank, 2012). In terms of international standards, South Africa also compares well with countries such as Spain (9.6%) and Japan (10.1%) (World Bank, 2012). Despite this level of spending in South Africa, it does not translate into a health system that meets the needs of the population.

1.2.1. The history of the South African National Health Fund

Prior to the 1994 democratic elections, South African history was characterised by discrimination; consequently, South Africa's health system was biased and fragmented. In 1994 the Healthcare Finance Committee put forward recommendations for a social health

insurance. The main challenge at that stage was the inability of government to finance the proposed health insurance.

In 1995 the Committee of Inquiry followed the Healthcare Finance Committee and supported the recommendations, putting forward a strong case for primary health care services. The framework of the Medical Schemes Act of 1998 (Republic of South Africa, 1998) was developed by the 1997 Social Health Insurance Working Group. This act was meant to regulate private health insurance; however, the level of coverage for the national population remained below 16 percent; the conclusion being that South Africa was still at a point where primary health care was not being achieved.

In 2002, Professor Taylor was commissioned to chair the Committee of Inquiry into a comprehensive social security system for South Africa. The Taylor Committee recommended the establishment of a National Health Insurance Fund. The Department of Health therefore established the ministerial task team on Social Health Insurance in 2002 to address the recommendations of the Taylor Committee. In 2004 the National Health Act (Republic of South Africa, 2003) was passed, providing a framework for a single health system for South Africa.

This ministerial task team was mandated to draft a concrete implementation plan for the National Health Insurance; however, owing to disagreements and political delays it was only in 2007 that the ANC passed Resolution 53, the green paper on National Health Insurance in South Africa, which gave life to the establishment of a National Health Insurance (Department of Health, 2011c).

Current state of health care in South Africa

In 2012, South Africa spent 8.8 percent of its GDP on health, which was split as follows: 4.1 percent in the private sector and 4.2 percent in the public sector. The 4.1 percent spent covered 8.2 million people, accounting for 16.2 percent of the population. The remaining 4.2 percent of the budget has to cater for the needs of 83.7 percent of the population, namely 42 million people who rely on public healthcare (World Bank, 2012).

Despite exceeding the spending required on health for a middle-income country, South Africa's health system performs poorly. Based on evidence presented by the *Lancet* series on Health in South Africa (Mayosi, Lawn, van Niekerk, Bradshaw, Karim, Coovadia, & Lancet South Africa team, 2012), it is apparent that this country has made some progress

towards its goals, but that this progress is insufficient or even reversed for many of the health millennium goals (World Bank, 2012).

1.2.2. The introduction of a National Health Insurance Fund for South Africa

In 2011, Government released its green paper on National Health Insurance, setting out the principles and the direction of the proposed reforms. The proposals set out a 14-year transition over three phases. The first phase would last for five years and focus on strengthening the public sector in preparation for the new National Health Insurance Fund, which would be established towards the end of the first five-year phase (National Treasury, 2012a).

The second phase would run from 2016–2020 and focus on the phasing-in of the National Health Insurance. Key features would be the refining and passing of the National Health Insurance Act, building capacity to manage the National Health Insurance, the implementation of a National Health Insurance conditional grant to support the creation of the National Health Insurance Fund and the aligning of the various bodies within government.

Phase three would run from 2021–2025 and would be an extension of phase two, with the key features being the establishment of family health teams, accreditation and contracting of general practitioners and networks, public hospitals quality investigation and accreditation, public hospital infrastructure, private hospital accreditations and management reforms.

1.2.3. Funding of National Health Insurance through revenue

As seen in Figure 1.1, the first aspect that should be considered is how to fund the National Health Insurance. Government has indicated that the National Health Insurance will mainly be funded from general tax revenue (Department of Health, 2011b). New sources of financing such as a payroll tax, a higher value-added tax (VAT) rate or a surcharge on taxable income would be required at phase two and three to fill the funding gap.

According to the 2012 Budget Review, the National Health Insurance green paper favours a single-payer option at the onset of the establishment of the National Health Insurance fund. This view was supported at the National Health Insurance conference held in

December 2011 (Department of Health, 2011d), where it was reiterated that general taxes would remain the primary financing mechanism over the medium term; however, over the long term, new sources of financing would have to be explored to fill the funding gap in order to achieve universal coverage. This finding confirmed the conclusion of the 2010 World Health Report, which stated: "There are two main ways to increase domestic funding for health: one is to allocate more of the existing financial resources to health...; the other is to find new methods to raise funds or to diversify the sources" (World Health Organization, 2010a).

A number of key role players participated in the National Health Insurance conference held in December 2011. The conference, themed "Lessons for South Africa", was organised as part of a strategy by the South African government to consult as many stakeholders as possible on the contents of the Green Paper on National Health Insurance.

Several innovative health financing mechanisms were put forward for raising additional funding. Suggestions made by Dr Robert Fryatt at the conference include a special levy on large and profitable companies, an excise tax on unhealthy foods, a tax levy on currency transactions, mobile phone voluntary contributions, a tourism tax, a tax on bonds sold to nationals living abroad, a financial transactions tax, sin taxes on alcohol and tobacco, and a tax on the sale of franchised products (Fryatt, 2011).

Mr Mark Heywood, another of the guest speakers at the conference, suggested that domestic financing options could include sin taxes on soft drinks, alcohol and cigarettes, a financial transaction tax, Medicines Patent pool and the establishing of a Health Impact Fund.

1.2.4. Funding of National Health Insurance through user charges

A user charge system is a method of cost recovery, which directly addresses the problem of under-funding of government health facilities. (Griffin, 1991 cited in Yisa, Fatiregun & Awolade, 2004)

Governments are responsible for the policy making and planning for their countries' health care systems; however, it is a reality that health-care financing goes beyond government resources.

User charges as a source of funding would have to be considered in the light of the quality of health care as perceived by consumers, the purchasing power of the consumers and the cost of the services provided.

Many studies have been carried out (refer to Chapter 2, section 2.5) to determine the advantages and disadvantages of user charges as a means of financing National Health Insurance funds, but it is now necessary to look critically at user charges as an option for achieving long-term sustainability of National Health Insurance funds.

1.2.5. Cost of National Health Insurance

National Treasury is responsible for managing the national budget and, more specifically, expenditure. Costs relating to the Department of Health would be allocated at this level. A rise in expenditure would in turn mean more money is needed from Treasury, who would look to the South African Revenue Service (SARS) for filling that gap.

According to the National Health Insurance Policy Paper (Department of Health, 2011b), resource requirements over the 14-year period would be as follows:

2012 R125 billion

2020 R214 billion

2025 R255 billion

This funding would have to be raised, and the current question being posed by this research is to determine the most advantageous balance of funding to ensure the success and sustainability of public health.

1.3. RESEARCH PROBLEM AND QUESTION

The World Health Report 2010 states that promoting and protecting health is essential to human welfare and sustained economic development. Countries need to modify and adapt their financing systems to achieve universal coverage and, more critically, to ensure that it can be sustained. Global experience and evidence show that there is no sole and right model for providing social health protection (De la Rosa & Scheil-Adlung, 2007).

The following research question arises:

What factors can influence the financial sustainability of South Africa's proposed National Health Insurance?

Having identified the importance of National Health Insurance in South Africa, this study investigated the following research questions:

- 1. What are the funding options for a National Health Insurance fund that can be included in the financing framework?
- 2. What factors influence the funding models used by other countries?
- 3. How has the historical inheritance of South Africa affected the current state of health in the country?
- 4. What progress has been made by South Africa with regard to the proposed implementation of the National Health Insurance?

1.4. RESEARCH METHODOLOGY

The selected method for the purposes of this study was a conceptual analysis (qualitative research design) by way of a literature and documentary study. The documents assessed in the study included government policies, programmes, strategies, legislation, accredited articles and other scientific literature. An archival research method was used as historical documents, reports and article were examined to identify information relevant to the topics under review. The documents used in the study were obtained from library searches conducted with the assistance of a librarian as well as seminal work used by other authors in their documents, reports and articles.

An interpretative research approach was adopted for the present research as it seeks to understand and describe the topic under review (Babbie & Mouton, 2009). The research method applied contained elements of *doctrinal* research as it followed a systematic exposition of the rules governing a particular legal category, analyses the relationship between rules, explains areas of difficulty and is based purely on documentary data (McKerchar, 2008).

Ethical principles and policies were applied in analysing and interpreting documents. As all the data used for this research is in the public domain, no additional ethical considerations needed to be taken into account.

Although there are many countries that have National Health Insurance in place we will focus on countries where research has been done on the sustainable funding model and then draw from their experience. The following criteria were used to select countries to be included in the study:

- the country should have a health care system in place,
- research should have been conducted on the financing of the system, and
- the language in which the reports was published must be accessible.

1.5. WHO COULD BENEFIT FROM THE STUDY?

South African government agencies, the Department of Health and other bodies tasked with the development and rollout of the National Health Insurance Scheme in South Africa would benefit from the analysis of the data. In order for the new National Health Insurance to meet its long-term sustainability objectives, this study would provide insight into the problems experienced by other countries in the implementation and running of their National Health Insurance schemes.

This study could influence social change by providing a wealth of knowledge to be used by researchers, both local and international, to further investigate and research the financing structures and expenditure costs of National Health Insurance schemes globally.

Significance of the study

Affordable healthcare is one of the major challenges developing countries are facing in this era (World Health Organisation, 2010a), while established European countries are also facing challenges due to rising costs and scarce resources. This study is therefore important as social change is eminent.

Local National Health Insurance officials can draw from the conclusions and use the information to strengthen the various structures and financing mechanisms to be incorporated into our National Health Insurance for ensuring long-term sustainability. It follows that access to affordable healthcare can be provided in South Africa if the long-term sustainability can be ensured. Positive social change both in rural and urban areas of

South Africa is achievable if we are successful in providing healthcare services and facilities to all South Africans.

1.6. LIMITATIONS OF THE STUDY

This section highlights certain challenges in the current National Health Insurance debate that have been identified as limitations to this study.

1.6.1. Lack of technical details on the National Health Insurance

A constraint in preparing this dissertation has been the continued lack of policy documents on the current reform proposals in the public domain. Reliance was therefore placed on the understanding of authoritative authors on the subject matter, relevant stakeholders, the media and relevant literature on what is being proposed.

On 26 February 2014, Pravin Gordhan, the Minister of Finance at the time, was quoted as having said that the white paper on National Health Insurance and Treasury's financing paper for the programme would be tabled "shortly" (Gordhan, 2014); however, as at 2 February 2015 the white paper is still not available.

For this reason, it is only feasible to outline the broad parameters of the intended reform and the financing thereof.

There is also a limitation on the long term sustainability of the proposed National Health Insurance owing to the lack of information.

1.7. OUTLINE OF CHAPTERS

Chapter 1: Introduction and background

This chapter has provided an explanation of the background to the study. The research problem and questions have been defined and the research methodology has been explained.

The remainder of this dissertation will be organised into the chapters as outlined below:

Chapter 2: Financing of National Health Insurance: A theoretical framework

In the first phase of this study, a theoretical framework for the financing of National Health Insurance, hereafter referred to as the financing framework, was developed for the various financing options available to fund the required cost of National Health Insurance. The financing framework placed specific emphasis on obtaining finance by way of the national revenue fund, financing by way of user charges, and financing by way of other sources such as loans, grants and donations. (Refer to Figure 1.1, which is repeated here for easy reference.)



Figure 1.2: Model for the financing of health care

An extensive analysis of relevant literature will be presented in this chapter.

Chapter 3: Problems encountered globally with financing National Health Insurance

The problems that have already manifested in countries implementing and operating National Health Insurance systems will be considered, various countries will be investigated and, drawing on the literature, problems will be summarised. The chapter will present an analysis of the successes and failures of each country and systematically analyse each of the three critical components of a National Health Insurance.

When considering which countries to include in the study, the following decision rule was applied:

- Does the country have a National Health Insurance?
- How is the National Health Insurance financed?
- Have there been problems with the financing models used?

Chapter 4: Historic overview of the South African health system

A proposal for a national health care system in South Africa dates back more than 80 years; however, it is only in 2012 that concrete steps were taken to create a National

Health Insurance for all South Africans. The aim of Chapter 4 is to provide a historical overview of the South African health system, and to indicate how the historical and political choices bear reference to the current state of health care.

The chapter will further distinguish between three distinct periods of development, namely the colonial era, the apartheid era and the post-apartheid era. This distinction is necessary to highlight how the various choices and decisions made in those periods have resulted in the current state of South Africa's health care systems.

The inequality of the current health system will be analysed from the perspective of health financing to determine the most appropriate financing mechanism to correct the inequalities of the past.

Chapter 5: Current state of health in South Africa

The chapter will present a close examination of the present-day health status of the South African population with emphasis on those elements that are conducive for maintaining the health of a nation. At a macro level, interventions in food, housing, sanitation and water supply have played a major role in improving the health status of all South Africans; however, the reality of a dualism in health care delivery has persisted, with a significant private-for-profit sector alongside the public health sector.

The chapter provides a consideration and evaluation of the main features of the proposed South African National Health Insurance against the research conducted thus far. The proposed National Health Insurance will be critically analysed, considering the financing models which are proposed by government at the stage of implementation, according to the white paper on National Health Insurance.

The projected success of implementation will be considered holistically by incorporating the cost or expenditure leg of the equation. The framework on which the South African National Health Insurance was based will be analysed to determine its appropriateness. The sustainability of the proposed National Health Insurance is key to the long-term success of health in South Africa.

Chapter 6: Conclusions and recommendations

This chapter will offer a final summary together with conclusions drawn from the research presented on financing National Health Insurance in South Africa. The advantages and

disadvantages of the proposed financing of the South African National Health Insurance system will be summarised. Finally, the research questions will be summarised and answered.

1.8. DEFINITION OF TERMS

A more detailed conceptual clarification of terms specific to the topic follows in the relevant chapters. Nonetheless, in an attempt to avoid uncertainty and ambiguity and to allow for greater consistency in the interpretation of concepts, terms utilised throughout the dissertation are briefly defined below so as to draw meaningful conclusions about them.

1.8.1. National Health Insurance

This is an approach to health system financing that is structured to ensure universal access to a defined, comprehensive package of health services for all citizens, irrespective of their social or economic position and/or any other consideration that affects their status (McIntyre & Van den Heever, 2007).

1.8.2. Universal coverage

This involves the progressive development of the health system, including its financing mechanisms, into one that ensures that everyone has access to quality, essential health services and where everyone is accorded protection from financial hardships linked to accessing these health services. This does not imply that the State must provide everything and anything to the population. Instead, it implies that everyone must be given an equitable and timely opportunity to access needed health services, which must include an appropriate mix of promotion, prevention, curative and rehabilitation care. The World Health Organization (2000) defines a universal health system as one that provides all citizens with adequate health care at an affordable cost.

1.8.3. User charges

A user charge system is a method of cost recovery that directly addresses the problem of under-funding of government health facilities (Robinson, 2002).Out-of-pocket payments

These are direct fees "paid by the patient (consumer) for health services directly to the healthcare provider at the point of use" (IMSA in McLeod, 2009).

1.8.4. Financing framework

This denotes a theoretical framework for the various financing options available for the financing of National Health Insurance (own source).

1.8.5. World Health Report

The report combines an expert assessment of global health, including statistics relating to all countries, with a focus on a specific subject. The main purpose of the report is to provide countries, donor agencies, international organisations and others with the information they need to help them make policy and funding decisions (World Health Organization, 2013).

1.8.6. Primary Healthcare

According to the ANC National Health Plan for South Africa (African National Congress, 1994:n.p.), the

Primary Healthcare Approach is the underlying philosophy for the restructuring of the health system in South Africa. It embodies the concept of community development, and is based on full community participation in the planning, provision, control and monitoring of services in the spirit of self-reliance and self-determination. It aims to reduce inequalities in access to health services, especially in the rural areas and deprived communities.

1.8.7. **Poverty**

Poverty is the inability to attain a minimal standard of living measured in terms of basic consumption needs or income required to satisfy them (Kehler, 2013).

1.8.8. Global health

Global health is the goal of improving health for all people in all nations by promoting wellness and eliminating avoidable diseases, disabilities and deaths. It can be attained by combining clinical care at the level of the individual person with population-based measures to promote health and prevent disease (World Health Organization, 2010a).

CHAPTER 2

FINANCING OF NATIONAL HEALTH INSURANCE: A THEORETICAL FRAMEWORK

2.1. INTRODUCTION

Despite exceeding the projected health spending required by middle-income countries, South Africa's current health system performs poorly, as revealed by the *Lancet* series on health published in 2009. Based on current performance, South Africa will not be able to reach the health millennium goals as contained in the millennium development goals to be achieved by 2015 (United Nations, 2000). As part of its efforts to achieve these goals, South Africa has embarked on a process of implementing a National Health Insurance to ensure universal coverage of health for all South Africans. The year 2011 marked the rollout of phase one of the National Health Insurance Fund to be implemented, with South Africa still facing challenges and changes in the health-care sector.

For any health-care system to be functioning at optimal efficiency, two things must be in place: firstly, the income required to fund the activities must be available; secondly, the cost incurred must ensure that the required services are provided. This process can be summarised as in the figure below (refer to Figure 1.1, which is copied here for easy reference.)



Figure 2.1: Model for the financing of health care

Source: Own.

This study made use of a qualitative descriptive research approach to assess the viability of the financing structure of the proposed South African National Health Insurance Fund. In order to understand the motivation for any country embarking on such an overhaul of their health system, there has to be a clear understanding of the objectives and targets to be achieved by this new health system (Chapter 2, section 2.2).

To address the research question, "What are the funding options for a National Health Insurance fund that can be included in the financing framework?", a theoretical framework for the financing of National Health Insurance, hereafter referred to as the financing framework, was developed for the various financing options available to fund the required cost of National Health Insurance. The financing framework placed specific emphasis on obtaining finance by way of the national revenue fund, financing by way of user charges, and financing by way of other sources such as loans, grants and donations (Chapter 2).

Having developed the financing framework, the next chapter (Chapter 3) will summarise and systematically analyse problems encountered by countries with more established National Health Insurance funds when applying the different financing options. In order to evaluate whether the identified problems might also arise in South Africa, a historic overview of the South African health system will be provided in Chapter 4. In the final section of the study the financing of the proposed South African National Health Insurance as proposed by government will be analysed, based on the structure of the financing framework (Chapter 5).

As indicated above, the aim of Chapter 2 is to provide a financing framework of the various financing options available to fund the required cost of National Health Insurance. Globally, there is no uniform model for a National Health Insurance as each country's system is a product of its own history, politics, unique conditions and national character (Tanner, 2008). Before deciding on the optimal financing model for a National Health Insurance programme, the objectives of introducing this social health system have to be determined (section 2.2). After identifying the objectives of a National Health Insurance system, various financing options have to be evaluated to determine the optimal financing options for a specific country (section 2.3).

Previous studies (Kutzin, 2001; Goodwin, 2008; Normand & Thomas, 2008) have identified three main options when financing a National Health Insurance, namely financing by way of national revenue, financing by way of user charges, and financing by way of other sources such as loans, grants and donations. The first option to consider when developing a financing model for National Health Insurance is the allocation of funds from the national revenue fund (section 2.4). The second major financing source of National Health Insurance is by way of user charges, also known as "out-of-pocket payments" (section 2.5). The third option would be to consider other sources of funding such as loans, grants

and donations (section 2.6). To ensure the long-term sustainability of a National Health Insurance, a balance between the different financing options needs to be found (section 2.7). In conclusion, innovative financing options will be explored in today's climate of rising expenditure and economic downturn (section 2.8).

The layout of this chapter can be summarised as follows:

	Visual overview of Chapter 2
2.1	Introduction
2.2	Objective of National Health Insurance
2.3	Financing National Health Insurance
2.4	Financing by way of national revenue
2.5	Financing by way of user charges
2.6	Loans, grants and donations
2.7	Innovative financing options
2.8	Conclusion

2.2. OBJECTIVE OF NATIONAL HEALTH INSURANCE

2.2.1. Introduction

The Conference strongly reaffirms that health, which is a state of complete physical, mental, and social wellbeing, 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 world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector. Alma-Ata Declaration (World Health Organization, 1978:1)

More than 30 years ago in 1978, the Alma-Ata Declaration affirmed that access to basic health was a fundamental human right. However, this challenge is still relevant today as many people still do not have access to even basic services and this gap is ever increasing. Following on this declaration, world organisations and governments around the world have had as a major preoccupation the building of effective and affordable national health systems (Goodwin, 2008).

Henke (1991) states that it is important for governments to have a clear picture of the different objectives of health and health insurance (their individual objectives of what they would like to achieve by a National Health Insurance) as this is the only way by which we would be able to evaluate the efficacy and efficiency of a country's National Health Insurance. Governments should set priorities according to their objectives and this will influence the level of government intervention in health care.

Many countries now find themselves on the brink of change, struggling with the implementation or correction of their national health systems. Clearly the starting point for any change should be an assessment of the current state of health. In order to assist governments in the achievement of basic health for all, the World Health Organization (World Health Organization, 2010a) was tasked to develop tangible goals with a long-term view to achieving health for all. The millennium development goals were the product of this need, providing clear tangible goals against which governments can meet their current health care system and with which to align the implementation of a new system. The next section will provide a more comprehensive analysis of the millennium development goals.

2.2.2. The Millennium Development Goals

The United Nations Millennium Declaration was signed in September 2000, committing world leaders to eight broad goals that are now termed "The Millennium Development Goals". The aim of these goals is to achieve the following targets by 2015:

- 1. Eradicate extreme poverty and hunger;
- 2. Achieve universal primary education;
- 3. Promote gender equality and empower women;
- 4. Reduce child mortality;
- 5. Improve maternal health;
- 6. Combat HIV/AIDS, malaria and other diseases:
- 7. Ensure environmental sustainability;
- 8. Develop a global partnership for development (United Nations, 2008).

These goals were drawn up with 15 targets in mind, and the achievement of these goals will be monitored through indicators. Following the Millennium Declaration in 2000, member states of the World Health Organization committed themselves in 2005 to develop the health financing systems of their countries so that all people would have access to

services and would not suffer financial hardship paying for them. Universal coverage is embodied in this commitment (World Health Organization, 2010a).

A study conducted by Leipziger, Fay, Wodon and Yepes (2003) acknowledges that the goals define some of the key challenges facing governments and international donors today. The authors further note that Goal 2 through to Goal 8 can be seen as superfluous, with the primary focus being on the first – the eradication of extreme poverty – and poverty is determined by the income levels of a country. This gives rise to the debate of why we should struggle with specific aims in health and education when improvements in most indicators of development are correlated with gains in per capita income, namely the income level of a country (Leipziger et al., 2003).

This question is answered by Leipziger et al. (2003), who postulate that economic growth should help, but will not be sufficient to achieve the millennium development goals. Income levels within a country influence the performance in health, education and gender equity, these being some of the main areas covered by the millennium development goals; on the other hand, it is not the only factor in the equation. Income levels do play a significant role and this is evidenced by the maternal mortality rates in low-income countries being far in excess of maternal mortality rates in upper middle-income countries (Leipziger et al., 2003 calculations from World Development indicators and UNICEF data). However, income levels are not the only factor to be considered in this integrated and inter-related problem of achieving universal coverage for health. Interventions implemented to improve health would need to be complemented by other interventions as well.

The millennium development goals are inter-related and an improvement in one area would have an effect in other areas. Traditional variables such as a country's income levels, assets, education, and health systems would be affected by its basic infrastructure and the access thereto. Interventions relating to health would be in the form of providing nutritional education, family planning and overall health education; however, these inventions would be most effective when combined with other areas of intervention such as water, sanitation, housing and other bundled interventions. These would be seen as basic infrastructure (Leipziger et al., 2003).

The effectiveness of multiple interventions in basic infrastructure, for example, can be shown to yield economic delivery (Chong, Hentschel & Saavedra, 2003). A key argument presented by Leipziger et al. (2003) notes that some of the biggest improvements are

likely to come from a combination of interventions in basic infrastructure as well interventions such as health education and family planning.

Although all the millennium development goals are interrelated and important, this study focuses on health, and attention will now be given to the specific millennium development goals that address health.

2.2.3. The Millennium Development Goals relating to health

The millennium development goals relating to health would be to reduce child mortality (Goal 4), to improve maternal health (Goal 5) and to combat HIV/AIDS, malaria and other diseases (Goal 6). The development of a National Health Insurance fund would aid countries in achieving their millennium development goals (World Health Organization, 2010a).

Universal coverage is a term that has developed around the promotion of health care and has been defined as health access and services to all people, and to ensure that people do not suffer financial hardship paying for these services at the time of need (World Health Organization, 2005), therefore the commitment made by countries upon the signing of the Millennium Declaration, namely the provision of basic health for all, which is the embodiment of the "universal coverage" principle, is an ambitious one. In order to assist governments in achieving this, the World Health Organization issued an additional report in 2010 to provide guidance to member states on how to go about realising the millennium development goals. The 2010 World Health Report, hereafter referred to as the 2010 report, reiterated that human welfare and sustained economic and social development are dependent on the promotion and the protection of health (World Health Organization, 2010a). This view supports the Alma-Ata Declaration of 1978.

The 2010 report synthesises lessons learnt from the experiences of other countries with established National Health Insurance systems. The report provides possible actions that countries at different stages of developing their health systems can consider and adapt. Furthermore, guidance is given on how to modify financing systems, considering all the financing options so that universal coverage can be achieved more quickly. According to Thurner and Kotzian (2001), a lively debate has been initiated by many developed and developing nations and institutional organisations on the performance of health care systems resulting from international competition, budget deficits and fiscal constraints. The

starting point for any change would first be an evaluation of the current state of health: according to the 2010 report we need to assess "where are we now?" The starting point for this assessment would be to clarify the objectives of health that the nation hopes to achieve.

Health coverage can be provided through either a National Health Insurance or a Social Health Insurance (SHI): Social Health Insurance can be described as a system where only those who contribute to the fund are entitled to benefits. Contributors may be all employed people, or defined groups in certain industries or all taxpayers (McLeod, 2009).

National Health Insurance, on the other hand, is where the taxpayers would be the contributors and everyone would be entitled to the benefits. The focus of this study was on National Health Insurance. It is important to note, however, that this technical distinction is not strictly applied in practice. Some systems that are technically social systems are called "National Health" and vice versa (McLeod, 2009).

Goodwin (2008) points out that National Health Insurance funds are often defined by their dominant revenue collection method. He goes on to cite the examples of France and Germany as being known to have "social health systems" because this method of financing generates the principal funding. Goodwin states that low-income countries that cannot rely on prepayments by way of social health insurance or tax revenues due to economic hardships are reliant on out-of-pocket charges, also known as user charges, or donor contributions, as alternative funding options.

The objectives of health care as identified by Henke (2001) can also be seen as a good definition of universal coverage: health care that meets the needs of the population, in a non-biased and non-discriminatory manner. All citizens should be treated equally, with personal responsibility coupled with freedom of choice and the sustainability of such health services from an economic, social and health policy point of view.

In the following sections, South Africa's progress towards achieving the millennium development goals for health will be considered, as this will have a significant bearing on the cost that will be incurred in future, which will in turn influence the financing required.

2.2.4. Where to from here in reaching the millennium development goals?

The World Health Report of 2010 identifies that the most concrete changes to reach the millennium development goals will be realised through the implementation of a National Health Insurance in those countries where it does not yet exist, and in those countries where it has been implemented to look for ways and alternatives to improve its efficiency and functioning.

In striving for these goals the following questions as identified previously need to be answered (refer to section 1.3):

- 1. How will National Health Insurance be financed?
- 2. How can protection be afforded for those individuals who rely on those services, to ensure that they do not suffer financial hardships at the time of need? and
- 3. How can we ensure optimum use of available resources to ensure universal coverage?

The sections below introduce the concepts to be considered when answering each of these questions. It should be noted that these questions are interrelated.

• Financing National Health Insurance

One of the objectives of this study was to explore the various financing options available. A concrete strategy together with sound policy choices needs to be made if countries are to ensure the long-term sustainability of their national health policies (Mossialos, Dixon, Figueras & Kutzin, 2002). Cognisance needs to be taken of the fact that 20 years ago there were more funds available to finance health from donor countries and donor agencies, whereas today, with the world grappling with an economic slowdown and financial crises, low-income countries can no longer rely heavily on donations to finance national health (Mossialos et al., 2002).

Financial hardship: paying for services at the time of need

The over-reliance on direct payments or user charges, such as over-the-counter payments for medicines and the charging of fees for consultations and procedures at the time the services are provided, can place the patients in financial hardship. User charges serve as a barrier against the use of excess services and need to be managed. The argument is

that the charging of user fees ensures that National Health Insurance is not abused (Shaw & Griffin, 1995).

• Inefficient and inequitable use of resources to achieve universal coverage

The World Health Organization report of 2010 states that 20 to 40 percent of health resources are being wasted. The report further states that efforts need to be made to curtail this wastage if improvements in health are to be realised. There is always the opportunity to achieve more with the same resources, if resources are used more efficiently.

Governments have different options on how they can achieve their health objectives. Guidance provided by the World Health Report of 2010 emphasises that governments around the world would achieve their health objectives (to be in line with the millennium development goals) most effectively by the implementation of a National Health Insurance. It is clear that the implementation of a National Health Insurance is one of the options, but other options are still available to achieve the millennium development goals towards health in a country.

The concepts introduced in this section will be expanded on in the remainder of this dissertation.

2.2.5. Conclusion

The World Health Report of 2010, which aimed to provide direction as to how countries could best achieve their millennium development goals, identified National Health Insurance as the vehicle by which the millennium development goals would best be achieved. This finding was confirmed during the National Health Insurance conference held in South Africa in December 2011 themed "Lessons for South Africa" that identified a National Health Insurance as the primary vehicle by which South Africa could achieve universal coverage (National Consultative Health Forum, 2012).

The report also highlighted the importance of clarifying and identifying their objectives in order for countries to reach their millennium development goals. Each country's National Health Insurance is unique and must be measured against the millennium development goals to ensure these goals will be reached in 2015. In the next section the financing framework will be analysed.

2.3. OPTIONS IN FINANCING NATIONAL HEALTH INSURANCE

2.3.1. Introduction

As stated previously, the effectiveness of a National Health Insurance system is dependent on sufficient resourcing. This section will analyse the main types of financing options available for funding a National Health Insurance system (the financing framework). Each government's stated health policy objectives would play an important role in the financing options selected to ensure that they operate optimally.

According to the World Health Organization (2007), general government funding for health expenditure accounted for 54 percent of total expenditure, globally, in 2004. The report also states that in over a third of all countries 70 percent or more of their health expenditure comes from government sources (World Health Organization, 2007). This role of government is ever increasing as a result of the growth in expectations from the population. A well-functioning National Health Insurance system would aid governments and alleviate the pressure on governments globally in that there would be systems (national insurance) in place to cater for the needs of the individual countries. Options available to finance national health and also the implications of each option will be explored.

Studies investigating the financing of National Health Insurance agree that three main options exist, namely financing from revenue collected by way of tax payments, financing by way of user charges, and financing by way of loans, grants and donations. The equilibrium between these three financing options must be carefully planned and the advantages and disadvantages of different combinations explored (Mitchell & Schwartz, 1976; Normand & Thomas, 2008; Goodwin, 2008; Thurner & Kotzian, 2001).

When investigating the process of financing National Health Insurance, three specific aspects need to be considered: who pays, the type of payment made, and who would collect it (Mossialos et al., 2002). Studies investigating the financing of health insurance have applied and/ or adapted the diagram compiled by Mossialos, et al. (2002) (hereafter referred to as the Mossialos model) as the basis for their studies. An analysis of this diagram indicates three distinct sections: the source of funding, the mechanisms of funding and the collection agents to collect the funding.

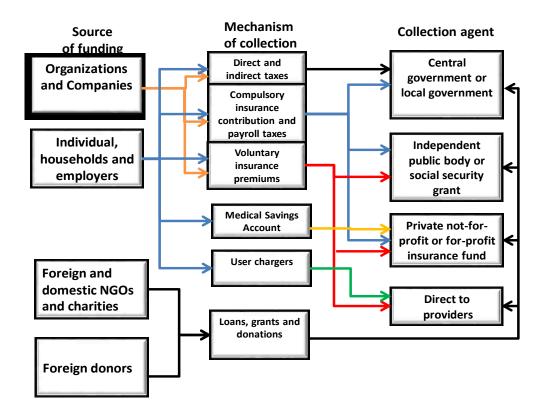


Figure 2.2: Examples of funding sources, contribution mechanisms, and collection agents within a health system

Source: Adapted from Mossialos, Dixon, Figueras and Kutzin, 2002 (Funding Health Care).

The following section will now expand on the different components of this diagram and explain the various inter-related constituents.

2.3.2. Source of funding

An analysis of the Mossialos model indicates that funds can be obtained from individuals, households, employees, and employers (organisations and companies), non-government organisations, charities and foreign donors. Internationally, National Health Insurance is primarily funded by the population, being individuals and those that employ them (Goodwin, 2008). When considering the optimal combination of funding sources it is important to note that foreign funding or donor funding as a percentage of total funding has shown a declining trend. This decline can be attributed to rising expectations of health care systems, rising costs, and challenges relating to the long-term sustainability of health care (Danzon, 1994).

Normally funds collected from individuals and companies are mainly in the form of taxes. All taxes collected are pooled into a national revenue fund and then allocated. To identify the suppliers of funds it is necessary to understand who the contributors to this national revenue fund are. In South Africa a progressive income taxation system is in place for individuals. This system is built on the premise that the wealthy should subsidise the poor. Effectively, the more a person earns the larger his contribution to the income tax system (South African Revenue Service, 2011).

The following section contains an analysis of the South African sources of funds that can be used to fund National Health Insurance.

2.3.2.1. Organisations and companies (corporate organisations)

Organisations and companies are the biggest tax revenue generators globally (Department of Finance, 2010). In South Africa the tax revenue for the 2011/2012 fiscal year was R742.6 billion (National Treasury, 2012b). An analysis of the tax revenue by main revenue source can be seen in the following table.

Table 2.1: Tax revenue by main revenue source, 2007/08–2011/12

R Millions	Personal Income Tax (PIT)	Company Income Tax (CIT)	Secondary Tax on Companies (STC)	Value- Added Tax (VAT)	Fuel Levy Customs Duties	Customs Duty	Specific Excise Duties	Other	Total Tax Revenue
2007/08	168 774	140 120	20 585	150 443	23 741	26 470	18 218	24 463	572 815
2008/09	195 146	165 539	20 018	154 343	24 884	22 751	20 185	22 235	625 100
2009/10	205 145	134 883	15 468	147 941	28 833	19 577	21 289	25 569	598 705
2010/11	226 925	132 902	17 178	183 571	34 418	26 637	22 968	29 584	674 183
2011/12	250 400	151 627	21 965	191 020	36 602	34 198	25 411	31 426	742 650
Percentage of total 2011/12	33.7%	20.4%	3.0%	25.7%	4.9%	4.6%	3.4%	4.2%	100%

Source: 2012 Tax Statistics. National Treasury, 2012b.

2.3.2.2. Individuals

Although the contributions of the individual components differ from year to year, the contribution trend remains similar from year to year. According to the 2012 tax statistics issued by the South African Revenue Service (South African Revenue Service, 2012),

there were 13.7 million individuals registered for tax, compared to 10.3 million in the previous year; however, this increase is due to the fact that every employee must now be registered. To see this increase in perspective, it is important to understand that in South Africa a tax threshold of approximately R67 000 applied in the 2013 tax year to taxpayers below the age of 65, those falling below this taxable income level did not pay income tax. Consequently, although the base of taxpayers has increased, many taxpayers still fall below this threshold and are not contributors.

2.3.2.3. Foreign and domestic donors, charities and non-government organisations

Goodwin (2008) notes that external aid is a substantial source of funding for the health sector in many low-income countries. Bilateral agencies such as USAID (United States), Danish International Development Agency (Denmark) and Department of International Development (UK) account for as much as 90 percent of the overall health budget in low-income countries.

South Africa was the 80th largest recipient of official humanitarian aid in 2010. South Africa received the equivalent of US \$1 billion in total aid and US \$6.4 million in humanitarian aid in 2010 and this constitutes 0.3 percent of South Africa's gross national income (Global Humanitarian Assistance website, 2015).

In April 2013 the United Kingdom announced its intention to eliminate aid to South Africa by 2015 (News24, 2013). This decision has been prompted by the United Kingdom's strong belief that South Africa is now in a position to fund its own development and future relations should be built on economic trade. South Africa is not the only country to be cut out of the United Kingdom's aid: aid to India is also being cut in an effort by the United Kingdom to promote domestic development. Both South Africa and India are members of the worlds "emerging BRICS nations" (News24, 2013).

Table 2.2 highlights the major contributors in the global arena with reference to humanitarian and other aid donations. As can be seen, South Africa is not a big role player in the granting of aid; however, we are the recipients of large aid contributions.

Table 2.2: Major contributors of humanitarian and other aid donations

	Share of humanitarian aid to fragile states (2006–2010)%	Share of ODA spent on governance, peace and security (2006–2010)%	Share of bilateral humanitarian aid spent on disaster prevention and preparedness (2006–2010)%	Contributions to GFDRR (2007–11) US \$m	Contributions to ISDR (2006–2010) US \$m
Australia	80.6%	20.6%	6%	16.7	4.8
Belgium	80.4%	5.7%	4%		0.0
Brazil	71.3%			1.7	0.6
Canada	82.7%	8.8%	2%	3.1	1.2
China	71.2%				0.9
Denmark	76%	7.7%	2%	8.8	2.3
Finland	78.6%	6.6%	1%		2.0
France	74.7%	0.9%	0%	1.5	0.1
Germany	75.3%	7.7%	3%	11.3	5.5
India	79.1%				0.1
Japan	77.4%	2.4%	10%	12.0	4.9
Korea	65.8%	7.7%	10%		2.5
Netherlands	75.5%	6%	0%	5.5	2.2
South Africa	17.9%				0.0
Spain	69.7%	6.6%	5%	8.1	2.4
Sweden	76.1%	11.7%	3%	27.3	19.7
Switzerland	70.1%	5.9%	0%	4.7	3.6
UK	82.1%	9.2%	3%	13.1	10.0
US	88%	11.1%	1%		0.5
EU institutions	74.5%	12.8%	3%	44.7	12.7
Poland	60.6%				0.0

Source: Development initiatives based on OECD DAC, OECD DAC CRS, United Nations Development Programme (UNDP), 2006 – 2010. Bureau for Crisis Prevention and Recovery (BCPR), and Global Facility for Disaster Reduction and Recovery (GFDRR) data.

In this section, the various sources of funding were explored. In the next section we will focus on the mechanisms of collection.

2.3.3. Mechanisms of collection

According to Mossialos's model, the mechanisms of collection refer to the various ways amounts can be collected from the sources of funding. These collection mechanisms include but are not limited to taxation, either direct or indirect, medical insurance contributions and payroll taxes, voluntary or compulsory, medical savings accounts, user charges and loans, grants and donations. The mechanism used will depend on the source from which the funding is obtained.

Each of these mechanisms of collection will now be discussed to understand the financing framework.

2.3.3.1. Taxation

In Mossialos's model taxation can be collected from different sources as either direct or indirect taxation. The tax can be levied at different levels of government, for example central government, provincial government or local government. Each of these levels of government can collect either general or hypothecated taxes. It is important to note that different levels of government carry different taxing rights, depending on their national system. In South Africa, provincial and local governments have limited taxing rights. In South Africa, most taxes are collected by central government and form part of the national revenue fund. This fund is then allocated to the various departments within the country by way of the national budget (National Treasury, 2012a).

Health would be one of these government departments which would have to follow the political process of the country to obtain the required funding. Where taxes are hypothecated or specifically earmarked for health they are less susceptible to political manipulation; however, there needs to be greater accountability and transparency (Evans, 2002).

The United Kingdom, Ireland, the Nordic countries, certain countries in sub-Saharan Africa and Canada use general taxation as a major source of financing (Normand & Thomas, 2008). On the other hand, countries like France and Italy use hypothecated or earmarked income taxes. South Africa currently uses the general taxation pool.

2.3.3.2. Medical savings accounts

Contributions are made regularly into accounts known as medical savings accounts and monies are then used for health services at the point of service. They form part of health insurance.

This contribution is made in addition to their normal contribution for medical insurance cover or as an additional contribution. These funds are then available to cover medical costs which would not have been covered by medical insurance cover.

According to Gardner (1995), medical savings accounts allow patients to 'purchase' health services directly through their own funds, thus placing more control over their spending on health in their own hands. The type of medical savings account can vary and is adapted to the needs of a country. Gramm (cited by Donaldson & Gerard, 1993) notes that where individuals are encouraged to take account of the financial consequences of their actions, it results in greater consumer satisfaction, as the services would be more in line with consumer preferences and costs would be controlled (Hsiao, 1995).

Another advantage of making use of medical savings accounts as a financing mechanism is that services that fall outside the ambit of traditional medicine would be covered out of this savings account, therefore giving individuals more control over minor medical expenses whilst still hedging them against more serious illnesses and catastrophic costs (Massaro & Wong, 1995).

2.3.3.3. User charges (out-of-pocket payments)

User charges are costs paid directly by the consumer for the services rendered. User charges include direct payments, formal cost sharing and informal payments, depending on the structure of the scheme. The absence of user charges has been cited as the reason for excessive demand for health services and escalating costs (Robinson, 2002). Robinson states that this problem has been termed the "moral hazard". The advantage of having user charges is that individuals are more conscious of the cost of the health care services they use, which deters users from abusing the services provided (Robinson, 2002). Robinson also notes that a further advantage would be that additional funds are generated at a time when resources and funding are dwindling (Creese, 1991).

2.3.3.4. Loans, grants and donations

Goodwin (2008) states that donor funding does not necessarily increase the available funds of a country to be spent on health; instead, governments see the subsidies as a substitute for their own expenditure or an opportunity to use their funds for other priority areas. The net effect is that the health sector of the country does not benefit from additional donations as intended. The use of loans, grants and donations is discussed in more detail in section 2.6.

Donations and grants

Foreign funding can be divided into two groups: foreign donations and foreign grants. Foreign donations are different from foreign grants in that they carry fewer conditions. The distinction between domestic donations and foreign donations is that domestic charitable donations would have an opportunity cost attached to them and if there is tax relief for the donations, an economic cost as well (Schieber, 1997). The opportunity cost mentioned means that if the funds were not allocated to health by the donor organisation, they would be used elsewhere within the country. Also, where there is tax relief attached to donations, donors would be more encouraged to donate. These are subject to change and this change would influence donations being made.

Loans

Funds granted by way of a loan, regardless of whether they are foreign or domestic, government or private, will eventually have to be repaid and this imposes a burden on future generations (Mossialos et al., 2002). Debt in low-income countries has created problems, therefore countries are moving away from reliance on borrowed funds (Schieber, 1997).

2.3.4. Collection agents

Mossialos's model analyses the various collection agents which complete the model. This section of the dissertation will now expound upon the various collection agents.

2.3.4.1. Central government or local government

Globally, government structures vary: some countries have central, regional or local government structures, while others only have central and local government structures.

The country's tax system would dictate the level of government involvement in the collection process.

The principle collection agent in South Africa is the central government via the South African Revenue Service (SARS) and local government. These are some of the collection mechanisms used by central government to obtain funds, namely income tax, value-added tax (VAT), corporate tax and fuel duty. Municipal rates would constitute collection mechanisms of local government (South African Revenue Service, 2011).

Mossialos et al. (2002) have identified various benefits of local government acting as collection agents.

- Local governments are normally more transparent as there is a greater link between
 the amount levied as local taxes and the money to be spent locally (this is not
 hypothecated taxes but it does have some of the features).
- Improved accountability (local politicians would have greater influence on the spending and the collection).
- Responsiveness to local preference (health care needs can be better facilitated by local government).
- Separation of health from competing national priorities (where the collection is done locally, the local level of government would be more in touch with the local population's needs and would thereby eliminate the political struggle at central government level).

The major criticism for using local government as collection agents is that it can lead to horizontal inequality if different tax rates are applied in different regions (Mossialos et al., 2002).

The key feature of tax collection at all levels is that it allows for trade-offs to be made between health and other public policies (Mossialos et al., 2002).

2.3.4.2. Independent public body or social security grant

The mechanism of collection done by this independent public body would be compulsory insurance contributions and payroll taxes. The collection agents could be a single national insurance fund or a single social insurance fund. The collection function would be done by

an independent public body or social security body. The independence of the insurer from government is the predominant attraction for the use of this collection agent. Some authors also believe that there is to be greater responsiveness to the patients by the collection agents (Karski, Koronkiewicz & Healy, 1999; Jesse & Schaefer, 2000).

2.3.4.3. Private not-for-profit or for-profit insurance fund and direct to providers

Private health insurance can be substitutive, complementary or supplementary (Karski et al., 1999). The collecting agents for this form of insurance can be private independent bodies, being either private for-profit insurance funds or private not-for-profit insurance funds. For these collection agents the function of collection and administration is done outside of government.

2.3.5. Conclusion

Each country's history, politics, unique conditions and national character would dictate its own National Health Insurance, and it would need to be adapted as it evolves (Tanner, 2008). Figure 2.3 illustrates the theoretical framework for financing of National Health Insurance. The financing framework needs to be analysed and refined for each country. One of the key problem statements of this dissertation is the actual financing of National Health Insurance. It is this differentiation between countries that needs to be investigated to identify the financing mechanism which would have the highest probability of success in South Africa. For this reason different financing mechanisms will now be discussed in more detail.

2.4. FINANCING BY WAY OF NATIONAL REVENUE

2.4.1. Introduction

The previous section of this dissertation developed a financing framework, as depicted in the diagram below, that analysed the main types of financing options available to fund a National Health Insurance system. Financing options selected by governments should be optimal for the particular country. This section will now dissect the financing framework which was developed in section 2.3 and specifically address the financing option by way of national revenue.

Industrialised countries today have evolved to the point where most health care is paid for by governments (through revenues raised by way of taxation) or by social insurance scheme (funds raised by imposing compulsory levies on all or most of the population) (Evans, 2002).

To ensure an effective and efficient health care system the total funds raised to fund health care expenditure for the nation should be equal to the total spent on health required by the nation. Ideally revenues should be equal to the costs, as illustrated by the following diagram (refer to Figure 1.1, copied here for easy reference.)

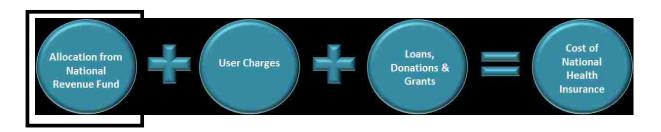


Figure 2.3: Model for the financing of health care:
Allocation from National Revenue Fund

Source: Own.

The first option to consider as a source of revenue would be the allocation from the national revenue fund. Funds in the central revenue fund are collected in the form of taxation from different taxpayers through direct or indirect taxation. These taxes can be administered at different levels, namely central government, provincial (regional) government or local government, and it can be either general taxes or hypothecated taxes (Mossialos et al., 2002). The use of taxation as a source of funding will now be discussed in more detail.

When considering the use of taxes as a form of funding, the first choice that has to be made is whether the tax will be in the form of a direct tax (section 2.4.2) or an indirect tax (section 2.4.3). Having identified the most effective form of tax or combination, the next aspect to consider is whether it should be a hypothecated tax (section 2.4.4). These decisions have to be taken within the fiscal framework of a country, taking into account the economic implications of each decision.

2.4.2. Direct taxation

A direct tax is imposed on an individual person (juristic or natural person) or property. This is different from a tax which is imposed on a transaction. Included in the definition of

"person" would be individuals, households, organisations, companies, trusts and deceased estates. Direct taxes are imposed on a person typically in an unconditional manner, such as a poll tax or a head-tax which is imposed on the basis of the person's very life or existence, or a property tax which is imposed upon the owner by virtue of ownership, as opposed to commercial use. The main distinguishing feature between direct and indirect tax is that a direct tax cannot be transferred by a taxpayer to someone else (Brittanica online, 2014).

Direct taxes would, for example, include income tax and estate duty. Chalkley and Robinson (1997) have noted that personal income tax in South Africa is a form of direct taxation, applying a progressive system. The amounts received from direct taxes can either be polled in the general revenue fund or be earmarked for health services (hypothecated tax).

An indirect tax is a tax that is collected by an intermediary (such as a retail store in the case of value-added tax) from the person who bears the ultimate economic burden of the tax (which would be the consumer). These will be discussed in more detail in section 2.4.3.

The following figure sets out the main sources of national revenue:

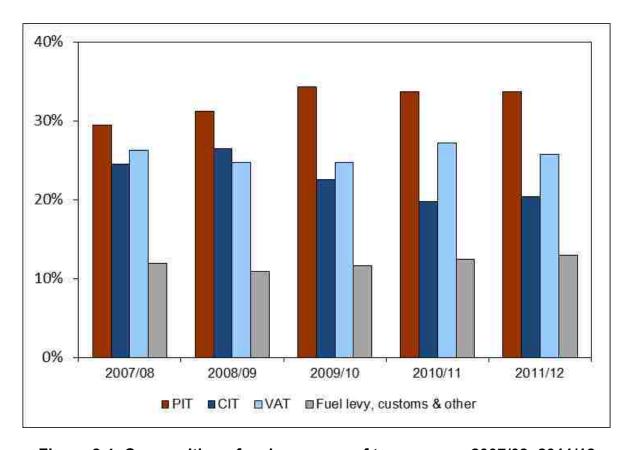


Figure 2.4: Composition of main sources of tax revenue, 2007/08–2011/12 Source: 2012 Tax Statistics. National Treasury, 2012b.

Individual income tax (PIT) and companies' income tax (CIT) can be seen as direct taxes, whereas Vat, fuel levy and customs duties would be classified as indirect taxes. Direct taxes can be further broken down into individual income tax, company income tax, dividends tax on companies and withholding taxes.

- Individual income tax: this tax is a levy based on applying a predetermined progressive rate to a person's annual taxable income, subject to certain thresholds. Individual income tax is the largest source of revenue in South Africa, contributing 33.8 percent of total revenue collections for the 2011/12 financial year (National Treasury, 2012b). Capital Gains tax forms part of income tax and would be levied on the difference between the base cost of an asset at the time of acquisition and the price for which the asset is sold. A percentage of the net gain would be added to the taxable income of the individual.
- Company income tax: Company income tax was the third largest contributor to the South African national revenue accounting for 20 percent in the 2010/11 financial year. The current headline company income tax rate is 28 percent, with different effective tax rates being applied to various economic sectors resulting from differing tax dispensations and deductions. Examples of these would be the gold mining formula, farming deductions and valuations and accelerated depreciation on qualifying assets. Furthermore, those organisations meeting the criteria of "small business corporations" and "micro business corporations" would qualify for special tax dispensations (South African Revenue Service, 2012).
- Donations tax: this is not a tax on income but rather a tax on the transfer of wealth. It
 is specifically aimed at gifts and donations as opposed to inheritance. This tax is also
 applied at a flat rate with certain exemptions being allowed (Huxham & Haupt, 2006).
- Dividends tax: this is a tax levied on dividends declared with the aim of encouraging companies to retain profits and build reserves as opposed to declaring dividends. It is levied at a flat rate on all dividends declared. Prior to 2011/2012 dividends tax was represented by Secondary Tax on Companies also known as STC (2013 Tax Statistics, South African Revenue Service, 2013).
- Withholding tax: also known as a retention tax, this is imposed where transactions
 carried out attract a tax and that tax is to be retained by the local citizen and paid
 over to the government (Huxham & Haupt, 2006).

 Estate duty is a tax on the transfer of wealth for high net worth individuals and is charged on the death of a person, on the value of their estate subject to certain abatements (Huxham & Haupt, 2006).

2.4.3. Indirect taxation

This tax is levied on transactions and commodities rather than persons (whether individual or organisations). These taxes would be in the form of sales tax, value-added tax, excise taxes, the fuel levy and import and export taxes. According to Hills (2000), some indirect taxes can be seen as regressive, as lower income earners spend more of their income on consumption, e.g. tobacco. This results in more tax being paid as a percentage of income.

Mossialos et al. (2002) also add that indirect taxes are linked to consumption and not overall income. Sin taxes that are applied to health-damaging goods, such as alcohol and cigarettes, do deter consumption and this has a positive effect on health (World Health Organization, 2010a).

The next section will consider financing by way of general taxes or hypothecated taxes.

2.4.4. General taxes or hypothecated taxes

The main advantage of general tax funding is that it is drawn from a range of sources. The revenue base is broad and it is easier to identify the spending priorities of the nation. The priorities would be reflected in the expense allocations; for example, on health spending: funds for health could be traded off for other expenditure. Where general revenues are the main funding, allocations to health would have to be done annually, which reinforces the ideas of democracy and accountability (Mossialos et al., 2002).

Hypothecated taxes can be either direct or indirect taxes. Mossialos et al. (2002) identify with Jones and Duncan (1995) that with hypothecated taxes there is a direct link between taxation and spending, giving rise to greater transparency, responsiveness and accountability.

Another advantages cited by Mossialos et al. (2002) is that hypothecated taxes create a link between the taxpayers and the taxes; people feel more 'connected' to the tax system. Earmarked or hypothecated taxes are less likely to fall prey to political manipulation.

The disadvantage of hypothecated taxes is that in practice these taxes are not strictly separated and may be merged with other taxes (Wilkinson, 1994). The link between the revenue and expenditure is lost and this undermines the trust of the population. Hypothecation would best serve those who would be able to exercise influence over the hypothecated funds (Mossialos et al., 2002).

2.4.5. Conclusion

Tax financing for health care involves raising revenue through various compulsory contributions to state revenue and then using that revenue either to provide or to pay for health care. (Evans, 2002:39)

In conclusion, Evans (2002) states that since the 1990s, the experience of tax-financed systems has consistently created tension between the *healthy and wealthy and the unhealthy and unwealthy*. One also needs to take cognisance of the fact that tax financed systems would take additional strain, especially in times of economic crisis (Evans, 2002).

The various taxing options, namely direct and indirect tax, and general or hypothecated taxes have been discussed in accordance with the financing framework.

The discussion in the next section will now focus on the second option for financing: financing by way of user charges.

2.5. FINANCING BY WAY OF USER CHARGES

2.5.1. Introduction

Refer to Figure 1.1 copied here for easy reference.

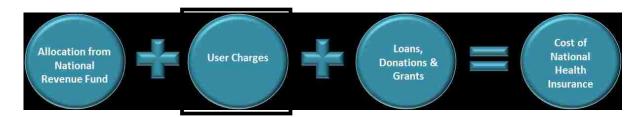


Figure 2.5: Model for the financing of health care: User charges

Source: Own.

Donaldson, Gerard and Mitton (2005) explain that for many countries financing their National Health Insurance exclusively by way of national revenue has become unsustainable, mainly due to the low or stagnant growth of the health sector and

constrained economic circumstances. The rationale for applying user charges is generally two-fold: firstly, to generate revenue, thereby enabling national health funds to be partially or fully self-sustaining; and secondly, user charges act as a device for rationing health services – the imposition of a charge for services discourages unnecessary use of services or abuse thereof.

Government services need to be financed by someone and when they are financed out of general revenue, taxpayers at large are financing this without their direct involvement or benefit (Leonard, 1985). The application of user charges follows the benefit principle of taxation, namely where someone receives a direct and measurable benefit from a government facility, compensation should be given for the benefit (Bird, 1992).

2.5.2. Advantages and disadvantages of applying user charges

According to Shaw and Griffin (1995), user charges have had a substantial positive impact on the efficiency, equity, and sustainability of health financing in Africa. African countries have had considerable experience with user charges owing to the fact that clinics, church missions and private for-profit service providers have had to recover costs in order to survive.

Cognisance needs to be taken of the disadvantages of applying user charges as a means of generating finance. McLeod (2009) indicates that there is overwhelming evidence that user charges hurt the poorest and even serve as a buffer preventing them from getting care. The world-wide move to pre-funding was initiated by the World Health Organization resolution (WHO, 2005) which encourages member states to ensure that National Health Insurance includes some method of pre-payment of financial contributions or user charges for health care to ensure their sustainability and to plan for universal coverage.

Donaldson and Gerard (1993) observe that applying user charges as a revenue raising device resulted in a marked decline in the number of visits to health services. An examination of user fees as a rationing device, which is a benefit of having the users participate, shows that it does lead to a more efficient health system: patients can be kept informed by way of price signals, so they are aware of what they would have to pay for the service and various incentives. This leads to a more 'rational' use of public health services, and abuse of the health services would be curtailed (Donaldson & Gerard, 1993).

As a result of the advantages and disadvantages relating to user charges, exemption policies have been identified as the solution. Griffin (1992) and Willis and Leighton (1995) argued that the efficiency and the equity goals can still be achieved through the use of exemptions for the low-income groups whilst improving the service delivery to these low-income groups.

Having considered the advantages and disadvantages of applying user charges, this study researched an analytical framework for user charges as the basis for this funding option.

2.5.3. An analytical framework for user charges

According to Robinson (2002), user charges can take several different forms: if viewed on a continuum, the one extreme would be a full third-party payment (no contributions); on the other extreme, full user charges (payments to be completely met by patients' out-of-pocket payments).

Rubin and Mendelson (1995) investigated user charges and divided them into two distinctive groups, namely direct and indirect payments.

2.5.3.1. Direct payments

Direct payments require users to pay the full cost of health care services provided not covered by National Health Insurance or to which access is limited (Mossialos et al., 2002).

Direct payments take the following forms:

- Co-payment: flat fee or charge per service;
- Co-insurance: a percentage of the total charge;
- Deductible payment: payment covering the first x amount of costs before the insurance cover begins (this can be seen as an excess payment); or
- Balance billing: an additional fee the provider levies in addition to the payment received from the national insurance (Robinson, 2002).

Chalkley and Robinson (1997) have highlighted the importance of the payment profile of the health service users, with marginal prices impacting on the behaviour of the users.

2.5.3.2. Indirect payments

Indirect payments would be those which are not directly imposed, that are less transparent and are not officially endorsed. According to Rubin and Mendelson (1995), these payments could range from:

- Coverage exclusions: limitations placed by National Health Insurance not covering specific services, such as in vitro fertilisation; to
- Various forms of pharmaceutical regulatory mechanisms, for example generic substitution.

Unendorsed indirect payments which could take the form of 'thank you' gifts or bribes to secure services could also exist in some countries. In many instances additional insurance can be taken out by users to defray the costs of user charges or out-of-pocket payments, in which case direct costs are still met by third-party providers (Robinson, 2002).

The table below highlights those countries that are more than 70 percent reliant on private household funding for health care and the bulk of this funding is by way of user charges (Normand & Thomas, 2008). South Africa has been included as a comparison to the other countries. The 29.6 percent reliance on user charges is indicative of the fact that South Africa does not rely heavily on this source of financing.

Table 2.3: Countries in which user charges are a major financing source, 2010 data

	Private expenditure on health as a % of total expenditure on health*	User charges as a % of private expenditure on health
Cameroon	70.4	94.5
Chad	75.0	96.7
Cote d'Ivoire	78.4	98.8
Guinea	88.7	99.4
Guinea-Bissau	90.0	73.8
Uganda	78.3	63.6
Haiti	78.6	51.2
Afghanistan	88.3	94.0
Sudan	70.2	95.7
Yemen	75.8	98.6
Azerbaijan	79.7	87.2
Georgia	76.4	89.5
Tajikistan	73.3	90.7
India	70.8	86.4
Myanmar	87.8	92.4
South Africa	55.9	29.6

^{*}Some estimates should be viewed with caution as these where derived from scarce data

Source: Reproduced from WHO (2012) National Health Accounts statistics.

It is interesting to note that countries where user charges account for more than 70 percent of the total funding for health care are mostly developing and low-income countries. The concern here is that it is the users in developing and low-income countries that are most harshly affected by these user charges or out-of-pocket payments. Normand and Thomas (2008) note that several countries in South and South-East Asia, Africa, the countries of central and Eastern Europe, and the former Soviet Union rely upon out-of-pocket payments as the chief financing mechanism for health.

2.5.4. The impact of user charges

In terms of the analytical framework, policies are evaluated using three main criteria: efficiency, equity and public acceptability (Robinson, 2002). The performance of user charges in terms of these criteria will be assessed below.

What is efficiency of user charges?

Efficiency was identified by Kutzin (1998) as one of the main economic criteria which would be used to evaluate the performance of a health system which applies user

charges. For the present purposes efficiency has many connotations. The aim of applying user charges would be to discourage or restrict unnecessary usage and abuse; therefore, its effect on utilisation of services would be the key measure. The efficiency of applying user charges would have to be arrived at by establishing the effects of imposing user charges on the level and pattern of demand (Robinson, 2002; Rubin & Mendelson, 1995).

What is equity of user charges?

Equity in user charges seeks to evaluate the effects of applying user charges disproportionately, thereby affecting lower-income groups and the more vulnerable such as the elderly (Dawson, 1999). Equity can be further broken down into two elements, the equity in financing and the equity in utilisation.

What is public acceptability of user charges?

Public acceptability would play a significant role in the success or failure of the implementation of user charges. In many countries this becomes a political debate; as such, public acceptance or the lack of it could pose an important constraint.

In conclusion, user charges should be assessed in terms of their effects on efficiency, equity and public acceptability (Robinson, 2002).

2.5.4.1. User charges and their efficiency

There has always been a need for a study to substantiate the theory that the absence of user charges would lead to moral hazard and excessive and abusive use of services.

The RAND Corporation carried out an extensive study in the United States to verify the effects of user charges on both the demand for health services and the health status (Robinson, 2002). According to Robinson, participants were given a choice of one of 15 different health insurance option plans. Variations in the health insurance plans were in the form and extent of user charges applied. The RAND findings indicated that the higher the user charges the less the health services were utilised.

This reduction was noted over a wide range of services; however, the RAND study had several limitations and has subsequently been extensively criticised as it failed to measure the effect of user charges on overall health expenditure (Mathauer, Xu, Carrin & Evans, 2009).

Subsequent to the RAND study, Rubin and Mendelson (1995) conducted a study that examined the effect of different types of user charges on the utilisation of health services. The undeniable conclusion was that user charges were associated with reduced utilisation in all areas covered. Rubin and Mendelson also investigated how user charges affected the demand pattern and they concluded that there was a strong correlation between the two components.

Scheiber (1997) states that user charges in developing countries are extensively used and the following finding would be worth noting: user charges supplement revenue; the net revenue generated from user charges rarely exceeds five percent of total revenue. Evidence from research shows that user charges have adverse effects on health outcomes: user charges reduce the demand for services but are accompanied by disproportionate effects upon the poor (refer to the next section on equity), while the managerial and administrative costs to implement user charges also need to be considered (Nolan, 1993).

2.5.4.2. User charges and equity

The findings of the RAND Health experiment showed that the reduction in use of services was mainly among lower-income groups, with the strongest relation to services for poor children (Robinson, 2002). The Rubin and Mendelson (1995) study found evidence to indicate that user charges adversely affected the health of the unemployed and homeless. The reductions in utilisation are disproportionately significant to poor people (Robinson, 2002).

To limit or counter the negative impact of user charges on vulnerable groups, exemption policies, which would extend to the young or elderly, individuals with chronic diseases and low-income households, should be considered. Exemption policies are there to protect the more vulnerable group by exempting them in certain instances. These exemption policies would go a long way towards protecting vulnerable groups but carry an additional administrative burden with additional managerial costs and the potential for misuse (Robinson, 2002).

2.5.4.3. User charges and public acceptability

User charges are a highly debatable and sensitive issue. Public acceptability varies greatly amongst nationalities as well as the various social levels. The more just or equitable a

system, the more acceptable it will be (Szende & Culyer, 2006). Reaching an equilibrium where the rich do not feel they are being exploited and the poor are not left without care would be the acceptable option.

2.5.5. Conclusion

Owing to the variable economic climate, the debate relating to user charges centres less on whether user charges are warranted than on how to increase their contribution so that it would result in a more efficient, equitable and sustainable health care system (Shaw & Griffin, 1995). Shaw and Griffin (1995) explain that governments need to be explicit about the amount of user charges that can be expected to contribute to the national health system and how funds made available as a result of user charges will be applied to further assist in primary and public health care services.

According to the Mossialos financing model, there are various financing options available. The financing of health insurance by way of national revenue (section 2.4) and financing by way of user charges has now been discussed (section 2.5). A further option exists to obtain the required funding, namely loans, grants and donations; this option will now be discussed in more detail.

2.6. LOANS, DONATIONS AND GRANTS

Refer to Figure 1.1, copied here for easy reference.

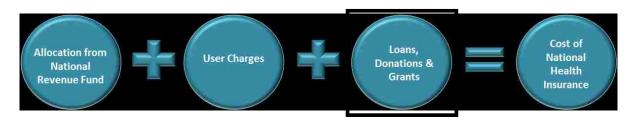


Figure 2.6: Model for the financing of health care: Loans, donations and grants

The millennium development goals have created a renewed impetus for generating additional funding for the poor and more vulnerable countries by the high-income countries (Normand & Thomas, 2008). These countries have pledged to give 0.7 percent of their gross national product in aid. This was set as a target in the Monterrey Consensus (Gupta, 2002). The millennium development goals, specifically the health-related goals, have done much to increase the importance of donor funding to low-income countries (Normand & Thomas, 2008).

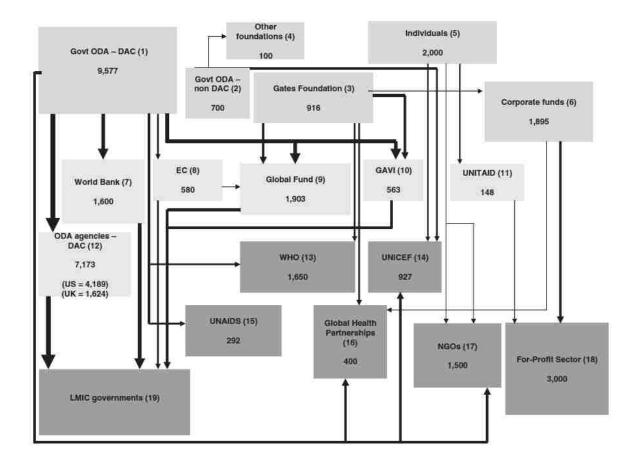
According to the World Health Organization (2007) report, 55 countries were reliant on external aid to provide health care, of which 19 countries are heavily reliant on this aid (the aid accounting for more than 30 percent of their aggregate health care spending). It was further reported that Africa had the greatest dependency on donor funding. Where this funding is in the form of loans, a perpetual problem of debt emerges. The additional funding raised comes at a price. Berer (2002:10) notes:

Although it is half a century since most developing countries became independent politically, all but a few have kept economically dependent ... international institutions and donors are taking a larger and larger role in determining the health sector policies and priorities of middle- and low-income countries and have not always reached consensus with national governments on how best to do it.

The conditions associated with donor funding need to be considered when obtaining these funds. The conditions attached to funding have been one of the driving factors for policy reform, particularly in Africa, where many governments are unable to withstand the pressure for reform or the manner in which it is done (Normand & Thomas, 2008). The Paris Declaration signed by 19 countries in 2005 forced some change by removing some of the conditionalities of aid, removing the "ownership" of the aid and harmonising the process (Normand & Thomas, 2008).

In conclusion, it is widely noted that, as with many other areas such as education and security, loans, grants and donations can do more harm than good if not managed properly. A further problem with heavy reliance on grants and donations is that if the priorities of the donor agencies change it cannot be relied upon for long-term financial sustainability (Schieber, 1997). Specific conditions and policies may have to be adhered to in order to qualify for grants and donations. A change in compliance status could result in a reduction or cancellation of funds received. Reliance on such funding poses a sustainability risk to the health care system.

Figure 2.7 below graphically illustrates the global health finance in dollar terms for 2006. This provides an overview of the various role players and their inter-relationships and how these funds are channelled.



Notes:

- Development assistance committee (DAC). This figure represents actual disbursements made for health in 2006: Source: OECD (2008a)
- 2 Non-DAC official development assistance in 2008. This figure is an estimate.
- 3 The Gates Foundation. This figure represents expenditure for 2006.
- 4 Wellcome Trust, Rockefeller Foundation and Ford Foundation (Rachiis et al. unpublished). This figure is a quesstimate.
- 5 This figure is a guesstimate
- 6 International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), Data for 2006
- Spending by the International Development Association (IDC) spending on Health, Nutrition and Population, according to the World Bank
- 8 European commission (EC) spending on health, population. Reported by Action for Global Health.
- 9 Expenditure/disbursements by the Global fund for 2006
- 10 Total expenses of GAVI according to GAVI data for 2007.
- 11 Expenditure by UNITAID
- 12 Official Development Assistance and Development assistance committee
- 13 World Health Organisation
- 14 United Nations childrens fund, expenditure according to UNICEF 2008, p. 40).
- 15 The Joint United nations program on HIV/AIDS. Expenditure for financial year 2006/07.
- 16 Global Health Partnerships. This figure is a guesstimate:
- 17 Expenditure of Me'decins Sans Frontie'res (MSF) and other large international Non-Government Organisations (NGOs). This figure is a guesstimate.
- 18 For-profit sector. This figure is a guesstimate.
- 19 Low and lower-middle income countries.

Figure 2.7: Global Health Financing Model

Source: McCoy, Chand and Sridhar (2009:414)

The complexity of this diagram further highlights the shortcomings in this global process. The need for a framework to give structure to this fragmented and hazy global aid architecture is imperative (McCoy, Chand & Sridhar, 2009). The United Kingdom Department for International Development (DFID, 2007) commented in 2007 that the 40 bilateral donors, 90 global health initiatives, 26 UN agencies and 20 global and regional funds working in global health were 'over-complex'.

2.7. INNOVATIVE FINANCING OPTIONS IMPLEMENTED GLOBALLY

Due to limitations and lack of fiscal space in traditional taxing instruments, it has become necessary for countries to find new methods to raise funds or to diversify their sources (World Health Organization, 2010a).

The following are examples of alternative options to raise funds for health care (World Health Organization, 2010a; Fryatt, 2011). The effectiveness of each option will depend on country-specific factors.

Special levy on large and profitable companies

This would be a tax imposed on some of the large profitable companies in the country. According to the 2010 World Health Organization report, Australia has recently imposed a levy on mining companies, Gabon has introduced a levy on mobile phone companies and Pakistan is a third example cited that has a long-standing tax on pharmaceutical companies. According to the World Health Organization 2010 report, this option has a medium to high fundraising potential (World Health Organization, 2010a; Department of Health, 2011d).

Levy on currency transactions

Foreign exchange transactions in the currency markets would attract this tax. The 2010 report further notes that substantial new resources can be raised in this way by middle-income countries that deal in currency transactions. According to the World Health Organization 2010 report, this option has a medium to high fundraising potential (World Health Organization, 2010a; Department of Health, 2011d).

Diaspora Bonds

These would be bonds available for sale to nationals living abroad. This tax can be applied in countries where they have a significant out-of-country population and patriotism funds can be raised at a lower cost of borrowing. This method has been used in India, Israel and Sri Lanka. The World Health Organization 2010 report cites this option as having a medium fundraising potential (World Health Organization, 2010a; Department of Health, 2011d).

Financial transactions tax

All bank account transactions or remittance transactions would attract this tax. Gabon currently has a levy on remittance transactions and in 1990 Brazil imposed a bank tax on bank transactions but this has subsequently been replaced by a tax on capital flows to or from the country. The fundraising potential of this levy would be medium, according to the 2010 report (World Health Organization, 2010a; Department of Health, 2011d).

Cellular phone voluntary solidarity contribution

Individuals could make voluntary donations via their monthly cellular phone bill, so-called solidarity contributions. According to the Taskforce on Innovative International Financing for Health systems Factsheet (2010), the global cellular market is around US \$750 billion. A contribution of even one percent would be significant and this would have a medium fundraising potential (World Health Organization, 2010a; Department of Health, 2011d).

Tobacco excise tax and alcohol excise tax

Although most countries already have an excise tax on tobacco and alcohol, there is scope to increase it without a drop in revenues. This would have a positive social implication as well if we are able to reduce the levels of tobacco and alcohol consumption could be reduced. A medium fundraising potential has been allocated to this tax (World Health Organization, 2010a; Department of Health, 2011d).

Excise tax on unhealthy food (sugar, salt)

An excise tax on unhealthy foods and ingredients would also have a positive social implication. According to Holt at the National Health Insurance conference in 2010 (Department of Health, 2011d), Romania is proposing to implement a 20 percent levy on foods high in fat, salt, additives and sugars. In South Africa there is an excise tax already

in place but there is room for expansion. According to the World Health Organization 2010 report, this option has a medium to high fundraising potential (World Health Organization, 2010a; Department of Health, 2011d).

Selling franchised products or services

Companies that are licensed to sell franchised products would contribute a proportion of the profits towards health. This option would operate successfully in low- and middle-income countries. According to the World Health Organization (2010) report, this option has a low fundraising potential (World Health Organization, 2010a; Department of Health, 2011d).

Tourism tax

This tax would be levied on activities largely linked to international visitors, such as departure taxes, which are already prevalent. A tax that is more specific to health can be incorporated and according to the World Health Organization 2010 report, this option's potential for fundraising is low: the gains could vary depending on the cooperation between countries. In South Africa an airport tax and a local tourism tax are already in force (World Health Organization, 2010a; National Consultative Health Forum (NCHF), 2012).

2.8. CONCLUSION

The performance and the financing of any health scheme can be described as a dynamic system constantly evolving. This is due to the many and various pressures as well as the constantly evolving economic factors. Despite these constant changes there are only a limited number of funding options available for the policy makers to choose from (Normand & Thomas, 2008).

This is illustrated by Saltman and Figueras (1998:86), who comment that "health policy debates around the world comprise a complicated cocktail of validated evidence intermixed with presumption and ideology".

South Africa has embarked on a process of implementing a National Health Insurance to ensure universal coverage of health for all South Africans. A clear understanding of the motivation for any country embarking on such an overhaul of their health system will only

be achieved if the objectives and targets to be achieved by this new health system are clearly defined.

The theoretical framework for the financing of National Health Insurance was developed in this chapter for the various financing options available to fund the required cost of National Health Insurance. For any health care system to be functioning at optimal efficiency the cost of providing services should balance with the income allocated or collected for health care. The funding options can be summarised as follows (refer to Figure 1.1, reproduced here for easy reference):

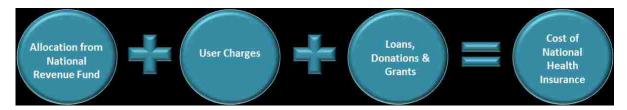


Figure 2.8: Framework for the financing of National Health Insurance

The optimal combination will depend on country-specific factors.

The first financing option by way of national revenue was addressed and the various taxing options, namely direct and indirect tax, and general or hypothecated taxes were discussed. Financing by way of user charges was addressed with the focus being more on how significantly they should feature rather than on whether or not to include user charges.

For comprehensiveness other financing options such as loans, grants and donations have been addressed as well as innovative financing options put forward both by the World Health report of 2010 and the National Health insurance conference held in South Africa in 2011.

Given that the financing framework has now been developed, the next chapter (Chapter 3) will summarise and systematically analyse problems encountered with different financing options based on the findings of countries that have established National Health Insurance funds.

CHAPTER 3

PROBLEMS ENCOUNTERED GLOBALLY WITH FINANCING NATIONAL HEALTH INSURANCE

3.1. INTRODUCTION

Global health is the goal of improving health for all people in all nations by promoting wellness and eliminating avoidable diseases, disabilities and deaths. It can be attained by combining clinical care at the level of the individual person with population-based measures to promote health and prevent disease. (Institute of Medicine, 2009: Introduction)

This definition of global health offered by the Institute of Medicine's Expert Committee on the United States Commitment to Global Health in 2008 (Institute of Medicine, 2009) reflects new demographic, economic and political realities where classifications of north and south or developed or developing countries were less salient features in the interconnected, globalised world of 2013 (Fineberg & Hunter, 2013).

Today, not only are health problems global, but also lessons, insights and solutions. Globally the last 50 years have seen infant mortality rates drop by 60 percent, fertility rates have halved, the growth rate of the world population has diminished by half since a peak in the late 1960s, and the average life expectancy worldwide has increased by almost 20 years (United Nations, 2011). Despite these positive changes towards the health demographics of the world there are a host of new and more pertinent health challenges that the world now has to address.

The world now faces new challenges with an aging world population that will bring with it age-related changes in the burden of disease. There is a shift in the economic powers of the world and formerly poor countries in East and South Asia and Latin America are now able to fund health systems and support disease-prevention infrastructure (Bryant & Harrison, 1996). The challenges to global health are enormous and transnational threats such as climate change and pandemic diseases such as HIV/AIDS and influenza have necessitated a more global approach to improving the health of populations. The solutions to global health problems depend on new technologies in medicine, improved capacity and resources and better-designed health care systems. All these factors together will promote population health and improve global governance (Fineberg & Hunter, 2013).

All these changes in the global dynamics of the world have increased the focus on health and the World Health Organization has identified National Health Insurance systems as the means by which global health will be achieved (World Health Organization, 2010a). Implementing a National Health Insurance to address the health needs of a population would be the ultimate solution, if there were unlimited resources; however, reality dictates that National Health Insurance should be funded in some way, which was the incentive for this study.

This study therefore sought to provide insight the costing aspects as well as the financing options available for funding National Health Insurance so as to safeguard the long-term sustainability to ensure global health. In this chapter of the study information from countries that have already implemented National Health Insurance systems will be analysed to establish which financing model they chose, as well as their successes and failures. This information can provide the South African National Health Insurance with information to ensure global national health and universal coverage (Engelbrecht & Crisp, 2010).

For any health care system to be functioning at optimal efficiency, two things must be in place: first, the income required to fund the activities must be available; second, the cost incurred must ensure that the required services are provided. This process can be summarised as follows (refer to Figure 1.1, copied here for easy reference):



Figure 3.1: Model for the financing of health care

Source: Own.

In this study, the focus will be on the income required to fund the activities and the success or failure of a National Health Insurance lies in the optimal balance between the three elements of funding, namely an allocation from the national revenue fund of a country, user charges, or reliance on loans, grants and donations and also to ensure that the cost required to meet the financing needs are in place.

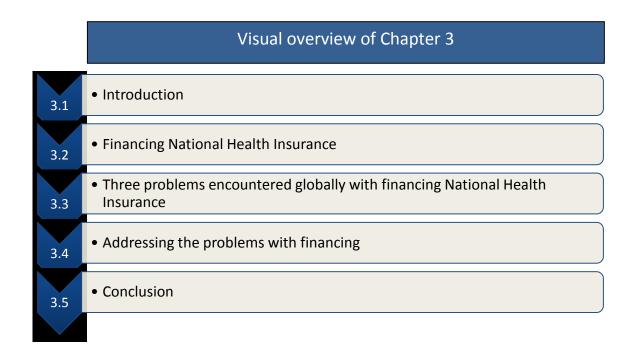
Having developed the theoretical framework in Chapter 2, the above model was discussed in detail and the various financing options available to fund the required cost of National Health Insurance were expounded with specific emphasis on financing by way of the national revenue fund, financing by way of user charges, and financing by way of other sources such as loans, grants and donations (Chapter 2).

This chapter investigates the problems experienced by countries that have already developed and implemented National Health Insurance systems. The focus is to identify the lessons learnt from those countries to ensure that the financing model adopted by South Africa in the implementation of a national insurance model will be successful and sustainable in the long run (Chapter 3). By ensuring that the costs required to fund the system are available.

In Chapter 4, the research focuses specifically on South Africa. Due to the unique nature of each country and its citizens, an understanding of a country's history and their health care system is required. As this study focuses on South Africa, an overview of the historical developments including the political and legislative choices of South Africa's health care system is presented. This overview will ensure that recommendations considered are made within the South African context. The chapter further distinguishes between three distinct periods of South African history: the colonial era, the apartheid era and the post-apartheid era, as the choices and decisions made in those periods have resulted in the current state of South Africa's health.

In the final section of the dissertation, the current state of health in South Africa will be brought into focus together with the proposed financing of the South African National Health Insurance to be implemented. The suggested way forward will be critically analysed based on the information presented in previous chapters (Chapter 5).

The layout of this chapter is as follows:



3.2. FINANCING NATIONAL HEALTH INSURANCE

3.2.1. Introduction

In 1883 Prince Otto Edward Leopold von Bismarck, the principal creator and first *Reichskanzler* (Chancellor of the Reich) of the new German national state, introduced publicly financed health insurance to the Western World and since then nation after nation has followed his lead until today almost every developing country either has or is in the process of implementing a National Health Insurance system (Bärnighausen & Sauerborn, 2002).

Some significant benchmarks in the history of the development of National Health Insurance would be the Russian system (introduced by Lenin after the Bolshevik Revolution), the British National Health Service (National Archives, n.d.), and the Canadian Federal-Provincial plans (hospital care in the late 1950s and physicians' services in the late 1960s). In nearly all these cases the health systems where based on previous systems of medical organisation and finance that reflected particular national traditions, values and circumstances (Abel-Smith, 1969).

The need for National Health Insurance systems is highlighted by the 1.2 billion people in the world who live in extreme poverty (on less than one dollar per day). According to the United Nations Human Development Report of 1997, it was further estimated that most of those who lacked access to health services lived in developing countries: 34 percent in South Asia, 27 percent in sub-Saharan Africa and 19 percent in South East Asia and the Pacific (Anand & Sen, 1997).

This need for a National Health Insurance is further highlighted by the World Health Organization's assessment in the regional overview of social health insurance in South-East Asia that 1.3 billion people globally are not in a position to access effective and affordable health care if needed, while 170 million are forced to spend more than 40 percent of their household income on medical treatment (World Health Organization, 2004a). Dr Margaret Chan, Director-General of the World Health Organization, who at the launch of the 2010 World Health Organization report is quoted to have said, "No one in need of health care, whether curative or preventive, should risk financial ruin as a result" (Chan, 2010).

Catastrophic health events plunge people into poverty as a result of the associated high costs (World Health Organization, 2007) and if this situation goes unchecked it will lead to a vicious cycle of poverty and ill health (refer to Chapter 4). Consequently, it is of paramount importance that the health status of the poor improve in order to generate income, increase productivity and wealth for any nation.

All these changes in the health profile and needs of populations have now led to a situation where governments need to redefine and rethink their financing of national health systems if they hope to meet the needs of the population in a sustainable manner. The financing of health improvements extends beyond investments in the health sector to include spending on social determinants – by reducing poverty or improving female education levels, for example (World Health Organization, 2010c).

In Chapter 4 specific emphasis will be placed on social infrastructure and the positive effects of this kind of development on health will be extensively discussed. The importance placed on health can provide insight into a country's commitment and concern for the health of its population. Governments need to re-examine budget priorities; however, there are several reasons why countries do not prioritise health in their budgets, some political,

some perhaps linked to the perception in ministries of finance that ministries of health are not efficient (World Health Organization, 2010a).

The sustainability of National Health Insurance systems is at the core of this study. More specifically, the financing of these systems needs to be addressed, as is evident from countries with long established national health systems that are now having difficulty in sustaining those systems. Latin America would be one example where their long-standing social health insurance scheme now fails to cover more than a minority of the population and has exacerbated inequity in access to health care between different segments of the population (Mills & Bennett, 2002). More recent examples would be in South-East Asia where several countries have introduced social health insurance and they too are now grappling with issues of how to achieve and maintain universal coverage when a relatively small proportion of the working population is in formal employment (Mills & Bennett, 2002).

The Netherlands has since the late 1940s supported a welfare system that was progressively built up whereby the state looked after those in need from the cradle to the grave, heavily taxing the rich and middle class to generate funds which were used for benefits for the unemployed, sick and elderly. However, after several decades, in October 2013 the Netherlands announced that the classic welfare state would slowly but surely be changing to a participation society. The Netherlands had reached a stage where the state was spending 25 euros more per day than its revenues and the interest and debt had slowly mounted up. Another contributing element was the aging population together with a dramatic drop in birth rate, which meant that the population was no longer replacing itself. The "Daddy State" that had been developed would therefore no longer be sustainable (Scholtz, 2013).

3.2.2. The sustainability of health care funding

Health care financing outside the industrialised countries is very diverse on the side of both government and what individuals and private agencies have tried to do in the absence of government action. Social health insurance, community-based insurance, user fees, increased tax financing and various combinations of these are just some of the financing options that have been experimented with, the outcomes of which have been mixed (Mills & Bennett, 2002).

This chapter will address the successes and failures of health financing reform to ensure that the most appropriate financing mechanisms are chosen in the implementation of the National Health Insurance in South Africa, learning from the experiences of other countries.

3.2.3. Transitions in global health: changes in the health needs of populations

The world has changed dramatically in the last 20 years and the health needs of populations have been dramatically altered due to demographic changes. Ageing populations, globalisation and the growing global burden of disease have all had an impact on the way in which countries plan for and provide social health insurance. These factors need to be built into the planning for social health insurance to be sustainable in the future.

Demographic change: population growth and ageing:

The late twentieth century brought to many the ultimate gift: the luxury of ageing. But like any luxury, ageing is expensive. Governments are fretting about the cost already; but they also know that far worse is to come. Over the next 30 or 40 years, the demographic changes of longer lives and fewer births will force most countries to rethink in fundamental ways their arrangements for paying for and looking after older people. (Gunter, 1998:10)

In Germany the traditional source of funding for its social health insurance was a wage-based insurance contribution; however; its ageing population means wage and salary earners have declined as a proportion of the total population, making it more difficult to fund its social health insurance system from traditional sources. The birth rate in Germany is about 1.6 children per woman of childbearing age, which means that the population is no longer replacing itself (Fin24, 2013). Consequently, the German government has been forced to inject additional funds from general revenues into the system to ensure its sustainability (World Health Organization, 2010a).

Social health insurance as a means of health care financing has advantages in that it can provide a stable source of revenues, a visible flow of funds into the health sector and a combination of risk pooling with mutual support. The disadvantages comprise problems with insuring informal sector workers and a lack of cost control (Normand & Weber, 1994).

For clarity it is necessary it reiterate what was stated in Chapter 2, namely that health coverage can be provided through either a National Health Insurance or a Social Health

Insurance (SHI): Social Health Insurance can be described as a system where only those who contribute to the fund are entitled to benefits. Contributors may be all employed people, or defined groups in certain industries or all taxpayers (McLeod, 2009).

National health insurance, on the other hand, is where the taxpayers would be the contributors and everyone would be entitled to the benefits. This study will focus on National Health Insurance; however, it is important to note that this technical distinction is not strictly applied in practice; some technically social systems are called "National Health" and vice versa (McLeod, 2009).

In Chapter 2, it was noted that National Health Insurance funds are often defined by their dominant revenue collection method (Goodwin, 2008). Goodwin goes on to cite the examples of France and Germany as being known to have "social health systems" because it is that method of financing that generates the principal funding. Goodwin adds that due to economic hardships low-income countries cannot rely on prepayments by way of social health insurance or tax revenues or are reliant on out-of-pocket charges, also known as user charges, or donor contributions, as alternative funding options.

At the turn of the millennium a number of low and middle-income countries (LMICs) were considering social health insurance for adoption or striving to sustain and improve already existing social health insurance schemes, e.g. China (World Bank, 1997), Thailand (Tangcharoensathien, Supachutikul, & Lertiendumrong, 1999; Nitayarumphong & Pannarunothai, 1998; Khoman, 1997), Vietnam (Ensor & Thompson, 1998) Indonesia, Philippines, Bangladesh (Tan, 2005), Kazakhstan (Ensor, 1998), Russia (Sheiman, 1995), Hungary (Donaldson & Gerard, 1993; Deppe & Oreskovic, 1996), and the Czech Republic (Deppe & Oreskovic, 1996).

Owing to changes in the economic environment (e.g. the financial crisis of 2010 and the increase in natural disasters), several countries have had to look at alternative options to social health insurance. For example, the current South Korean health system is a National Health Insurance with compulsory wage-based contributions and a medical aid scheme for the poor. User charges dominate and there is a high level of private health care services (Kumar, 2011).

Globalization: Trade policies, natural disasters, armed conflict and climate change

Health is increasingly influenced by decisions that are made in other global policymaking arenas ... [for] example ... the World Trade Organization, which has profoundly shaped domestic and global intellectual property rules relating to pharmaceuticals, which directly affects health related trade issues. (Frenk & Moon, 2013:937)

The effects of natural disasters on populations include immediate death and disabilities, while further disease outbreaks seem to be linked to ecological shifts (Leaning & Guha-Sapir, 2013). Also in recent times the scale of natural disasters has increased owing to increased rates of urbanisation, deforestation, and environmental degradation and to intensifying climate variables such as higher temperatures, extreme precipitation, and more violent wind and water storms (Leaning & Guha-Sapir, 2013). This increase in natural disasters has a ripple effect on health. Increased disasters translate into an increase in human casualties that requires increased health care. Governments need to plan and provide for this additional burden to ensure that the health needs of their populations are met.

Examples of natural disasters are the 2010 earthquake in Haiti and Cyclone Nargis, which hit Myanmar in 2008, killing 225 000 and 80 000 people respectively. In a matter of minutes health care facilities were destroyed and many left homeless (Guha-Sapir, Vos, & Below, with Ponserre, 2011). Extensive planning would be required in such countries as the risk of damage or total destruction of health care facilities within a country would render the country completely helpless and additional resources are needed, which can be called upon. The global response should be integrated into the country's own health infrastructure.

The global burden of disease: Pandemic diseases

Prior to 1990 there was no comprehensive source of information on the global burden of diseases and it was to this end that the World Bank and the World Health Organization launched the Global Burden of Disease (GBD) study in 1991. Quantifying the burden of disease provides useful input into health policy dialogues and identifies conditions and risk factors that may be relatively neglected and others for which progress is not what was expected (Murray & Lopez, 1996).

It is necessary to take cognisance of the advent of new and increased levels of diseases in the planning of a National Health Insurance to ensure that policies and funding can meet the needs of the population; again, the global response should form part of the infrastructure.

The introduction of a National Health Insurance in South Africa should take into account the burden of disease which plagues the country. There are four clear health problems that have been described in the *Lancet* Report as the quadruple burden of disease (Coovadia, Jewkes, Barron, Sanders & McIntyre, 2009). These are:

- HIV/AIDS and tuberculosis;
- Maternal, infant and child mortality;
- Non-communicable diseases;
- Injury and violence.

South Africa currently makes up around 0.7 percent of the world population; however, it carries 17 percent of HIV infected people in the world. The HIV prevalence is twenty-three times the global average, while the TB infection rate is amongst the highest in the world. As a result of this South Africa is going against the world trend with the life expectancy having declined over a number of years and the failure to intervene would reverse 50 years of health gains (Department of Health, 2011b).

The maternal mortality ratios, perinatal mortality and neonatal mortality rates in South Africa are much higher than those of countries with similar levels socio-economic development. These ratios are adversely affected by HIV and AIDS but they are also prey to other preventable causes (World Health Organization, 2008).

Non-communicable diseases such as high blood pressure, diabetes, chronic heart disease, chronic lung diseases, cancer and mental illnesses contributed to 28 percent of the total burden of disease measured by disability-adjusted life years in 2004. They are largely driven by four risk factors, namely alcohol, smoking, poor diet, and a lack of exercise (World Health Organization, 2008a).

Injury and violence are also significant contributors to the burden of disease. Social factors such as poverty and unemployment are the main drivers of road accidents and interpersonal violence, particularly violence against women and children (Coovadia et al., 2009).

The need for long-term care arises from a combination of many factors, usually dominated by ageing-related deterioration in health and the ability to care for oneself. Globally tremendous achievements in the previous decades in reducing morbidity and mortality have created unprecedented levels of need for long-term care across the world, posting major challenges for economies, societies and governments.

3.2.4. What factors constitute a more effective health-care system?

How resources are allocated, what mix of inputs is used and what services outputs are obtained may significantly affect health (Jönsson & Musgrove, 1997). According to the 2010 report of the World Health Organization, it is estimated that 20 to 40 percent of all health spending is currently wasted through inefficiency; the implementation of better policies and practices could increase the impact of expenditures drastically. Countries need to invest their resources more wisely, thereby moving closer to universal coverage without increasing their spending (World Health Organization, 2010a).

3.3. CHALLENGES IN FINANCING NATIONAL HEALTH INSURANCE

3.3.1. Introduction

All countries, rich and poor, struggle to raise the funds required to pay for the health services their populations need. No country, no matter how rich, is able to provide its entire population with every technology or intervention that may improve health or prolong life (World Health Organization, 2010a). Rich countries also face budget limitations – often exacerbated by dual pressures of ageing populations and shrinking workforces – but their spending on health still remains relatively high (World Health Organization database, 2011).

Health-care systems tend to "haemorrhage" money and while some countries lose more than others, the effect is that all countries fail to fully exploit the resources available. Examples of this would be poorly executed procurement, irrational medicine use, misallocated and mismanaged human and technical resources or fragmented financing and administration (World Health Organization, 2010a).

According to Mills and Bennett (2002), the most important lessons concerning health financing reform would include the following:

- Ensuring an adequately long time frame for implementation;
- Focusing on the elements of reform most critical to its overall success;
- Carefully phasing reforms to build capacity, develop political support and ensure that technical changes occur in the correct order; and
- Paying adequate attention to the skill of people and financial and information systems so the new financing mechanism functions as intended.

A closer look at these four points would highlight their applicability to the South African arena and how any one of these could become the stumbling block on the road to implementation of the National Health Insurance.

According to Mbati Mello (2002) in his research entitled "Investigation into the administration of primary health care services in South Africa with specific reference to the Emfuleni local authority", the problems associated with health care in South Africa include but are not limited to the following:

- Unevenly distributed and fragmented primary health care services;
- An increase in the number of patients;
- Misuse of financial resources:
- Inaccessible primary health care services in informal settlements;
- Wasted resources on revamping a system which does not work.

In order to identify the challenges and possible solutions to these challenges, research conducted in developing countries that met the inclusion criteria of the study (refer to section 1.4) were analysed in the next section to identify information to be considered in ensuring the long-term sustainability of the South African National Health system.

Each of these will now be discussed individually to identify the problems encountered and their different experiences.

3.3.2. Problems identified in developing countries

3.3.2.1. Introduction

There are inevitable comparability concerns when comparing experience in other counties even if they are considered to be in a similar group of countries. What is culturally acceptable in one country may not be so in another and much depends on the collective effort made by way of insurance funds, cooperatives and mutual support. The population dispersion, patterns of unemployment and the levels of literacy would all play a role. The perception by a nation of its public administration being corrupt or whether strong sanctions against unethical behaviour have been upheld also factor in. For all these reasons systems of financing and organising health care that work well in one society may not work well in another (Abel-Smith, 1985).

Based on the above reasoning, it is necessary to understand that all lessons drawn from other countries are just that – lessons to be learnt; their applicability in the South African arena would still have to be justified and researched more extensively.

The following developing countries that meet the selection criteria will now be discussed South Korea, Thailand, Turkey and Ghana.

3.3.2.2. South Korea

Historical development

The Republic of Korea began its journey in the early 1960s when early investment focused on building infrastructure to support health. There was significant expansion of the programme in 1977 which was fuelled by vigorous high-level political support (Mathauer et al., 2009). There was a steady expansion of employer-based health care schemes. Civil servants and teachers were brought into the scheme in 1981, and played a key role in raising awareness in the rest of the population. In 1988 universal coverage was at the heart of the political agenda when enrolment in social welfare programmes was a core issue in the presidential campaign, and in 1989 coverage was extended to the remaining population (Jeong, 2010).

Over the years, South Korea has enjoyed remarkable economic and social development and in 2010 South Korea achieved universal coverage in excess of 98.5 percent. It

previously had multiple funding pools based on the economic sectors but since 2000, it passed a law for the integration of more than 300 individual insurers into a single national fund, a single insurer (Kwon, 2003). This significant move helped improve equity and resulted in the highest reduction in out-of-pocket spending (Kumar, 2011).

Funding model

In the current South Korean health system, National Health Insurance underpins universal coverage, with compulsory wage-based contributions and a medical aid scheme for the poor. The out-of-pocket payments still dominate almost all health care service providers and there is an overwhelmingly high level of private provision of health care service and this is why it is considered to be one of the most competitive systems in the world (Kumar, 2011).

Challenges in the system

- In South Korea, there is a growing hospital sector with more people going to hospitals than clinics and in so doing there is a risk of unnecessary hospital admissions that is driving the cost of these services upwards (Kumar, 2011).
- The out-of-pocket payments are still dominant in South Korea and the side effect of this is an overwhelmingly high level of private health care. Furthermore, the out-ofpocket payments prevent patients from seeking medical treatment and in the long term this has led to an increase in the number of people with chronic diseases (Kumar, 2011).

System development guideline

Considering the historical development and current funding model of South Korea, the following guidelines should be considered:

- South Africa should implement a single payer National Health Insurance fund taking into account the strong economies of scale that this is likely to yield for the country (McIntyre, 2011).
- Community-based chronic disease management programmes should be well developed at primary care facilities to manage and treat HIV, AIDS, TB and other non-communicable diseases (Blecher, Kollipara, Dejager & Zulu, 2011).

- Hospital price controls should be introduced from the onset of the National Health
 Insurance and mechanisms put in place to channel volume expansion towards basic
 primary care for the under-served (Kumar, 2011) so as to avoid unnecessary hospital
 admissions that drive up the cost through administration.
- Out-of-pocket payments that are high in South Korea have shown that there is no impact for the richer groups but meaningful impact for the low-income groups. This is something that will have to be considered very carefully, taking into account the poverty problem in South Africa. Taking the example of another developing country, Ghana, in order to address the funding gap, funds should be raised from the informal sector by way of indirect funding mechanisms, for example value-added tax (McIntyre, 2011).

3.3.2.3. Thailand

Historical development

Thailand is classified as a developing country located in Southeast Asia. It had one of the fastest growing economies in the region with an average growth rate of 8.4 percent per annum during the mid-80s to the mid-90s. Historical milestones in Thailand's health systems development were achieved over the 1970–2009 period (World Health Organization, 2008b). A key feature in Thailand's socio-economic picture is its informal economy. It provides employment and income for the great majority of Thailand's working population.

Of the estimated total workforce of 34 million, 20 million are part of the informal economy. Included in this group that lacks any formal social security are agricultural workers, home workers, casual construction workers, side street and market vendors, entertainment venue workers, domestic staff and other types of self-employed workers (International Labour Organization, 2004).

Prior to the introduction of the Universal Health Care Scheme (UC), Thailand had a number of health financing schemes, namely the medical welfare, civil servants medical benefits scheme, social security scheme and the health card (De la Rosa & Scheil-Adlung, 2007). Inefficiencies were prominent in all these schemes for varying reasons and although changes were made to these schemes to expand coverage, 30 percent of the

Thai population was still without coverage in 2001 (Hanvoravongchai & Hsiao, 2007; Tangcharoensathien, Prakongsai & Limwattananon, 2007).

Funding model

In 2002, Thailand introduced its universal coverage scheme, then called the 30 bhat scheme, which meant that every Thai needed to pay just 30 bhat (approximately US \$0.70 in 2002) per medical visit or hospital admission. As a result of the implementation of the 30 bhat scheme the number of uninsured dropped to only five percent (Chanwongpaisarn, 2010).

According to Dr Tangcharoensathien from the Ministry of Public Health in Thailand, the Thai government has implemented a number of reforms to improve health infrastructure and human resources, yielding a number of positive results over a short span of time. He adds that the Thai Ministry of Health also carried out parallel local initiatives in a drive towards achieving universal coverage in health (Tangcharoensathien, 2011).

Thailand is a striking example of a country that has vastly improved service coverage and protection against the financial risks of ill health despite spending much less on health than higher-income countries. It has achieved this by changing the way it raises funds for health and moving away from out-of-pocket payments (World Health Organization, 2010a).

Challenges in the system

- The current population in Thailand is about 69 million (World Bank, World Population Statistics, accessed March 2014) and the main source of finance for the health system is through general taxation. The country spends an estimated US \$79 per capita (2011 figure) and the universal coverage scheme is managed by the National Health Security Office which is an independent public agency by law (Tangcharoensathien, 2011).
- The universal coverage scheme pools funds for nearly 50 million people and has reduced the proportion of the population without insurance coverage from 30 percent to less than four percent (World Health Organization, 2010a).
- There are currently three public health insurance programmes in Thailand: the Universal Coverage Scheme (UC), the Civil Servant Medical Benefit Scheme (CSMBS) and the Social Security Scheme (SSS). The Civil Servant Medical Benefit

Scheme provides healthcare to government employees, their dependents as well as retirees. The Social Security Scheme is a compulsory insurance programme for employees of private businesses, in which dependents and retirees are not covered. The Universal Coverage Scheme is available to anyone who is not eligible for the other two schemes (Chanwongpaisarn, 2010).

 The Social Security Scheme is financed by way of payroll tax while the other two schemes are financed by general tax revenue with no premium payments from the beneficiaries (Chanwongpaisarn, 2010).

System development guideline

This experience shows that for a developing country access to basic health care for all people is attainable. Some of the lessons that can be drawn from the experience are the following:

- Universal access to health services can be achieved in a realistic time frame if the health financing mechanisms are coordinated and pluralistic.
- There should be proper preparation and design of health-care financing and service delivery prior to implementation.
- In developing a system good governance should be built in and sufficient resources should be made available to facilitate change.
- Government should be committed to improvement in health and this would be demonstrated by their increased spending in that field.
- Sustainability should be planned for by identifying and earmarking additional sources
 of funding such as sin taxes.
- Good governance would form one of the cornerstones of success, including decisionmaking mechanisms, developing capacity building and communication policies that are geared towards the patient.
- The three synergistic driving forces that South Africa must draw on as it implements its National Health Insurance are the following (Tangcharoensathien, 2011):
 - Intelligence: systems should be designed in a way that navigates direction.

- Engine: responsive politics and financial commitment translates universal coverage politics into tangible outcomes for the population.
- Steering: citizens should hold politicians and governments accountable and responsive.

3.3.2.4. Turkey

Historical development

In 2003, the Turkish government decided to implement a wide set of policies and initiatives as part of the "Health Transformation Programme". Prior to this, according to Professor Tatar, the Turkish health system had characteristics very similar to those currently associated with South Africa's health system: the Turkish health system was highly fragmented with different schemes offering different benefit packages and coverage rules for different population groups; further, there were high levels of inequality, inaccessibility and poor quality problems for the majority of the Turkish population (Tatar, 2011).

These initiatives included the purchaser-provider split, the introduction of the family practitioner scheme, the expansion of health insurance, and increased administrative and financial autonomy of public hospitals.

Challenges in the system

The Turkish health system still faces additional challenges and the government has already started implementing mechanisms to holistically deal with difficulties relating to cost containment to create increased autonomy of public health institutions, and to reorganise hospitals.

3.3.2.5. Ghana

Historical development

Ghana achieved independence in 1957 and thereafter provided medical care to its population through a network of primary-care facilities (Eghan, 2011). The system was financed through general taxation and received a degree of external donor support. No fees were charged for services. In the 1980s the country liberalised its health sector as part of broader structural reforms. Liberalisation led to an explosion in the number of private health-care providers, which, combined with the introduction of fees to cover part of the costs of government facilities, led to a sharp dip in the use of health services,

particularly amongst the poor. Those people who did seek treatment paid out of their own pocket and often risked financial ruin as a result (McIntyre, Garshong, Mtei, Meheus, Thiede, Akazili, Ally, Aikins, Mulligan & Goudge, 2008).

Funding model

The dissatisfaction with the current financing system brought about change in 2003 with the passing of the National Health Insurance System with the purpose of providing basic health-care services to persons resident in the country through mutual and private health insurance schemes (De la Rosa & Scheil-Adlung, 2007). The guiding principles of the Act are solidarity and cross-subsidisation.

Challenges in the system

- Funding for the National Health Insurance Scheme (NHIS) are premiums and registration fees supplemented by a 2.5 percent mandatory contribution from formal sector worker pension contributions and 2.5 percent health insurance levy that is added to address the funding gaps (Eghan, 2011).
- The benefit package covers 95 percent of commonly occurring diseases and health services are provided by predominantly public sector providers, private sector doctors, non-government organisations and faith-based organisations (Eghan, 2011).
- The dominant reimbursement mechanism was out-of-pocket payments in the initial stages of implementation but now the National Health Insurance Scheme is proposing to implement capitation for doctors and diagnosis-related groups for hospital level care (Eghan, 2011).

System development guideline

Some of the lessons that can be drawn from their experience include the following (De la Rosa & Scheil-Adlung, 2007):

- The strong political commitment of government with the support of development partners towards pro-poor policies: for the provision of technical and financial assistance, collaboration with international agencies and donors was essential.
- Proper enforcement of legislation and the development of staff capacity are important components for success during the implementation phase.

- The use of coordinated pluralistic financing mechanisms rather than one single scheme is important for achieving universal coverage and access to affordable health services.
- One of the major challenges experienced by Ghana's National health insurance system in its operations is the lack of adequate information technology capacity to handle increased volume, utilisation and claims and a weak communication strategy to update stakeholders on new developments. Current changes include the rollout of four regional offices to support improved claims processing and reimbursement (Eghan, 2011).
- Investment has to be made into good governance and steps need to be taken to create public awareness. It goes without saying that the strengthening of national capacities for sustainable social health protection are prerequisites for success.

3.3.3. Problems identified in developed countries

3.3.3.1. Introduction

Developed countries have the advantage of time, having established their National Health Insurance systems long ago. It is only natural that they should lend themselves to historical analysis.

Germany, for example, has the world's oldest social health insurance system which has evolved and changed over time (Bärnighausen & Sauerborn, 2002).

3.3.3.2. Germany

Historical development

Social health insurance was first introduced in Germany in 1883 and it took just over 100 years to reach universal coverage (Bärnighausen & Sauerborn, 2002). This is evidence of the fact that there is no blueprint for realising universal coverage across all contexts and that advice must be tailored to a country's needs and conditions (Rompel, 2011).

Funding model

The German health system was founded on the principles of social cohesion, free choice of providers (patients have freedom to choose their service providers; Germany has more

than 100 multiple payer systems; also, there is a unified compensation system for the providers, negotiated price schedules and competition based on need), solidarity (meaning fair financing and equity; ethical platform, same benefit package, payment according to needs and subsidising of the poor) and subsidiarity (problems are addressed at the lowest possible level) (Reid, 2011).

Challenges in the system

- The German health financing system occupies a middle ground between public and private mechanisms.
- Since 2009 Germany has formally reached universal coverage of its population.
- Individuals can choose to be a member of the publicly administered Social Health Insurance (SHI) or private health insurance, not both.
- 87.7 percent of the population are under the public insurance fund and the rest are private, with only 0.2 percent of the population with no insurance, and the social health insurance scheme has to accept everyone.
- The roles of purchaser and provider are separated and there are no cash payments for patients.

System development guideline

Some of the lessons and conclusions that are relevant for the South African context are the following (Reid, 2011):

- From this example it is clear that adequate and almost equal access to benefits can be achieved within a pluralistic environment, and successful cost containment is achievable within a universal coverage system.
- Systems do matter: there needs to be coherence between the different components
 of health. Clear objectives, within the specific context, directed at promoting
 efficiency, access and equity need to be defined so as to earn the faith and trust of
 the system users.
- The country needs to have a clear vision of what it hopes to achieve and this should be communicated to all stakeholders.
- Legislation should ensure that human rights and patient safety are well regulated.

- The commitment by government to ensure that a successful health system is established should be evident.
- Emphasis should be placed on efficiency to ensure value for money and for generating resources.

3.3.3.3. Australia

Historical development

Australia has been at the centre of the policy debate around public-private mix for health care for decades, and in 1970, prior to the introduction of universal public health insurance, 80 percent of the population had private health insurance (Australian Institute of Health and Welfare, 1999). The Australian health insurance, which was a universal tax-financed health insurance, was first introduced in 1975 as a result of major social reform intended to achieve a fair and affordable system (Maynard & Dixon, 2002). Subsequent to its introduction it has seen many changes and since Medicare was established in 1984 the proportion of the population with private insurance has declined from about 50 percent to 30 percent and this system is now part of the social fabric of Australia and accepted by all major political parties (Schofield, 1997). The Australian private health insurance is a reflection of the political ideologies of the ruling parties and the government has offered numerous subsidies over the years (Harris & Harris, 1998).

Funding model

Under Medicare everyone has free access to medical care in public hospitals, thus reducing the demand for private health insurance (Maynard & Dixon, 2002). Medicare is a single funder and as such has its challenges; however, the private and public sectors coexist, private health insurance does not discriminate and there is the possibility of lifetime health coverage if taken early and premiums are low (Mooney, 2011).

Challenges in the system (Mooney, 2011)

- A total of 70.7 percent is funded by government at the federal level, 7.5 percent through private sources and 16.8 percent is through out-of-pocket payments.
- In terms of public financing, 82 percent comes from general taxes and 18 percent from Medicare levies and contributions based on income.

• Within the Medicare system, primary health care is dominated by general practitioners who are reimbursed on a fee for service basis.

System development guideline

Lessons and conclusions for South Africa:

- Different types of inequalities in access to health services exist between the indigenous and non-indigenous people and these can often be linked to distance and transport costs (Pulver et al., 2010).
- Due to the lack of accountability there is a lot of blame shifting in Australia. The
 lesson to be learnt is that accountability is instrumental to success and this
 accountability should be enforced by governmental laws.
- According to Professor Mooney (2011), policy makers and implementers need to keep a watch on demand-led services as these resources tend to be abused.
- Patient payments need to be kept to a bare minimum as patient payments in Australia are unaffordable and this has been shown to undermine the Medicare health system and the objective of universal coverage.
- Professor Mooney believes that multiple payer systems lead to multiple problems and his advice is that the South African system must be based on the principles of universality, equity, efficiency and cost containment.
- Caution needs to be applied when looking for guidance from Australia as their
 policies and interventions to achieve universal coverage are more radical and
 comprehensive than those of other countries; as a consequence, the South African
 government could end up subsidising more high-income earners and this is not
 something South Africa can afford (Duckett & Jackson, 2000).

3.3.3.4. France

Historical development

It was in 1945 after World War II that France, realising the need for health care institutions, implemented the general scheme in France. In 1958, job insurance was created as part of social protection to create health insurance and thus achieve universal coverage (Brami, 2011). In 2011, the French health system cost about 10.9 percent of its gross domestic

product and the annual growth of health expenditure was considered lower than most OECD countries.

Funding model and challenges in the French system (Brami, 2011)

- French health insurance has two parts; there is a co-existence of both public and private health care systems: basic service coverage and optional supplementary cover provided by non-profit organisations (NPOs) or private insurance.
- The state is responsible for hospital care and medical products and social partners share in the management of the National Health Insurance through their specific boards.
- The main sources of funding for the French system are social security revenue, employers' and employees' contributions and "sin taxes" from tobacco and alcohol.
- Current funding for health is achieved as follows: 75.5 percent from National Health Insurance, 13.8 percent from complementary private health insurance and 9.4 percent from out-of-pocket expenditure (based on 2011 figures).

System development guideline

Challenges and lessons for South Africa (Brami, 2011):

- The issues of efficiency and cost containment have become paramount in France.
- The rise of non-communicable diseases and chronic illnesses has presented a further problem leading to the question of sustainability of health insurance.
- Doctor Brami's advice for South Africa is that funding sources should be robust enough to ensure medium to long-term sustainability of the system and that adequate systems should be in place to ensure rational use of covered health services, especially when it comes to specialists and hospital services, as abuse of these would lead to funding problems.
- Previously, the French have had quick access to their primary care physician but there is a growing problem, *medical nomadism*, where patients go from one doctor to another until they find one whose diagnosis they prefer, and this is driving up costs to the system (Moffit, Manière, Green, Belien, Hjertqvist & Breyer, 2001).

3.3.3.5. United States of America

Historical development

According to Barr (2011), the United States spends more on health, both overall and per capita, than any other country in the world. Yet the health of the American population, measured by indices such as life expectancy, infant mortality and access to health care, are worse than those of all other industrialised countries (Barr, 2011).

In the 1930s a national health care plan formed part of social security; however, in the years that followed it was seen as too far-reaching and scrapped. In the years following World War II, President Harry Truman proposed a national system of health insurance; however, he was defeated by the forces of organised medicine. In the 1960s congress adopted major policy reforms in the financing of health for the elderly and the poor but this cover stopped short of national comprehensive reform. In both the 1970s and the 1990s congress came close to enacting comprehensive health care reform on several occasions (Barr, 2011).

Funding model

As health care costs continued to rise and more and more people were left without health insurance the US government faced the same problems at the beginning of the twenty-first century as they faced at the end of the twentieth century. The Affordable Care Act was passed in 2010 together with a companion reconciliation bill which together promise access to affordable health insurance to more than 30 million Americans who were previously uninsured.

Challenges in the system (Westmoreland, 2011)

- The United States of America has a highly fragmented healthcare system.
- The population life expectancy has increased to 85 years, thereby placing extra demands on an already challenged health system. Where people are living longer they now require extended health care which was not budgeted for.
- The country's health system is ranked as the most expensive in the world, where R20 trillion was spent in 2010, approximately R50 000 per capita, which translates into 20 percent of GDP.
- The American system is described as pro-rich and unfriendly to the poor.

- Americans over 65 years of age are covered by Medicare, health care for the elderly.
- Employers, private insurance and Medicaid catering for the under 65 years of age
 category are however private health insurance, which is very expensive for both
 employers and employees, and individual insurance does not cover insurance to the
 sick or those likely to be sick.
- Only 20 percent of Americans are covered by Medicaid and this fund is subsidised by federal and state government.
- Each of the 50 states has its own scheme with individual characteristics.
- According to 2011 figures, about 50 million Americans are without any insurance and most are catered for by charities.

System development guideline

- According to Professor McIntyre (2011), the South African health system compares to the US system, which is pro-rich with very high voluntary prepayments and challenged with significant levels of fragmentation. With this in mind he recommends that only three types of healthcare financing should be considered within the South African context: mandatory prepayments, voluntary prepayments (private insurance) and out-of-pocket payments.
- He further emphasises the need for some form of mandatory prepayment if South Africa is to ensure sustainability of affordable health care (McIntyre, 2011).
- Section 27 of the Constitution of South Africa should be the guide to be applied in implementing National Health Insurance as the tool to realise human right of access to health for all.

3.4. SUMMARY OF THE MOST IMPORTANT LESSONS THAT CAN BE DRAWN FROM THE EXPERIENCES OF OTHER COUNTRIES

From the discussion provided in this chapter, the following themes have emerged:

Universal health insurance does not necessarily mean universal access to health care: many countries promise universal coverage, however coverage is normally rationed and long waiting lists are the norm. There is always a small percent even if it is one to two percent of the population which is left uncovered. (Tanner, 2008:p.1)

Rising health care spending is a global phenomenon: health care has become more expensive and is getting ever more expensive and will continue to do so far into the future. This problem is not dependent on the system used to deliver the health care or the financing; therefore, what does matter is that health care is largely a service at present and this is the "cost disease" which needs to be contained (Baumol, 2012). According to Professor William Baumol, South Africa needs to look at ways to move medical care from being a service to being a manufacturing function by making use of innovation and technology.

Single-payer systems have their limitations: Countries that apply single-payer systems or those that are heavily weighted towards government control are the most likely to face waiting lists, rationing, restrictions on the choice of physicians and other constraints. Those countries that have incorporated market mechanisms such as competition, cost-consciousness, market prices, and consumer choice into their national health care systems have shown better success. Examples of such countries would be France, the Netherlands and Switzerland (Tanner, 2008).

Dissatisfaction and discontent with a nation's health care systems seem to be a universal phenomenon: According to the Commonwealth Fund survey, an astounding 82 percent of Americans believed that their system required fundamental change. Fifty-eight percent of those polled in the Netherlands and 78 percent in Germany all called for fundamental reform. Although no country with universal coverage is considering abandoning a universal system, the broad and growing trend in countries with national health care systems is to move away from centralised government control and introduce more market-oriented features (Tanner, 2008).

In the words of Richard Saltman and Josep Figueras of the World Health Organization, "[t]he presumption of public primacy is being reassessed" (Saltman & Figueras, 1998).

Sustainability of health care expenditure: the sustainable funding model

For promises to translate into actions with long-term effects, they have to be backed by sustainable funding. This statement confirms the importance of the relationship between the ministries of health and finance. As identified earlier in the chapter (section 3.2.3), the transitions in global health owing to the changes in the health requirement of populations

have forced governments, even those with established health systems, to revisit their financing options.

The underlying element throughout this research is the question of sustainability, the selection of the ideal financing framework that would ensure long-term success and sustainability.

3.5. CONCLUSION

No country starts from scratch in the way it finances health care. All have some system in place and must build on it according to their values, constraints and opportunities. This process should be defined by national and international experience. Achieving universal coverage with National Health Insurance is difficult and many long-standing schemes in countries such as Germany (Reid, 2011) and the Netherlands (Scholtz, 2013), now have to readdress the financing of their social health schemes as they are now grappling with issues of how to provide universal coverage.

The global demographics have shifted and this needs to be accounted for by nations who are striving for universal coverage in health. With South Africa on the brink of implementation of its first national health scheme it is necessary to draw from the experiences of both developing countries and developed countries. Challenges and lessons from these countries have been analysed and summarised as a basis from which South Africa can draw.

The South African health system is plagued by a number of interrelated challenges, ranging from shortages of human resources, to the inequitable distribution of resources between the public and private health sectors to the poor financial management of allocated resources. It is with this in mind that consultation and research should be carried out with local and international experts in the areas of health financing and health system reform and how these should be undertaken in the South African context to ensure that universal coverage is achieved for the entire population. South Africa needs to benefit from and apply the experience of other nations.

CHAPTER 4

HISTORIC OVERVIEW OF THE SOUTH AFRICAN HEALTH SYSTEM

4.1. INTRODUCTION

In 2011, South Africa spent 8.3 percent of its GDP, amounting to R248.6 billion, on health, this figure being far in excess of the five percent recommended by the World Health Organization (WHO) (Department of Health, 2013). Despite South Africa's spending being excessive when compared to similar middle-income countries, the health outcomes remain poor (Department of Communications, 2012). This disproportion between expenditure and outcomes can be attributed to the inequities between the private and public sector with the inheritance of a poor health system from the apartheid and pre-apartheid periods.

According to the late Collins Chabane, former Minister in the Presidency, the progress in improving the health of South African citizens is "commendable" (Ensor, 2013), yet the maternal mortality rate, according to the Millennium Development Goals Country Report issued in 2010, estimated South Africa's maternal mortality rate to be 625 per 100 000 births, this compared with 236.8 in 2008 and 120.7 in 1990 (Department of Health, 2013). It is evident that since 1990 there has been an increase in the maternal mortality rate and not a decrease. Currently in South Africa the maternal mortality rate still remains at 310 deaths per 100 000 births and according to the targets set by the Department of Health in terms of their Negotiated Service Delivery Agreement, the maternal mortality ratio should have decreased to 100 deaths or less per 100 000 births by 2014 (Department of Communications, 2012). This would be in line with the millennium development goals.

The campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA), which is an African Union project, was formed in May 2012 with a mandate to reduce maternal and infant mortality rates and South Africa is a signatory, confirming their commitment to improving the health needs of women and children (South Africa Info. 2012).

The United Nations Population Fund released a report on *The State of the World's Midwifery* in June 2011 (United Nations Population Fund, 2011). The objective of this report is to provide guidance on how to achieve the millennium development goals, particularly Goal 4, which is to reduce child mortality, and Goal 5, which is to improve maternal health (United Nations Population Fund, 2011). South Africa forms part of this

initiative, which is indicative of their acknowledgment that South Africa is still struggling to achieve this goal as set by the millennium development goals.

South Africa's commitment to achieving and working towards and achieving the millennium development goals is further indicated by the launch of the Green Paper in 2011 on the National Health Insurance, which was tabled to give all South Africans access to appropriate, efficient and quality health services (Department of Health, Policy on National Health Insurance, 2011a). Currently only 16.2 percent of South Africa's population has access to medical aid. This leaves the remaining 83.8 percent dependent on a failing health system. However, the Development Indicators Report of 2012 presented by Mr Collins Chabane on 20 August 2013 explains:

In this area, we are making commendable progress in improving the health status of the nation. The tide is turning and we are achieving more positive health outcomes. This has been critical to addressing the systemic racial and socio-economic inequalities that characterised the pre-democracy era. Free primary health care for children and pregnant mothers has had a significant, positive impact in terms of immunisation and child nutrition, among other benefits.

As a result, data from the Rapid Mortality Surveillance system shows that South Africa's life expectancy has increased to 60 years, exceeding our 2014 targets. Infant and child mortality rates are also decreasing. Inequities and the quality of health care remain an area of concern. This applies also to the number of mothers who die due to direct and indirect factors related to pregnancy.

Many targeted health interventions are in place to address these challenges, including the strengthening of health worker and management capability, the establishment of the Office of Health Standards Compliance and the development of a National Health Insurance System. (The Presidency, 2012)

Despite the positive picture presented by government in this report South Africa will not be able to reach its millennium development goals by 2015; however, it will be closer to achieving them than any other African Country (Boston, 2013). As part of its efforts to achieve these goals, South Africa has established Outcome-Based Priorities with 2014 as the target year. The current picture indicates that the country is ahead of schedule on many targets, but is lagging in the attainment of others.

Further initiatives to achieving the millennium development goals include the implementation of a National Health Insurance to ensure universal coverage of health for all South Africans (Department of Health, 2011d), with the rollout of phase one of the National Health Insurance Fund from 2011.

To reach universal health care coverage, optimal use of available resources is required. This aspect represents the third question under consideration in this study, namely "How can we ensure optimum use of available resources for universal coverage?" as stated in Chapter 2 (section 2.2.4).

This study aimed to provide insight into the financing options of National Health Insurance and the costing required for the financing (Chapter 1). During the study, information from countries that have implemented a National Health Insurance was analysed to establish which financing model they chose, as well as their successes and failures. This information can provide the South African National Health Insurance with valuable information to ensure universal coverage (Engelbrecht & Crisp, 2010).

Following on this, for any health care system to be functioning at optimal efficiency, two things must be in place; first, the income required to fund the activities must be available and second, the cost incurred must ensure that the required services are provided. This process can be summarised as in Figure 1.1 (repeated here for easy reference).



Figure 4.1: Model for the financing of health care

Source: Own.

Following the development of the theoretical framework in Chapter 2, the above model was discussed in detail and the various financing options available to fund the required cost of National Health Insurance were explained, with specific emphasis on financing by way of the national revenue fund, financing by way of user charges, and financing by way of other sources such as loans, grants and donations (Chapter 2).

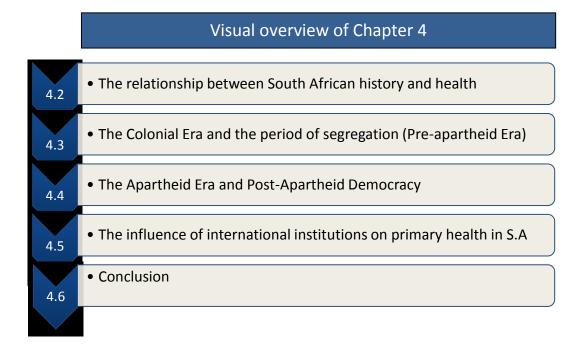
Chapter 3 summarised and systematically analysed problems encountered globally by countries introducing and operating national health systems. The results of this analysis

can be used to identify specific areas that should receive attention when developing and implementing a National Health system for South Africa. Due to the unique nature of each country and its citizens an understanding of a country's history and their health care system is required. As this study focuses on South Africa, an overview of the historical developments of South Africa's health care system was researched. This overview will ensure that recommendations considered are made within the South African context.

The aim of Chapter 4 is to provide a historic overview of the South African health system. The historical, political and legislative choices of a country have a significant bearing on the current state of health and their impact on health. A countries history and it's practices are all determining factors in their current state of affairs and it is with this aim in mind that a comprehensive overview of the history of South Africa's health is being investigated. It is not possible to correct the mistakes or fix the problems without identifying where and how they originated. In the following sections clear connections will be highlighted between South Africa's history and it's impact on the current state of health, as well as the connection between poverty and ill health and how these factors have culminated into the current state of health, which will be discussed more extensively in chapter 5. The discussion will distinguish between three distinct periods, the colonial era, the apartheid era and the post-apartheid era, as the choices and decisions made in those periods have resulted in the current state of South Africa's health.

Dr Aaron Motsoaledi, the Minister of Health (2011), at the launch of the green paper on national health, stressed that the cornerstone of the proposed National Health Insurance is universal coverage. This concept of universal coverage has been addressed in Chapter 1 (section 1.8.2.) and can be summarised as follows: "...to ensure that all people have access to services and do not suffer financial hardship in paying for them" (World Health Organization, 2010a).

In order to achieve the objective of the chapter, namely to highlight the link between social injustice of South Africa's history and the current state of health in South Africa, five specific aspects need to be researched. These concepts that form the basis of the chapter are as follows:



4.2. THE RELATIONSHIP BETWEEN SOUTH AFRICAN HISTORY AND HEALTH

The World Health Organization definition states that health care is a basic human right that a just society through its government is obligated to ensure to the fullest extent possible for all its citizens (World Health Organization, 2010a). South African history is permeated with discrimination based on race and gender (Coovadia et al., 2009:817):

The roots of a dysfunctional health system and the collision of the epidemics of communicable and non-communicable diseases in South Africa can be found in policies from periods of the country's history, from colonial subjugation, apartheid dispossession, to the post-apartheid period.

These are the opening words of *The Lancet* Series on Health in South Africa as published by Coovadia et al. (2009). This reasoning is the basis of this chapter. There is a direct link between people's health and the environment in which they live and work (De Beer, 1984), and the history of this living and working environment is what has led to the large disparities in health in the present-day South Africa.

Apartheid has been predominantly credited with the current legacy of poor health services; however, what is apartheid: A system? An ideology? A coherent blueprint? No, rather a pragmatic tortuous process of consolidating a nationalist movement's leadership of establishing the Afrikaner's right to self-determination, not primarily against a coloured

force, but by preventing the return of the United Party (Schrire, 1994). This dissertation will go back to the colonial era to explain this.

The reign of apartheid as well as the policies pre-1948 dictated and contributed to the current state of health in South Africa. It is necessary to look at the historical roots of South Africa to understand the impact that segregation in the colonial era, apartheid and inequality have had on the current state of health in South Africa.

The burden of disease in South Africa that has been documented by the *Lancet* Report, specifically HIV/Aids and tuberculosis, maternal, infant and child mortality, non-communicable diseases, and injury and violence, can also be more clearly understood if the historical roots of South Africa are laid bare (*The Lancet*, 2009; also see Chapter 2, section 2.2.2).

Zegeye and Maxted (2003) note that colonialism and apartheid have left the majority of South Africans living in a highly unequal society in which poverty and social dislocation have had profound and traumatic effects on the social fabric (Zegeye & Maxted, 2003). Modern South Africa is a multiracial democracy, with a mid-year population estimate of 52.98 million people, made up of a black African majority (79.8% of the population), coloured (9.0%), white (8.7%) and Indian (2.5%) (Statistics South Africa, 2013a).

The impact of South Africa's history on the current state of health, health policy and health services is undisputed; however, it is assumed that this pronounced effect was only as a result of the coming into being of the National Party in 1948. This assumption is questionable as white domination of the South African health system has a history which dates back to the colonial era (Burrows, 1958). Racial segregation had manifested itself in a number of forms decades before the establishment of the National Party. This segregation had a direct impact on the health of the country in that racial separation extended into health institutions and health authorities, being the unequal state provision of health care.

The quality and availability of health facilities were established along racial lines and it is due to this root cause that the history of South Africa needs to be delved into at this stage of the dissertation to understand the inequality in medicine under the colonial, preapartheid and apartheid eras (Van Rensburg & Benatar, 1998).

Furthermore, it is important at this stage of the dissertation to understand the meaning and effect of poverty and the role it played in apartheid; these terms and concepts will be briefly discussed below.

What is Poverty?

According to the World Bank, poverty is "the inability to attain a minimal standard of living measured in terms of basic consumption needs or income required to satisfy them" (World Bank, 1990).

The opening of the World Health Organization's Annual Report for 1995 states that poverty "is the world's deadliest disease, the world's most ruthless killer and the greatest cause of suffering on earth". Poverty not only determines the sort of illnesses people have but also determines the health care available to them, and this vicious cycle feeds on itself in that illness thrives in an environment of poverty and poverty perpetuates illness (Conrad & Gallagher, 1993).

Although poverty and inequality are closely related, they are not one and the same. Primary health care, clean water, adequate sanitation, food, shelter, clothing, income and basic education would be included as the key elements in order to ensure a basic minimal standard of living, according to Dasgupta (1993).

Poverty can be further analysed and it can be establish that there is a difference between "absolute poverty" and "relative poverty". Absolute poverty would be where a person earns or does not possess a specified amount of money, food, and shelter. Relative poverty refers to that situation where poor individuals lack the resources to meet the standards that are acceptable in the society in which they reside (Sen. 1983 cited in Townsend, 1979).

Furthermore, the majority of black South Africans living in the apartheid era would indeed be considered poor as they lacked the money to buy anything besides food. They were unemployed, oppressed and restricted in terms of the colour bar from changing their situation by way of better job opportunities. It is on this definition and reasoning that the concept of poverty is applied in this dissertation.

Inequality and poverty - their relationship with race

It is only through the history of the people that the inequality between black and white South Africans can be understood. The National Party's coming into power in 1948 was not the creation of segregation and inequality; it merely legalised and refined the existing inherited practices. The majority of these segregation practices stem from the colonial practices followed by the British and Dutch colonists. These practices were formalised with the enactment of the Population Registration Act and the Group Areas Act in 1950, which formed the foundation for the racial classification of society into White, Black, Asian and Coloured (Phatlane, 2006).

The racial classification system determined a person's opportunities in life, their access to education, health services, and employment; therefore, it can be concluded that race classification formed the basis of poverty in South Africa (Phatlane, 2006).

Table 4.1: South African population

Year	Whites	Africans	Coloureds	Asians	Total
1950	2 641 689	8 556 390	1 103 016	366 664	12 667 759
1960	3 088 000	10 927 922	1 509 258	477 125	16 002 797
1970	3 751 328	15 057 952	2 018 453	620 436	21 448 169

Source: Department of Statistics. Republic of South Africa, 1974.

The figures in Table 4.1 above highlight that the white population was a minority in comparison to the African population.

To determine the impact of segregation policies on health services and the development of these policies which resulted in the current failed health system, this study will now investigate the history of South Africa starting from the colonial era to understand where these policies originated and the true place in time where the seeds of segregation were planted.

4.3. THE COLONIAL ERA AND THE PERIOD OF SEGREGATION (PRE-APARTHEID ERA)

4.3.1. Introduction

People make their own history but not in a circumstance of their own choice; they act in an arena shaped by the past. Accordingly, to understand the present conjuncture in South Africa it is essential to have a sense of its history, to reflect on constraints and the possibilities created by that history. (Bundy in Terreblanche, 2002:3)

These words of Bundy (1993), quoted by Terreblanche (2002) and Phatlane (2006), confirm the objective of this chapter, namely identifying the role history played in the current state of health in South Africa. To understand the impact of inequality in medicine under apartheid it is necessary to look at the historical roots of such inequality (Phatlane, 2006). The fact is that almost all key apartheid measures such as the pass laws, influx control, labour migrancy, native reserves, etc., have their roots in the pre-apartheid period (De Beer, 1984).

The colonial era can be divided into three distinct periods, namely the Dutch colonisation 1652–1800 (section 4.3.2), the British colonisation 1800–1910 (section 4.3.3) and the first period of the Union of South Africa: period of segregation 1918–1948 (section 4.3.4). Each of these periods will now be discussed separately with specific emphasis on the health system and the health challenges prevalent in those specific periods.

Where there was specific legislation and political changes relating to health it will be discussed in the general section and not in the health section.

4.3.2. Dutch-colonisation (1652–1800)

In 1652 the first white settlers arrived on the shores of Cape Town at the Cape of Good Hope and this marks the entry of the first white people into a land they found inhabited by native tribes, namely the San and KhoiKhoi. Over the next century and against much resistance the natives were forced into slavery and thieved of their lands and cattle by these new settlers. These indigenous people were then forced to work as labourers on farms. The settlers' reach extended eastwards towards the neighbouring lands of the AmaXhosa tribes and they were dealt the same courtesies as the other black African tribes living in the area (South African Info, 2012). More and more of the indigenous inhabitants were dispossessed and absorbed into the colonial economy as slaves (Department of Communications, 2012); a new multiracial social order evolved, based on the supremacy of the European colonists.

In 1657 colonial authorities awarded farms to European settlers in arable regions around Cape Town where wheat and wine became the prevalent products (South African Info, 2012). With the onset of the 1700s the colonists began to extend their reach inwards towards the interior, and as they intruded further inland their demands for water, land,

livestock and labour grew. Up until this stage the South African economy was an agricultural one (Coovadia et al., 2009).

Other African countries such as Mozambique, Madagascar, India, and Indonesia were the main source of slaves imported to work for the settlers on their newly acquired lands. The ancestors of the present-day citizens classified as coloured are thought to be the workers and slaves that came to work on the settlers' farms (South African Government Communication and Information System, 2011).

With the importation of slaves to feed the demand for cheap labour, the slave population grew rapidly and by the mid-1700s there were more slaves in the Cape than there were "free burghers" (European colonists). Slaves of African descent were found on the farms of outlying districts while Asian slaves imported from India brought with them a new Islamic religion and they were mainly concentrated in towns (Phatlane, 2006).

4.3.2.1. Health issues during Dutch colonisation (1652–1800)

According to Burrows (1958), medical care was still not readily available even to the white settlers. They were largely dependent on herbalists, patent medicines and home remedies. Political control of the settled area of the Cape was held by the Dutch East India Company and hospitals were limited at that stage and built for specific needs, hence the first hospital in the Cape housed sailors of the Dutch East India Company who had fallen ill at sea (De Beer, 1984).

Medical practice at the time was primitive and procedures such as blood-letting, blistering and sweating were the preferred measures used. It was the Europeans who introduced diseases such as smallpox in 1713, and 1755 saw the outbreak of a serious smallpox epidemic in the Cape – 963 white settlers and 1000 slaves lost their lives as a result. Isolation techniques were applied and following the smallpox outbreak two temporary hospitals were established, one for blacks and one for whites (De Beer, 1984). It is important to note that the most favoured method of health treatment at the time was isolation.

The first doctors in the Cape were employees of the Dutch East India Company. They were military men, there to provide health services to the settlers. These doctors were followed by midwives who arrived shortly thereafter (De Beer, 1984). Traditional healers were responsible for the health care of the indigenous people as well as the slaves

(Phillips, 2004). In the nineteenth century medical care offered by traditional healers and medical missionaries differed little by way of results. It was only the discoveries made in the late nineteenth century, for instance the "germ theory", that then made biomedicine more effective (De Beer, 1984).

4.3.3. British colonisation (1800–1910)

The British occupied South Africa in 1806 and ruled uninterrupted for a century, and the Cape Colony was integrated into the dynamic international trading empire of the then industrialising Britain. Over this time the British extended their rule further inland by violence and warfare against the indigenous people, who were either forced into being tenants or forced into designated rural lands (Coovadia et al., 2009).

During this period the mineral revolution not only transformed the country from an agricultural to an industrial economy, but was also responsible for the social changes that dramatically altered the health of the country's population (Andersson & Marks, 1987). The depression in the wine industry made slavery less profitable at this time, while wool became a staple export on which the Cape was dependent. The year 1820 saw thousands of British settlers, who were the unemployed in Britain, arriving on the shores of the Eastern Cape. The mid-1830s were marked by the movement of large numbers of displaced Dutch colonists moving northwards to extend the white occupation beyond the Cape's borders. This is known as the Great Trek. In 1843 the British took control of Natal as they were concerned about controlling traffic through Port Natal (Government Communication and Information Systems, 2011).

The discovery of diamonds in Kimberley in 1867 and the discovery of gold on the Witwatersrand in 1886 brought demographic, economic and social changes, the impact of which would only be understood in later years (Marks & Rathbone, 1982). People flocked to the mines and overcrowding and social evils such as prostitution became rife. The demand for cheap labour was unrelenting and more aggressive methods were used to obtain it: legislation and other tactics were used to force male labourers to the towns as they were considered expendable. In 1889 there were 10 000 miners working on the mines, and by 1910 this figure had increased to 200 000 (Coovadia et al., 2009).

The working conditions on the mines, in the reserves and in the towns were appalling and, coupled with inadequate nutrition, the "diseases of poverty" were born (refer to section

4.4.2.1. for a full explanation). These diseases affected mainly the African labourers. It was in this context that tuberculosis arose and, in the same way, sexually transmitted infections amongst the workers on the mines (Horwitz, 2001).

Black labour was procured ruthlessly with no or little regard for health matters, and the colonial government of the day worked with the mining industry to ensure the constant supply of cheap black labour.

The British were victorious in the First Boer War, which was fought from 1880 to 1881, and they also won the second Boer war, which was fought from 1899 to 1902. Following the British victory in 1902 the two Afrikaner Republics (Orange Free State and Transvaal) and the two British colonies (Cape Colony and Natal Colony) were merged to form the Union of South Africa. The newly formed Union of South Africa did not consider it "necessary to plan for a Ministry of Public Health" (Phatlane, 2006) and the South Africa Act of 1909 made only a brief reference to health. Health was left to each province individually and instead of unifying the provinces, the newly formed Union created and promoted further separation and fragmentation (Phatlane, 2006).

In 1807 the first health legislation saw the establishment of a Supreme Medical Committee to oversee all health matters. In 1883, the Public Health Act was legislated that made certain diseases notifiable, whereby notification and certain inoculations became compulsory. In 1897, the Public Health Amendment Act was passed which racially segregated health facilities as well as curative and preventative services (Coovadia et al., 2009).

4.3.3.1. Health issues during British colonisation (1800–1910)

Isolation was the favoured method of treatment and in the early 1800s a leper colony opened, which by 1822 housed 120 lepers in conditions which have been described as being beyond description. In 1845 Robben Island was built as a housing station for the lepers and mentally challenged (De Beer, 1984). In the mid-1800s hospitals were established in most major centres and hospitals for blacks opened in Pietermaritzburg and Kingwilliamstown (Coovadia et al., 2009).

Towards the end of the nineteenth century epidemics of typhoid, tuberculosis, yellow fever, cholera and malnutrition all spread rapidly and chaotically (De Beer, 1984).

In the late 1800s the nursing profession in South Africa was established; however, this professional body was only for white women. It was only in 1907 that the first professional black nurse qualified. Joseph Lister, who is known as the father of the antiseptic movement, stated that "the discovery of the professional trained nurse who has helped the medical practitioner to revolutionise the care of the sick, to extend his own sphere of usefulness, to increase his personal income and to apply his scientific discoveries to patient treatment" was the greatest discovery made by medical science during the nineteenth century (Lister cited by Searle, 1980, cited by Phatlane, 2006).

It should be noted that the Cape colonial government adopted legislation providing for the registration of medical practitioners, dentists, nurses and midwives, etc., through Act No 34 of 1891, thus making South Africa the first country worldwide to pass a law recognising the legal status of nursing and the subsequent effect on the training of black nurses thereafter was profound (Mashaba, 2002).

Conditions in Johannesburg were chaotic and dysentery and typhoid were the order of the day. Furthermore, men frequently suffered injuries on the mines and the condition of the Kimberley Carnarvon Hospital has been described by a nursing sister in the following words:

Eighteen men are put into a narrow room which would scarcely hold six. The beds are narrow: they have no quilts, no screens, no lockers... there is no mortuary...the floor is bare earth. There are never less than six urgent cases waiting for a bed... This is the white ward; there is no need to tell you of the tent where the coloured (black) people are. (De Beer, 1984:18)

It is clear from the above that health care in South Africa was impoverished. In 1896 the Simmer and Jack mining company opened a hospital for its mine workers and a number of mines soon followed this example (De Beer, 1984).

4.3.4. Union of South Africa (period of segregation 1910–1948)

The year 1910 saw the establishment of the Union of South Africa and the urban black population grew by 94 percent between 1921 and 1936. Evidence of racial segregation at the end of the eighteenth century was explicit when people of colour were required to carry documents from their employees in the cities as a means of identification (Brits, 1994). These included pass laws, influx control and labour migrancy which controlled the

movement of black South Africans, restrictions on the ownership of property and many other measures with the sole objective of white domination.

Evidently white political and economic power determined and set the scene in a very significant way for the incidence of poverty and disease. The number of women and children living in urban areas grew and this led to over-crowding, unsanitary hostels and slums in urban areas. The African National Congress (ANC) was formed in 1912 and they opposed the formation of the Union in 1910 as well as the pass laws and the 1912 Land Act (Coovadia et al., 2009).

In 1915 a Union-wide Tuberculosis Commission was established to help curb the spread of the disease amongst the white population. It was the order of the day that the government was only propelled into action on public health matters when the health of the white population was endangered. The signing of the Public Health Act of 1919, prompted by the outbreak of a serious influenza epidemic in 1918, marked the second phase in the medical history of South Africa (Phatlane, 2006).

A committee of inquiry was appointed in 1927 to "[i]nquire into the training of Natives in Medicine and Public Health". This was known as the Loram Committee (De Beer, 1986). An extract from the official documents reads as follows:

It cannot be denied that at present there are hordes of Natives in many centres who have little chance of medical treatment, and the untreated sick become a menace to the community. Indeed, not just a menace but a double menace to South Africa. Firstly there is the immediate danger of the spread of infection and contagious diseases from areas where they may be said to be practically endemic. Secondly, there is the economic danger of the deterioration and eventual failure of the labour supply. (Loram Committee Report, 1928, cited in De Beer, 1986:21)

There was widespread recognition of the fact that more black doctors were needed to service their own people and this commission's findings motivated the decision to allow the training of African doctors and the establishment of rural health units (Phatlane, 2006). According to Shapiro (1986), there were fewer than ten black doctors in the whole of the Union of South Africa in the 1930s.

The Gluckman Commission arose out of the recommendations made by the Loram Committee and despite the dire predictions made by this committee it took more than ten

years for government to appoint the Gluckman Commission to redirect and correct the health system (De Beer, 1984; Gluckman, 1944).

In 1942 it was with the frank and transparent words below that Dr H Gluckman, Member of Parliament for Yeoville, proposed and formed the National Health Services Commission which was tasked to "investigate and recommend the best measures to be adopted for ensuring adequate health services for all sections of the population of the Union of South Africa". The commission was progressive in its approach in that it put the prevention of ill health above the curing of disease, a concept which has taken root today but was new at the time (De Beer, 1984).

What is wrong with our present health services? Let me refer briefly to some of their shortcomings. Under the present system the majority of people are deprived of the advantages of modern medical services. The service rendered is determined not by the individual's susceptibility to disease, but by his ability to pay. Members of the medical profession are compelled, under the present system to practice for gain and are said to have a vested interest in disease. (De Beer, 1984:15)

The Gluckman commission report criticised the existing health services and stated: "Unless there are vast improvements made in the nutrition, housing and health education of people, the mere provision of more 'doctoring' will not lead to any real improvement in the public health" (De Beer, 1984:24). The Commission provided a detailed blueprint for a National Health Service as the Commission believed that adequate health should be available to all and the state had a duty to provide this service (De Beer, 1984).

The Gluckman report summarised the health services that were present at the time and condemned the health services as chaotic and uncoordinated. In addition, the Commission was critical of the monotonous repetition of uncoordinated services as a result of the haphazard development of health in South Africa. The Commission summarised the prevailing confusing situation, the main fault being that services were fragmented and uncoordinated in every branch dealing with health. The following role players were responsible for the different branches of health:

Local authorities: local authorities were meant to provide hospitals and other facilities
for dealing with infectious diseases such as tuberculosis; local authorities were also
meant to supervise environmental health services such as sewerage disposal.

- Provincial authorities: provincial authorities were meant to run the hospitals provided by local authorities; school-run educational health programmes and medical assistance for the poor was supposed to be carried out by this branch; however, the name of the task at hand would indicate that it would have been better managed by local authorities who were closer to the communities.
- The Department of Public Health: this branch was merely for appearance as it had no
 authority to enforce regulations. It was tasked with the duty of supervising local
 authorities in their environmental health programmes but this branch held no real
 power. The state was also involved in controlling the spread of infectious diseases;
 however, with the lack of coordination between the local, provincial and Public Health
 department, services were often haphazard.
- The mines: the mines were responsible for running mine hospitals so this was not in line with what was being done in other hospitals in other parts of the country.
- Mission and charity organisations: these individuals tried to provide health care to those who had no other way of getting medical treatment.
- Private hospitals: these hospitals existed to provide services to those who could afford them and the Gluckman Commission condemned them as many provided overpriced and poor services.
- Private doctors: these doctors on a scale of benefit provided the greatest portion of medical treatment in South Africa but only to those who could afford it (De Beer, 1984).

Dr Henry Gluckman became Minister of Health in 1945 but the Nationalist Party came into power in 1948, before his recommendations could be implemented (Buchman, Kunene & Pattinson, 2008).

4.3.4.1. Health issues in the union (period of segregation 1910–1948)

The poor urban working and living conditions, with diseases caused by overcrowding, poor sanitation and diet, stress and social disintegration, gave rise to further outbreaks of tuberculosis, syphilis, malaria and venereal diseases. There was a need for more doctors to service the black population and this was highlighted by the Loram Committee (Phatlane, 2006). The first doctors were European and the first non-white registered doctors in 1910 were one coloured doctor and one Malay doctor (Phillips, 2004).

According to the report of the National Health Services Commission, of which Dr Henry Gluckman was the chairman (1944), in 1940 there was one doctor for every 308 white people in Cape Town, as compared to one doctor for every 22 000 people in Zululand and one for every 30 000 people in a reserve area in the Northern Transvaal. These statistics were evidence that despite the growth in the population the private practice in the country was failing as doctors congregated where rich people lived (De Beer, 1984). From this, it is clear that already in the 1940s there was a disproportionate allocation of resources.

By the late 1920s, tuberculosis had affected more than 90 percent of adults in parts of the rural reserve of Transkei and Ciskei (Coovadia et al., 2009), highlighting the poor state of health already prevalent amongst the blacks in South Africa. Private health care was not an option for the masses; the state failed them and as a result they suffered.

Private practice

User charges (out-of-pocket payments) were the primary funding for private health care in South Africa until 1889, when the first private voluntary health insurance organisations, called medical schemes, were introduced. These schemes were established to cater for the needs of white mine workers, and membership was for whites only until the late 1970s (McIntyre & Dorrington, 1990). The mining houses were the driving force behind the development of private health care. At the onset private hospitals were limited to mission hospitals and industry-specific hospitals such as hospitals at large mines.

From the 1930s, committees were being established to address the problems encountered as a result of spiralling poverty, an increased number of strikes for improved working conditions, and the worsening social conditions.

The following is a brief overview of the commissions tasked during the 1900s with their specific mandates and findings.

Table 4.2: Commissions appointed for the period 1926 to 1950

Year	Commission	Mandate	Findings
1926	Loram Committee	Inquire into the possibility and feasibility of establishing a training institution for Natives in Medicine and Public Health (Loram Committee Report, 1928).	It reported that there was a grossly inadequate supply of doctors for the black population; there was an excessively high rate of infantile and maternal mortality as well as a rise in the general death rate in the impoverished areas. The conclusion was twofold: firstly, there is a danger of the spread of diseases and the sick would become a menace to society. Further, there would be an economic danger in that there would be a deterioration and failure of the labour supply (Loram Committee Report, 1928).
1930s	Carnegie Commission	To investigate the "poor white problem"	The report highlighted the high degree of malnutrition amongst the whites in this group; their health status was deplorable and they suffered from preventable ill health (Murray, 1932).
1942	Smit Committee	Ways to improve the material welfare of the urban African population	The report condemned the gap between the earnings of migrant and urban workers, recommended that unions be recognised, and proposed steps to abolish pass laws (De Beer, 1984).
1944	Gluckman Commission	To investigate and recommend the best measures to be adopted for ensuring adequate health services for all sections of the population of South Africa.	The report noted that there was an unacceptable level of disease; it blamed the situation largely on social and economic conditions. The report criticised the health services of the day; which it regarded as inadequate, uncoordinated and misdirected. It recommended that a National Health Insurance be implemented to provide free health care for every person in South Africa (De Beer, 1984).
1948	Fagan Commission	To look at ways of responding to the economic and social changes that had taken place.	The report recommended that the migrant labour system should end. It noted that the African workforce had been permanently urbanised and that the reserves were overcrowded and impoverished (Phatlane, 2006).
1950	Tomlinson Commission	To ascertain the state of economic and social conditions in the African areas and to suggest measures for their development.	The commission submitted a development plan in an attempt to build a bridge between the ideological rhetoric of apartheid and the need for positive action in the reserves. The report suggested that a means be provided for the direct enlistment of Africans in the administrative process (Butler, Rotberg & Adams, 1977)

These reports represented the reformist response to the social tensions of the 1940s. The Gluckman Commission was more progressive than the other reports in that its recommendations ran counter to dominant views on health care at the time.

The Gluckman Commission Report criticised private practice, stating that it was totally inadequate for the masses as medical care was only available to those who could afford it. The fundamental belief of the Commission was that adequate health care should be provided by the state and should be available to all. With this in mind the Gluckman Commission proposed that a National Health Insurance be established along the following lines (De Beer, 1984):

- All personal health services should be supplied free of charge.
- All necessary personal and preventative services should be provided by the state;
 The main institution in the National Health Insurance should be the community health centres.
- These centres should be supported by a network of general practices, specialist and teaching hospitals.
- Training of medical staff would be imperative and it was recommended that the training of several thousand medical staff commence immediately (De Beer, 1984).

Dr Gluckman was applauded for his report and the United Party, which was the ruling party at the time, was prepared to adopt the recommendations made. However, this report was never given life as the National Party emerged as the victors in the 1948 elections and the Gluckman Commission and its report were considered a hindrance.

4.4. THE APARTHEID ERA AND POST-APARTHEID DEMOCRACY (POST-APARTHEID ERA)

4.4.1. Introduction

Although social factors cannot be held responsible for all diseases in apartheid South Africa, the disease patterns and their distribution in the period under review can be attributed to the major inequalities in society. Debates around the relationship between poverty and disease are not new: both Edwin Chadwick and Charles Booth, in their respective studies covering the Victorian era and the poverty in London in the 1890s, have conceded that poverty and health are interrelated (Phatlane, 2006). Colonialism and

apartheid have left South Africans living in a highly unequal society in which poverty and social dislocation of the majority are the root cause for the current state of our society (Zegeye & Maxted, 2002).

The recognition of the problem of poverty did not exist in South Africa until the emergence of an unemployed class of unskilled whites in the urban areas at the turn of the century and this inevitably produced a social crisis. The "poor white" issue lay at the heart of the explanation for the intensification of racial segregation in South Africa.

History has shown that poverty and health are interrelated: state interventions that were provided to the poor whites were not provided for the blacks and therefore their condition remained unchanged. The poor-white problem was a major element in motivating the future leaders of South Africa to explore a more permanent solution for separating the two racial groups so as to ensure that the white minority was protected (Phatlane, 2006).

4.4.2. The apartheid years 1948–1994: A segregated society

In 1948, the National Party became the ruling party in South Africa and it was determined to safeguard white superiority by crushing all black resistance and further enslaving and suppressing the black population so as to ensure a constant supply of cheap labour with no opposition (De Beer, 1984). Geoffrey Cronje and a number of Stellenbosch academics can be credited with the ideology of apartheid as they had developed and published broad guidelines in this regard as early as the 1940s. It is also interesting to note that Cronje, who was an Afrikaner sociologist, regarded apartheid as a means of safeguarding whites (Phatlane, 2006).

With the new regime, segregation became a fixed part of government, where the black population was further disadvantaged by racially based legislation. For example, in 1935 white people earned 11 times more than black people and 20 times more in 1970 (Houghton, 1976). The apartheid era opinion in respect of black education was that black people should be educated to a level appropriate for menial positions in society (Coovadia et al., 2009). From the onset racial segregation dominated medical training and in 1920 the first faculty of medicine was established at the University of Cape Town; however, this faculty was only available to whites. The University of Natal Medical School opened in 1951 and it was only after this that black doctors started to be trained. In the period 1968-1977 only three percent of graduating doctors was black. This was due to the fact that

black people were only able to receive medical training at the University of Natal. No other institution was available to them (Phillips, 2004 as quoted by Coovadia et al., 2009).

In 1977, a new Health Act was passed which, together with the Health Services Facilities Plan, published three years later, promised wide-ranging change and a very optimistic outlook.

In the political arena, the 1980s saw the integration of the different forms of the struggle, the mass mobilisation of the people and international solidarity. From this period, regional and national states of emergency were enforced. In 1983 reform was evidenced by the amendment of the Constitution to allow the coloured and Indian minorities limited participation in separate and subordinate Houses of Parliament. By the end of 1980 mass defiance campaigns were the order of the day and there was widespread support for the release of political prisoners. At the same time, the international community strengthened its support for the anti-apartheid movement. In 1989, FW de Klerk replaced PW Botha as State President and it was with the opening of Parliament in February 1990 that the unbanning of the liberation movements and the release of political prisoners became a reality. Amongst those released was former president Nelson Mandela, who was released on 11 February 1990, and this marked the change in the South African apartheid era (Government Information and Communication Systems, 2011).

Sufficient evidence has been presented thus far to support and verify the interrelationship between poverty and health. The various elements from South African history that contributed to the creation of a society steeped in poverty will now be discussed.

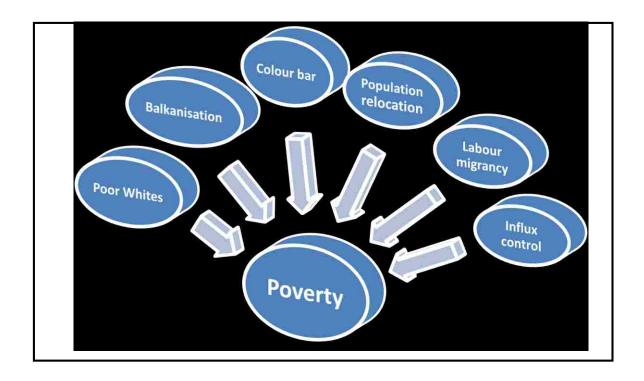


Figure 4.2: Diseases leading to poverty

Source: Own

"Poor Whites" and poverty

The 1920s and 1930s witnessed an accelerated movement of black as well white rural dispossessed people into the towns and it was these factors that created a similar crisis in health both amongst the poor whites and the blacks, although the latter always bore the brunt of the suffering. In the early 1930s the Carnegie Commission was appointed to investigate the "poor white problem", their appointment being the recognition by government that something needed to be done (Murray, 1932).

The report highlighted the high degree of malnutrition amongst the poor whites. Furthermore, it was revealed that their health status could be considered deplorable. Many of the diseases from which they suffered would be considered preventable. It was necessary to take a holistic view of the problem and although these people were suffering from malnutrition it was only part of the bigger problem. By improving the political and social conditions of this community by way of state intervention, the health status was significantly improved (Murray, 1932).

It was under the leadership of J.C. Smuts that economic benefits of the Boer War were directly channelled to the poor whites to ensure that they were not swamped by the growing masses of urbanised black workers. This would explain why by 1948 poor whites

had virtually ceased to exist (Phatlane, 2006). The steps used to change the condition of the poor whites were not directly related to health. The good health which was purchased for the poor whites was not in the form of more doctors, more drugs or more health facilities; it was achieved by addressing poverty as the underlying cause. A community development programme was started which included job reservation, government-subsidised housing and greater technical education for the white youth (Phatlane, 2006). Access to medical care also improved; however, health services played only a limited role in changing the condition of this group of people.

"Balkanisation" and poverty

The term Balkanisation was used to describe the process of fragmentation or division of a region or state into smaller regions or states that were often hostile or non-cooperative with one another.

In the rural areas blacks were forced into designated areas, 'the ethic homelands', which were termed the 'Bantustans'. The urban population was being pushed back into the townships so as to keep them far from both the white suburbs and their places of work (Phatlane, 2006). In terms of the 1913 Land Act the majority of the country's population was allocated to live in thirteen percent of the land (Lacey, 1981). Politically, it was easier to police and control those citizens who were considered such a threat. In 1968 this already overcrowded situation was further aggravated by the state's decision to stop the building of urban township housing. Rural residents in the thousands moved to the cities illegally (De Beer, 1984). A study conducted by Randall Packard on tuberculosis in South Africa in1989 drew attention to the apartheid government's attempts to import African labour into both industries and mines while simultaneously exporting poverty and disease to the countryside (Phatlane, 2006).

The Tomlinson Commission (Commission for the Socio-Economic Development of the Bantu Areas within the Union of South Africa) was appointed in the 1950s to report on a scheme for the rehabilitation of the "Bantu" areas. Their recommendation was that a policy of separate development be followed (Union of South Africa, 1955). The Commission made a number of far-reaching recommendations, some of which included substantial expenditure in the amount of R208 million for developing secondary and tertiary industries within the Bantu areas (Union of South Africa, 1955). However, the Tomlinson

Commission Report was not favourably received and the state decided to rely on pass laws and influx control to limit and prevent black urbanisation (Phatlane, 2006).

The colour bar and poverty

To reiterate the point made at the beginning of this chapter, racial discrimination was not an invention of the National Party that took over in 1948, but was their inheritance which had already been legislated long before. In 1948 the ruling party merely tightened and enforced more diligently the discriminatory practices of their predecessors. To illustrate this, the Mines and Works Act of 1911 already prohibited blacks from performing certain types of skilled work and the Industrial Conciliation Act of 1956 merely extended and refined this policy by way of black exclusion (Horrell, 1969).

This legislation sought to provide safeguards against interracial competition between black and white South Africans (Phatlane, 2006). With the discovery of gold in the Transvaal, the poverty levels amongst the poor white population became a significant social problem, one that had existed from at least the eighteenth century; however, with the socio-economic transformations brought about by the mining revolution the problem had peaked to the point where it could no longer be ignored (Lange, 2003).

Dire poverty was the state of large numbers of Afrikaners who were suffering the effects of the Great Depression of the 1930s and who were not prepared for the reality of the modern industrial society which had emerged. These 'poor whites' were pouring into the cities, displaced by war, drought, population growth and the change in the economy (Illife, 2006). As a result, the state considered the colour bar necessary in order to maintain white supremacy.

Population relocation and poverty

Desmond (1970: xviii) uses the following words to describe the forced removal of millions of black South Africans to the rural Bantustans:

It is not the result of a sadistic aberration, it is not the expression of a pathological negrophobia, above all, it is not a mistake. It is being done because it has to be done if apartheid is to survive.

The Group Areas Act of 1950 was responsible for the forced removal of over three million people from their settled areas to the Bantustans. These forced removals further

impoverished the people and created bitterness. The conditions of resettlement, particularly the poverty, overcrowding and malnutrition, continued to provide a catalyst for tuberculosis, and the wider South Africa showed a decline in the rate of tuberculosis as the more susceptible segments of the population had been exported to the rural areas where record-keeping and medical records were out of their reach (Phatlane, 2006).

According to Wilson and Ramphele (1989), the forced removal of people from Ga-Tlhose to Bendel meant that they could no longer be involved in subsistence farming and cattle grazing, the working men who were employed by the mines and who before the relocation were able to walk to work were now much further from the mines, and those who did have work could not return to their families more often than once a year. This is just one of the social consequences of the forced relocations. Family life suffered and together with the conditions of poverty, overcrowding and malnutrition resulting from resettlements created a fertile environment for the spreading of tuberculosis (Packard, 1989).

Wilson and Ramphele (1989) explain that most families that were forcibly removed were forced to sell their livestock at a tenth of their value as it would not be possible for them to keep cattle in the Bantustans.

For political and ideological reasons the close connection between ill health and social change which had already been recognised by health professionals and health officials in South Africa (Andersson & Marks, 1989) was deliberately ignored.

Labour migrancy and poverty

The migrant labour system has been an inherent feature of the South African political economy since the beginning of the industrial revolution (James, 1992) and this topic has received much academic attention. Studies conducted include Murray (1980), May (1985) and Wilson (1972). Many other countries also make use of migrant workers; however, no other country can be cited as having trapped such large numbers of its population in such a dehumanising manner (Phatlane, 2006). A unique feature of the South African migrant labour system is that workers were forced to leave their families behind in the impoverished conditions of the Bantustans (Mazibuko, 2000).

In addition, the overcrowding that was rife in the hostels only perpetuated the spread of tuberculosis. To further link the historical events with poverty, disease and health, it is only necessary to consider the statement made by a professor of medicine at the University of Witwatersrand, Harry Seftel, in 1973 at an International Cardiology Conference that South Africa's migrant labour system was the major contributory cause of heart disease amongst Witwatersrand Africans (Seftel, 1973).

Colin Murray (1980:150) concluded that "virtually every adult male in the Bantustans is faced with the contradiction that his absence is a condition of his family's survival. But his absence also undermines the conjugal stability from which his family derives its identity".

There is no doubt that this system contributed to the rural poverty by disrupting family life.

Influx controls and poverty

From the 1920s, the goal was to keep blacks out of the cities except as units of labour. After 1948 the apartheid system merely tightened up the pass laws and limited the construction of housing for blacks.

According to Wilson and Ramphele (1989), one arrest was made on average every two minutes, from 1916 to 1989. Over the seventy years from 1916 until 1986, the total number of black South Africans prosecuted in the country under pass laws has been estimated to be well over 17 million (Phatlane, 2006). The black South Africans lived in constant fear of police raids and brutality, together with the trauma and humiliation of being arrested, is but one of the faces of poverty.

Political stability had been achieved by the end of 1960 and there was a strong system of labour controls in place. From 1960 to 1971 there was strong growth and foreign investment into South Africa by industries looking to capitalise on the cheap labour available, bringing with them sophisticated technology which drove South Africa to become a modern industrial power (De Beer, 1984). South Africa emerged at the end of the 1960s richer and more developed; however, this growth was not evenly spread. Whites made up 17 percent of the population and earned 72 percent of the income in 1960. Blacks made up about 70 percent of the population and earned only 19 percent of the income. This disparity was not coincidental; black workers were held back, limited in their training so as to halt their growth. It is interesting to note that all this remarkable economic growth occurred at the time when the world economy was in a decline (Phatlane, 2006).

Finally, it would be fair to say that apartheid South Africa was generally unhealthy not as a result of a disease-ridden country but as a result of the majority of the population living in

conditions that are incompatible with health. This study has not been able to discuss all the elements which contributed towards poverty.

Health in the period 1948–1994: Apartheid years

The "diseases of poverty" and the conditions of the life emanating from apartheid, the migrant labour system, enforced settlement, the job colour bar, influx controls, and "bantustanisation" are the true killers of the black population during the period under review and not "apartheid" itself (Phatlane, 2006).

In the previous section the discussion centred on the elements contributing towards poverty and their interrelationship. Poverty and health are so interrelated that one cannot discuss the one exclusively of the other. This dissertation will now address the elements leading out of poverty as depicted in Figure 4.3 below.

The purpose of this section is to highlight how the apartheid system was incompatible with the provision of good health for the period under review. Each of the diseases resulting from poverty will now be discussed.

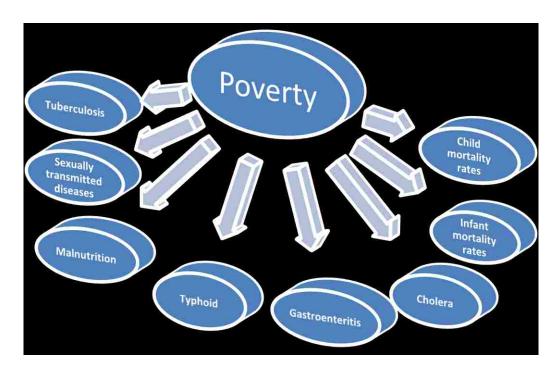


Figure 4.3: Diseases resulting from poverty

Source: Own

In the following sections the relationship between poverty and each of these diseases will be explored.

Poverty and tuberculosis

One of the indicators of a status of poor health would be the prevalence of tuberculosis. The poor standard of living provides an excellent breeding ground for the disease (De Beer, 1984). According to Professor J.R.V. Reid of the Faculty of Medicine at the University of Natal, a symptom of the poverty was that blacks were ten times more likely to contract tuberculosis than whites (Letter from G.A. Joubert, regional director of State Health Services, to Secretary for Health, 31 January 1969, cited in Pathlane, 2006.).

In a study conducted by Randall Packard (Packard, 1989) on the history of this disease and poverty he states that malnutrition is key to tuberculosis. By weakening the immune system it makes the onset of active tuberculosis much more likely. This study confirms that malnutrition is a key element in most diseases. Admittedly, overcrowding does explain the rapid spread of infection, but it is malnutrition more than any other single factor that allows the disease to produce such devastating effects.

The official statistics showed a decline in the spread of the disease between 1950 and 1965. However, one has to take cognisance of the fact that this was the time during which the mass relocation of blacks took place. Millions of blacks were forcibly removed to the overcrowded Bantustans (De Beer, 1984). With this action government removed those individuals from urban areas where they would have received better treatment and furthermore, they were out of reach and were not relected in the statistics and this explains the decline which was recorded. This amounted to nothing less than state manipulation of the tuberculosis statistics (Phatlane, 2006).

Following the resettlements into the Bantustans blacks were forced to rely on indigenous medicine as they were geographically beyond the reach of modern medicine (Packard, 1989).

Poverty and sexually transmitted diseases

With the implementation by the National Party in 1948 of influx controls, single-sex hostels for migrant labourers and the detrimental effects of "bantustanism" on family life, there can be little doubt that the apartheid government perpetuated and encouraged the conditions

that were necessary for the spread of sexually transmitted diseases (Hunt, 1989). There is a historical tendency to blame the black Africans for the spread of sexually transmitted infections based on the assumption that they are sexually immoral and promiscuous; however, this assumption totally disregards the impact of the social conditions that produced these diseases. The disruption to the African family unit as a result of migrant labour resulted in a significant price to be paid (Ramphele, 1993).

Poverty and malnutrition

Malnutrition has a direct impact on all other diseases. This needs to be highlighted at the outset of this discussion to ensure that the true implications of malnutrition are understood. The lack of good nutrition was a promoting element in the health problems of black South Africans (Phatlane, 2006).

In the World Health Organization Report, *Better Food for a Healthier World* (1973), it is stated that "one half to three quarters of all statistically recorded deaths of infants and young children are attributed to a combination of malnutrition and infection and an adequate diet is the most effective vaccine against most of the diarrhoeal, respiratory and other common infections".

According to *The State of the World's Children, 1984* (United Nations Children's Fund, 1984), "all infections have a nutritional impact in that they depress the appetite, decrease the body's absorption of nutrients and induce the body's rejection of food through vomiting, or even drain away nutrients through diarrhoea. As a result, malnutrition and infection become joined in a self-reinforcing cycle".

It is not difficult to identify the link between malnutrition and apartheid and this does not mean that malnutrition did not exist in other parts of the world; however, what made it unacceptable was the fact that there were sufficient food resources during the 1960s to feed the country's entire population, had there been a fair and equitable distribution of these resources (O'Meara, 1966).

The Race Relations Survey of 1963 shows that malnutrition was prevalent in South Africa at a time when the country's economy was booming and South Africa was a major exporter of food (Horrell, 1964). *The Star* newspaper carried an article on 20 February 1971 stating that surplus milk powder was being fed to animals and about four million pounds of butter was exported to Britain at a loss (Horrell, 1964).

According to Seedat (1984), it was reported that more than 10 000 litres of milk were being pumped into the sea on a daily basis with the objective of maintaining prices. *The Star* newspaper ran another article on 17 September 1962 stating that technical tests conducted by the Council for Scientific and Industrial Research (CSIR) revealed that a pint of milk per child per week was sufficient to prevent malnutrition. The horror of the above revelations is that the South African government was in a position to avoid malnutrition becoming an epidemic and yet they consciously decided against this.

According to Wisner (1989), in the period 1979-1980 surplus maize amounting to R226 million was exported by white farmers. This amount was estimated to represent about R350 for each malnourished child in South Africa – another example of how much of the current-day health problems could have been averted if the government of the day had so decided.

Poverty and typhoid

To eradicate poverty would be expensive compared to the cost of providing clean water and proper sanitation, which can be considered the most basic health issues. It would have been expected that the South African government would have placed more emphasis on these health issues as the scarcity of clean water and the lack of appropriate sanitation and sewage disposal are the direct causes of water-borne diseases such as typhoid. High levels of typhoid reflect the lack of sanitation and clean water supply (Phatlane, 2006). In the rural Bantustans, where the majority of black South African lived, typhoid was one of the most common notifiable diseases for the period under review (Mills, 1988).

In the periods of 1950 and early 1960s, it was estimated that at least one in every 750 boys between the ages of 5 and 14 years had contracted the disease (De Beer, 1984). In 1979, the Department of Health conducted a study and found the incidence of typhoid to be six times higher in the homelands of Venda, Gazankulu and Kangwane as opposed to the rest of the country (Department of Health, 1980). Subsequent appeals were made to government by hospital authorities to embark on immunisation campaigns but these pleas fell on deaf ears. This period of intensification of typhoid corresponds with the government's intensification of the population removals and resettlement of these people in unsanitary rural areas. It should further be noted that proper sanitation would have been more effective than immunisation programmes (De Beer, 1984).

Poverty and gastroenteritis

The four most common killers in children would be respiratory ailments (such as pneumonia), measles, gastroenteritis (diarrhoea) and diseases of malnutrition (kwashiorkor and marasmus). The connecting thread between all these ailments would be malnutrition, as undernourished children have a weaker resistance to infection, therefore making them more prone to illness. For example, it is common for children to contract measles but only malnourished children die from it (De Beer, 1984).

The relationship between the incidence of gastroenteritis and poverty and also the duration of the disease have been clearly demonstrated by Botha in the case study he conducted on the diarrhoeal disease as cited by Wilson and Ramphele in their work entitled "Uprooting Poverty: The South African Challenge" (1989).

Hunger kills and the socio-economic status of a community can be gauged by the incidence and prevalence of these diseases. The negative synergy between enteritis and malnutrition has been well documented in South African journals by Wittmann and Hansen (1965), stating that undernourished children are more susceptible to contracting gastroenteritis and the period of illness would also be prolonged in children who are undernourished.

The Star newspaper commented in January 1966 that "disease is killing kids like flies" after having reported 112 deaths in that year (*The Star*, 20 January 1966). This evidence should be considered in light of the fact that only the worst cases were being reported as admission to hospitals was not an option for all; therefore, these alarming figures are still understated (World Health Organization, 1983). In conclusion, gastroenteritis is directly related to malnutrition and poverty. These three factors together are what create an epidemic.

Poverty and cholera

Dr Jerry Coovadia, of the Natal Medical School, had the following to say with regard to cholera:

Cholera is only a different shade on the canvas of ill-health. The cause of cholera is not to be found in biology, but in poverty. Inadequate and non-existent sanitation and the lack of piped clean water are the immediate causes of the spread of the disease. But the roots of cholera lie in an unequal distribution of resources – too much for some,

very little or next to nothing for others. Many of us have been saying for years now that serious diseases which are preventable have been among black South Africans all the time. (Andersson & Marks, 1989)

Cholera was not a significant problem in South Africa up until the late 1970s and early 1980s and despite South Africa being a developing country at that stage, the political and economic policies of the apartheid era dictated that the majority of black South Africans were forced to live in unhygienic conditions where healthy living was utterly impossible (Friedman, 1982). In 1975 the World Health Organization sponsored a survey in developing countries and found that only 22 percent of the rural population of those countries enjoyed access to safe water as compared to 77 percent of city dwellers (Harrison, 1993).

As stated by Andersson and Marks (1989), the inadequate supply of clean water in most developing countries is the true culprit for the spread of cholera; however, the South African government took advantage of the ill-founded belief that cholera is a tropical disease and natural in a given area. In reality, this was an excuse to shift the responsibility for creating the circumstances in which this disease could thrive (Phatlane, 2006).

There was a vaccine available against cholera in the apartheid years but it remained ineffective as it only lasted for six months and had a prevention rate of 50-60 percent and, according to Zwi (1981), it was thought to be unwise to vaccinate large groups of people as it would give them a false sense of security against the disease (Zwi, 1981).

Poverty and infant mortality rates

Infants are extremely vulnerable in their first year of life and the infant mortality rate is a measure of the number of children out of every thousand live births who die before reaching one year (World Health Organization, 2015). The infant mortality rate in developing countries is much higher than in developed countries and this can be attributed to the fact that the infant mortality rate is a good indicator of a population's general standard of living (Phatlane, 2006). Infants are most vulnerable in their first year and poor housing, poor sanitation, and exposure to infection would all be contributing factors to preventative diseases such as diarrhoea and pneumonia which are themselves fuelled by malnutrition (Kelly, 1990).

In 1963 the *Star* newspaper reported that the 1962 Town Council of Umtata's municipal cemetery report showed that almost half the burials in that previous six-month period were African children under the age of one year (*The Star* newspaper, January 1963). In the period 1950–1970, in the era of South Africa's economic boom, statistics indicate that the infant mortality rate amongst blacks was almost three times as high as that of the white population (Department of Statistics, 1974).

According to the United Nations publication in 1972 on the apartheid facts and figures, mortality figures ranged between 200 and 450 infant deaths per 1 000 live births. As a comparison, another developing country, namely Ghana, had an infant mortality rate of 110 per 1 000 live births according to a comprehensive investigation carried out in the 1960s (Laurence, 1979).

Poverty and child mortality rates

The child mortality rate is the number of children per 1000 children who die before turning five years of age. This rate reflects factors affecting the health of children, such as nutrition, sanitation and communicable diseases in children (World Health Organization, 2015). According to Cleland and Van Ginneken (1988), there is a link between the level of maternal education and child health and child mortality; however, cognisance needs to be taken of the South African context where it is not so much a question of the education of the mothers as it is the availability, accessibility and affordability of caring for and nurturing children in those adverse social conditions (Phatlane, 2006).

A prime example of the circumstances would be where bottle feeding had to replace breast feeding so as to enable mothers to look for work and subsidise their migrant husbands' meagre wages. Furthermore, the availability of clean hygienic water with which to prepare the bottle feeds was not a reality in the rural villages. Certain basic requirements such as clean water are necessary to enable a mother to care properly for her children; its absence has a significant influence on the child mortality rate (Phatlane, 2006).

Diseases do not occur in isolation but are usually the combination of a number of social and political developments which are not conducive to the promotion of good health or the prevention of disease. As has been addressed in this section, diseases such as

tuberculosis and sexually transmitted diseases all thrive in the socio-economic environment people lived in.

This section has sought to establish the link between apartheid-created poverty and disease. In the next section the post-apartheid period will be considered in terms of history and health.

4.4.3. Post-apartheid democracy 1994–2012

South Africa's first democratic election was held in 1994 under an interim constitution which divided South Africa into nine new provinces in place of the previous four (Constitution of the Republic of South Africa, 1993). In 1994 the African National Congress (ANC) emerged from the first democratic elections with 62 percent of the votes. This new ANC-led government embarked on a course to promote the reconstruction and development of the country (Government Communication and Information Systems, 2011).

This was a period of momentous transition, socio-economic change, reconciliation and a commitment to improve the lives of all South Africans. The Constitution enacted in 1996 was a significant milestone which, coupled with the peaceful elections that followed in subsequent years, gained the admiration of the international community. Thabo Mbeki succeeded Nelson Mandela as president in 1999 and went on to hold two terms of office until 2008. During this period he was successful in further integrating South Africa into the global political, economic and social arenas. In the 2009 general elections the ANC emerged with 65.9 percent of the vote and Jacob Zuma was inaugurated as President of South Africa (Government Communications and Information Systems, 2011).

Based on the historical background the new government was confronted with many challenges to right the wrongs of the past, one of which was the correction of the health system, and to improve the overall health of all South Africans.

4.4.3.1. Health in the period 1994–2012: Post-apartheid democracy

"The greatest single challenge facing our globalised world is to combat and eradicate its disparities" Nelson Mandela. (*Harvard Magazine*, 1998)

The advent of democracy in South Africa created a unique opportunity for numerous laws and policies to be changed that included the National Health Plan for South Africa. The Department of Health adopted the primary health care approach which emphasised health

as a human right, equity in resource distribution, expanded access, decentralised services which were aimed at promoting local health needs and community involvement through the district health system as well as preventive and promotive health care (Klugman, Stevens & Van den Heever, 1998).

From 1994 to 1999 the focus on health was primarily on increasing access to health care to those who did not enjoy access in the rural and other under-served areas of South Africa. Thereafter further structural reorganisation was prioritised and during the next five years from 1999 to 2004 emphasis was placed on quality issues in health care. In 2004 the National Health Act was passed which provided a framework for a single health system for South Africa. It highlights the rights and responsibilities of health-care providers and users, encourages broader community participation, and outlines the general functions of provincial health departments (National Department of Health, 2003).

According to the report issued by the Department of Health in South Africa for the year 2009/2010, the aim of the National Department of Health is to promote the health of all people in South Africa through an accessible, caring and effective national health system based on the primary health care approach (Department of Health, 2010). Despite strategic health programmes being carried out, South Africa continued to confront the quadruple burden of diseases, consisting of HIV/AIDS and tuberculosis; high maternal and child mortality rates; non-communicable diseases; and violence and injuries. Studies have found HIV/AIDS to be a common denominator influencing the mortality rates of mothers and children, and also fuelling the tuberculosis epidemic (Department of Health, 2010).

In the 2011/2012 report issued by the Department of Health with the theme "A Long and Healthy Life for All South Africans", the Minister, Dr A. Motsoaledi, reienforced the message:

All South Africans deserve the highest attainable standard of health, envisaged by the World Health Organization for all nations of the world. To redress these inequities and to ensure universal coverage for all South Africans, government adopted the policy on National Health Insurance to transform the health system and grant all citizens access to good quality health services irrespective of their socio-economic status. National Health Insurance is based on the principles of universal coverage, right of access to basic health care and social solidarity. These principles are intertwined with the concept of equity. The financial year 2011/12 was a historic period in South Africa in

many respects. Major strides were made in 2011/12 towards the creation of the National Health Insurance system. In August 2011, the DoH released the Green Paper on National Health Insurance for public comment. (Department of Health Report, 2012)

The progress referred to by the Minister would be the Negotiated Service Delivery Agreement signed between the Minister of Health and the President, which prioritises 12 outcomes that include the vision of "a long and healthy life for all South Africans" (McKerrow & Mulaudzi, 2010b). This progress has not been without challenges, including inadequate human resources and planning coupled with a lack of leadership and management (Coovadia et al., 2009).

Four outputs which are consistent with the health-related millennium development goals to be achieved by nations across the world by 2015 have been identified by the health sector (refer to Figure 4.4)

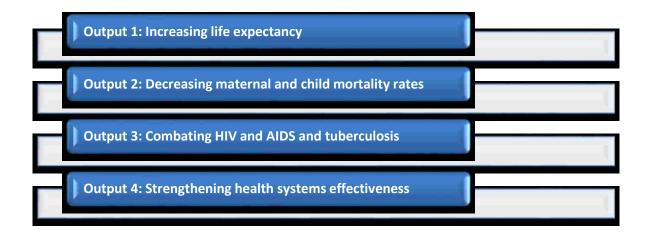


Figure 4.4: Four outputs to be achieved in the health sector by 2015

The Department of Health has been assigned the responsibility of harnessing the country's efforts towards the achievement of these outcomes (Department of Health, 2013). To achieve these outputs, interventions in sanitation, water supply, housing and combating hunger (social grants to combat malnutrition) have played a major role in improving the health status of all South Africans. These areas of intervention have been identified as fundamental issues that feed poverty as it is widely recognised that food, sanitation, water and housing satisfy a basic human need for physical security and comfort, which would directly impact on the well-being of individuals (Statistics South Africa, 2013b).

The following progress was noted in the survey:

Table 4.3: Interventions towards achieving the millennium development goals

Sanitation	In 1994, 50% of households had access to sanitation compared to 73% in 2007 Presidency development indicators, South Africa, 2008). In 2007 60% of all household access to a flush or chemical toilet as compared to 51% in 1996 (Statistics South A 1996). According to the report on the status of sanitation services in South Africa in 79% of households had access to sanitation. The report adds that on average 30 households are provided with sanitation services annually; however, this is insufficient order to achieve the target of universal coverage by 2014 as contained in the miller development goals (Department of Water Affairs, 2013).	
Water	In 1994, 62% of households had access to water, meeting Reconstruction and Development standards as compared to 87% in 2007 (The Presidency, Republic of South Africa, 2008). By December 2011, 449 082 people had received a basic water supply, which would mean that South Africa had surpassed the Millennium Development goal of halving the proportion of people without sustainable water and is likely to achieve the Millennium Development Goals by 2014 (Government Communication and Information Systems, 2011).	
Housing	Formal dwelling inhabitants increased from 64% to 71% for the period 1996 to 2007. There was a simultaneous decrease in inhabitants occupying informal dwellings from 16% to 15% (The Presidency, Republic of South Africa, 2008). In the 2011 census 77.6% of the population was living in formal dwellings (Statistics South Africa, 2011a). 1996–65.1% of households lived in formal type dwellings 2001–68.5% of households lived in formal type dwellings 2007–72.6% of households lived in formal type dwellings 2011–77.6% of households lived in formal type dwellings (Statistics South Africa, 2011a) The statistics highlight the steady improvement made over the period 1996 to 2011.	
Social Grants	To address the issue of malnutrition, social grants have been consistently increased in the annual budget since 2004.	

What is still very real in South Africa is the inequality between populations. Further inequities were entrenched through the development of a private for-profit health sector that was unregulated but well supported and organised through private financing (health insurance funds or 'medical aids'), private hospitals, pharmacies and health practitioners (Department of Health, 2011d). Government employees themselves contributed to these health funds and accessed their care from private health facilities (McKerrow & Mulaudzi, 2010a; Department of Health, 2012).

The following graph highlights the progress made with regard to infant and child mortality rates where the infant mortality rate has decreased from 46.8 deaths per 1000 live births in 2006 to 39.1 deaths in 2010. In the 2011/2012 report issued by the Department of Health, the Health Data Advisory and Co-ordination Committee concluded that the target for the

2014/2015 period should be to decrease the infant mortality rate (IMR) to 36 per 1000 live births. The child mortality rate also decreased from 72.2 deaths per 1000 live births in 2006 to 56.6 deaths in 2010. In the 2011/2012 report issued by the Department of Health the Health Data Advisory and Co-ordination Committee concluded that the target for the 2014/2015 period should be to decrease the infant mortality rate (IMR)to 50 per 1000 live births (McKerrow & Mulaudzi, 2010a; Department of Health, 2012).

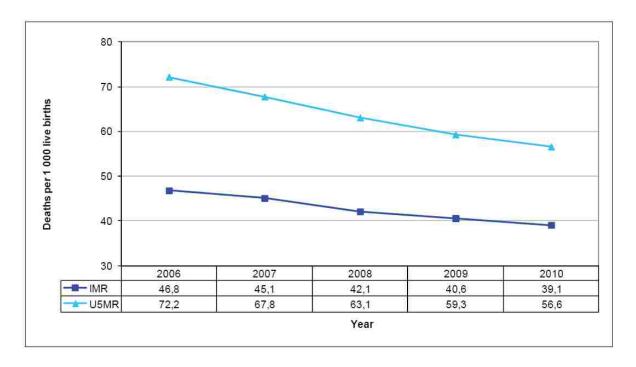


Figure 4.5: Infant and under-five mortality in South Africa, 2006–2010 Source: Mid-year population estimates, 2011 (Statistics South Africa, 2011b).

The above discussion is merely an introduction to the next chapter, which will comprehensively address the current state of health in South Africa. The infant and child mortality rates have received more attention as it is these two indicators that have been specifically identified by the millennium development goals.

Before concluding this chapter, an important component needs to be addressed, namely international institutions and their influence on South African health. A brief discussion will now follow explaining the nature of international health and related institutions within the context of this dissertation.

4.5. PRIMARY HEALTH CARE IN SOUTH AFRICA AND THE INFLUENCE OF INTERNATIONAL INSTITUTIONS

4.5.1. Introduction

The inability of individual governments to be self-sufficient in finance and health experience required to meet the needs of their population is what gave rise to International Health Institutions (Mello, 2002). According to the World Health Organization (1988), primary health care should reach everybody; it should not be limited to health facilities and it should constitute a continuous relationship.

To understand this concept, it needs to be analysed. The word "primary" refers to something which is fundamental or of first rank in a series and the word "health" refers to the state of being well in body and mind (Fowler, Fowler & Thompson, 1995). International health institutions such as the World Health Organization have been established by mutual agreements by a number of member states. The policy and composition of these organisations would carry political weight which is used to compel members to comply.

Some developing countries are heavily reliant on donor funding to meet their health spend needs; however, as is clear from Figure 4.6 below, this is not the case in South Africa. This country's interaction with and reliance on international organisations is more in terms of knowledge pooling and drawing from international experience. The direct and indirect influence of international health institutions on the administration of primary health care in South Africa is now discussed.

Although various international organisations exist, the key players would be the United Nations, the World Health Organization, the International Hospital Federation and the Commonwealth of Nations. Refer to Figure 4.6 for a graphical representation of these international health institutions and their influence on and relationship with South Africa.

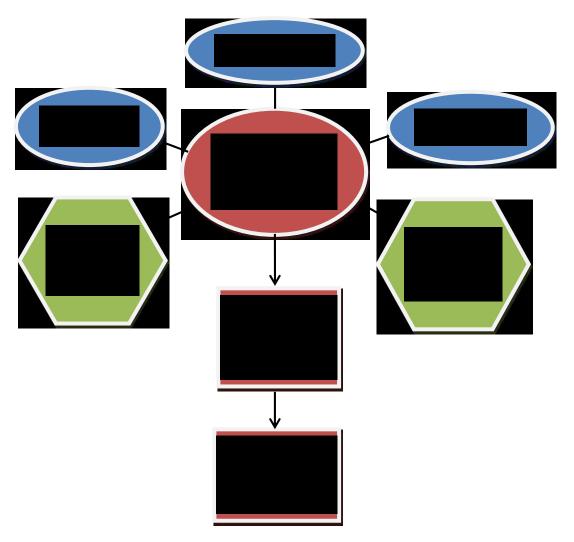


Figure 4.6: International health institutions and their influence and relationships with South African health care

Source: Own.

4.5.2. International health institutions and their relationship with South Africa

Since achieving democracy in the 1994 general elections, South Africa has become an active member of the international health sector. South Africa is currently a member of the World Health Organization, the Commonwealth, and the International Hospital Federation (Mello, 2002). Membership of international health institutions commits its members to certain obligations and duties and awards members certain rights. The advantages and disadvantages need to be given recognition (Evans, 2002); further, according to Evans (2002), the advantages outweigh the disadvantages such as membership fees. South Africa stands to benefit from international experts operating under the World Health Organization who would assist South Africa in an advisory capacity on policy making that would have a direct impact on primary health care services.

The bulk of health-sector funding in South Africa comes from the National Treasury. In the 2011 National Treasury Fiscal Review, the financing of the spending on health was broken down as follows:

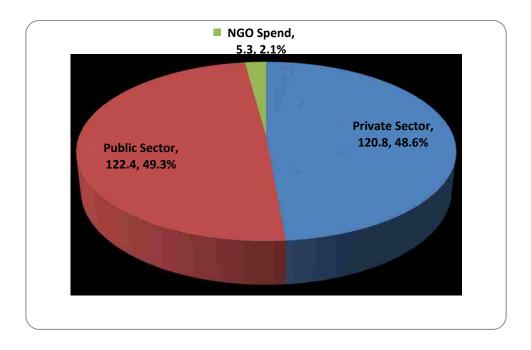


Figure 4.7: Financing of health in South Africa, 2011 Source: National Treasury, 2012a.

- R120.8 billion (48.5%) in the private sector, which covers 16.2 percent of the population or 8.2 million people, many of whom have medical cover.
- R122.4 billion (49.2%) in the public sector, which is made up of 84 percent of the population, or 42-million people, who generally rely on the public health care sector.
- The remaining R5.3 billion (2.3%) is donor and NGO spend (SouthAfrica.info, 2012).

The relationships between South Africa and these international organisations need to be nurtured and this is demonstrated by the hosting of the 11th Triennial Commonwealth Health Ministers meeting which was held in Stellenbosch as well as the numerous conferences and technical meetings hosted in South Africa. South Africa would be judged internationally by their level of involvement.

South Africa's relationship with international health organisations is reciprocal. Advice and financial assistance given to South Africa is returned by the country's participation and inputs at conferences.

According to Beattie, Rispel and Booysen (1993), the South African Medical Research Council has 400 full-time personnel. This number exceeds the number of researchers in the Southern African region combined. This means that all the members of SADC would benefit from research carried out by the South African Medical Research Council. According to the 2013 budget review of South Africa, R440 million was allocated to South African Medical and Research Council to improve research programmes and infrastructure, and to support projects carried out jointly with development partners (National Treasury, 2013).

The budget further commits the South African government for an amount of R30 million per year over the Medium Term Expenditure Framework, to pay for technical support from the Development Bank of Southern Africa and the Council of Scientific and Industrial Research to improve the management and delivery of health infrastructure projects (National Treasury, 2013).

Clearly the commitments made by the South African government are indicative of their commitment to health and the attainment of the millennium development goals, as well as their commitment to the international community.

The next section will address the relationships between the various international stakeholders.

4.5.3. United Nations influence on primary health care in South Africa

The United Nations was born out of the League of Nations, which failed in its purpose of being an international institution able to settle disagreements between states amicably. The First World War was evidence of the League's failure. However, even with the onset of the Second World War various states still sought to establish an institution that would prevent wanton human carnage and the concomitant massive waste in war actions (Simmons, 1994).

The United Nations assists the World Health Organization, a structure of a specialised nature which was formed outside the organisational structure of the United Nations. The World Health Organization works in close co-operation with the United Nations (Faba & Roos, 1998) to achieve its objectives, which include primary health care for all. The United Nations has had a positive impact on universal health institutions in that it maintains an environment of peace and security for international institutions so that they can in turn

assist other member states such as South Africa to discharge their responsibility of primary health care. The United Nations can co-ordinate and provide protection to non-governmental institutions such as the Red Cross in countries that are plagued by civil wars (Mello, 2002).

The United Nations is to be a centre for harmonising the actions of nations with a view to attaining common ends such as the prevention of diseases through immunisation. This is stated as one of the objectives of Article 1 of the United Nations Charter. Article 55 further commits the United Nations to creating conditions of stability and wellbeing.

As a direct result of these objectives, primary health care is addressed by the promotion of higher standards of living which in turn prevent diseases and also the promotion of finding solutions to international health-related problems. In South Africa, for example a solution to the high doctor-patient ratio needs to be found (National Consultative Health Forum, 2012).

4.5.4. The World Health Organization's influence on primary health care in South Africa

The Alma-Ata Declaration of 1978 (WHO, 1978), which was the seed from which the Millennium Development Goals grew, was a product of the decisions, resolutions and declarations taken by the World Health Assembly which is the policy-making committee of the World Health Organization.

In an effort to comply with the Alma-Ata declaration, which stipulates that governments should formulate national policies, strategies and plans of action to launch and sustain primary health care, the South African National Department of Health confirmed in 1996 that primary health care services would be free (Department of Health, 1997).

According to Faba and Roos (1998), the objectives of the World Health Organization include research, the strengthening of primary health care services rendered by national and local departments with specific emphasis on Africa, Asia and Latin America, to assist people in achieving the highest possible level of health, both physical and social, and to eliminate diseases such as malaria, tuberculosis and HIV/AIDS (Faba & Roos, 1998).

The following are only some of the functions carried out by the World Health Organization in order to achieve its objectives:

- Directs international primary health care work such as immunisations of children against polio and hepatitis B (Department of Health, 1997).
- Donates funds for projects on primary health care and environmental health.
- Promotes improved sanitation and housing conditions.
- Proposes and co-ordinates international conventions to encourage contact and communication between professional groups.
- Establishes relations with bodies within the member states.
- Promotes and facilitates research on health about aids and malaria (World Health Organization, 2013).

4.5.5. The Commonwealth of Nations' influence on primary health care in South Africa

In 2002 the Commonwealth of Nations had 199 independent members. In 1971, the heads of the Commonwealth governments met in Singapore where it was agreed that all members would subscribe to the Declaration of Commonwealth principles. Most of its members were once part of the British Empire and the Commonwealth of Nations arose out of their desire to remain in an organised association. However, the present organisation hosts many other member states as well.

Technically, the Commonwealth of Nations is not an international health institution; though it has the power to influence primary health care policies amongst its member states.

The preceding exposition revolves around international health institutions in the current political arena. These include the World Health Organization, United Nations, Commonwealth of Nations and the International Hospital Federation. Their individual characteristics have been documented to describe their classification. The functions of these organisations were addressed and also the relationship South Africa enjoys with them.

4.6. CONCLUSION

By way of conclusion it would be accurate to share the responsibility for the current health care problems facing South Africa equally between the pre-1948 governments and the National Party governments after that date. From the colonial era, health was never prioritised and health services were rendered on an ad hoc basis. Since then successive governments did very little to improve the health for the black population and any interventions were mainly to ensure that infectious diseases did not spill over into the white group. Epidemics such as tuberculosis, gastroenteritis and now HIV/AIDS all occur and spread within a particular socio-economic context. Based on this assertion it may be concluded that the relationship between health and social well-being is reciprocal.

This chapter has clearly sketched the disease profile of the black South African; however, this picture is different from other developing countries in that the marked discrepancies between the health of the different racial groups confirm the proposal is this thesis that the adverse health situation in South Africa is directly and indirectly related to the history of the country.

The eradication of smallpox is an example of how medical intervention has been extremely significant in the reduction of the disease and mortality of the population. The link between apartheid-created poverty and disease has been established in this chapter. The deliberate social policies of population resettlement, the job colour bar, influx controls and migratory labour, these being the contributory causes of poverty, have resulted in overcrowding and physical impoverishment, particularly in the rural Bantustans. It was this breeding ground that laid the foundation for tuberculosis, typhoid, gastroenteritis, cholera, diarrhoea and many other infectious diseases that came out of poverty.

Colonisation and apartheid have left the majority of South Africans living in a highly unequal society in which poverty and social dislocation have had profound and traumatic effects on the social fabric. Apartheid South Africa was generally unhealthy primarily because the majority of the population was forced to live in conditions that were incompatible with health and not because it was an inherently disease-ridden country. In conclusion it is necessary to emphasize that the history of South Africa has had significant bearing on the current state of health of the nation. If the health of a country's population can be seen as a test of the effectiveness of that country's health services, then South Africa at the turn of the century would have been seen as unsuccessful.

CHAPTER 5

CURRENT STATE OF HEALTH IN SOUTH AFRICA

5.1. INTRODUCTION

The Green Paper on National Health Insurance was released in August 2011 and is the cornerstone of the proposed system of universal coverage (refer to Chapter 2, section 2.2.3, for a discussion on universal coverage). The National Health Insurance is intended to be a financing system that will ensure the provision of essential healthcare for all citizens of South Africa regardless of their employment status or ability to make a direct monetary contribution to the fund (Government Communication and Information Systems, 2011).

In South Africa the bulk of health care funding comes from the National Treasury. In the 2011/2012 national budget there was an increase of 15.3 percent to R25.7 billion. An additional amount of R692 million was set aside at national level in the 2012/2013 budget to improve the quality of health care services by strengthening public health care teams, upgrading and maintaining nursing colleges, improving maternal and child health care. In the 2013/2014 budget an amount of R2.28 billion was allocated for the universal coverage of HIV and AIDS. A further R16.1 billion was specifically allocated at a provincial level, over a three-year period, for preparatory work to be carried out for the implementation of the National Health Insurance Fund (Government Communication and Information Systems, 2011). This increased spending on health is indicative of the South African government's commitment to achieving the millennium development goals, specifically those relating to health, and to ensure that these goals are realised by 2015.

The Millennium Development Goals relating to health would be to reduce child mortality (Goal 4), to improve maternal health (Goal 5) and to combat HIV/AIDS, malaria and other diseases (Goal 6). The development of a National Health Insurance fund was identified in the World Health Report of 2010 as the vehicle by which these goals would be best achieved (World Health Organization, 2010a); therefore, South Africa has initiated the process of implementing a with phase one having started in 2011. The purpose of this study is to provide guidance on the financing of South Africa's National Health Insurance by drawing from the experience of countries with more established health insurance funds.

For any National Health Insurance model to be functioning optimally, the following components should be in balance, namely the funds required to enable the services to be delivered and the cost that must be incurred to provide the services. Figure 1.1 depicts this balance, copied here for easy reference.

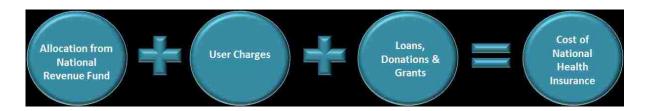


Figure 5.1: Model for the financing of health care

Source: Own.

In Chapter 2, the theoretical framework of the financing model was discussed and the various financing options available to fund the required cost of National Health Insurance were expanded upon with specific emphasis on financing by way of the national revenue fund, financing by way of user charges, and financing by way of other sources such as loans, grants and donations (Chapter 2).

Chapter 3 summarised and systematically analysed problems encountered globally by countries introducing and operating national health systems. The results of this analysis can be used to identify specific areas that should receive attention when developing and implementing a national health system for South Africa. Due to the unique nature of each country and its citizens an understanding of a country's history and their health care system is required. As this study focuses on South Africa, an overview of the historical developments of South Africa's health care system was presented. This overview would ensure that recommendations considered are made within the South African context.

In Chapter 4 of this dissertation, a historical overview of the South African health system was presented in order to contribute towards a better understanding of the current health system. The historical, political and legislative choices and their impact on health were reviewed; a distinction was made between three periods, namely the colonial era, the apartheid era and the post-apartheid era. A sound understanding and description of the unequal distribution of health in South Africa will contribute towards the successful

implementation of a National Health Insurance that could correct the prejudices of the past (Chapter 4).

From the discussion in Chapter 4, clear relationships were identified between poverty and health and it is for this reason that poverty forms such an integral part of this dissertation.

No political democracy can survive and flourish if the majority of its people remain in poverty, without land, without their basic needs being met and without tangible prospects for a better life. Attacking poverty and deprivation will, therefore, be the first priority of the democratic Government. (African National Congress, 1994)

The 27th of April 1994 marked the unprecedented political transformation in South Africa and carried with it the hope of a better future. Notwithstanding the unique political transformation achieved with minimal violence, the first democratically elected government inherited a country that was described by the World Bank as one of the world's most unequal economies, with a Gini co-efficient measuring 0.63 (World Bank, 2012). These inequalities were grossly apparent in education, healthcare and basic infrastructure, such as access to safe drinking water, sanitation and housing. One such example to illustrate this would be the fact that in 1995 only a quarter of all blacks people had access to piped water in their houses, whereas Asians and Whites had universal access (Hoogeveen & Ozler, 2004).

The problem of poverty is common in many societies around the world but South Africa is unique in that these problems of poverty were primarily engendered by the four decades of apartheid legislation built on the earlier policies of colonialism (May, Budlender, Mokate, Rogerson & Stavrou, 1998). While significant progress has been made since 1994 in the areas of education, healthcare, housing and the provision of basic services (refer to Chapter 4, section 4.4.3.1. for more detailed evidence of this), the general consensus amongst development practitioners (May et al., 1998; Aliber, 2001; Woolard & Leibbrandt, 2001; Meth & Dias, 2004) and institutions (Department of Social Development, National Treasury in South Africa, Statistics South Africa and the World Bank) is that poverty is still widespread in South Africa.

In 2004, a decade after apartheid, the State President at the time, Thabo Mbeki stated:

Endemic and widespread poverty continues to disfigure the face of our country. It will always be impossible for us to say that we have fully restored the dignity of all our people as long as this situation persists. For this reason, the struggle to eradicate poverty has been, and will continue to be, a central part of the national effort to build the new South Africa. President Thabo Mbeki (Department of International Relations and Cooperation, Republic of South Africa, 2004).

The present-day health status of the South African population will now be examined more closely with emphasis on those elements that are conducive to maintaining the health of a nation. At a macro level, interventions in food, housing, sanitation and water supply have played a major role in improving the health status of all South Africans, while the reality of a dualism in health-care delivery has persisted, with a significant private-for-profit sector alongside the public health sector (World Bank, 2012). Without analysing the current state of health it would not be possible to implement improvements without understanding from which point we need to start, it is for this reason that the current state of health is discussed in such lengthy detail.

Amongst the complex transitions over the past two decades the following challenges are still dominant: poor service delivery, limited progress in strengthening the education system, the emergence of HIV and AIDS, and the very real failure of the South African health system to effectively address the HIV epidemic (Department of Health, 2011d).

The layout of this chapter is provided below:



5.2. CURRENT STATE OF HEALTH IN SOUTH AFRICA

5.2.1. Introduction

Major transformation has taken place in South Africa over the past two decades in health legislation, health policy and the delivery of health services (Frenk, Bobadilla, Sepulveda & Cervantes, 1989). Primary healthcare is the vehicle by which the intended transformation of the health sector will take place. The aim is to ensure a system which is underpinned by values such as universal access, equity and community participation (The Presidency, 2012).

Currently South Africa's progress is still hampered by a two-tier health system (public and private) which is based on socio-economic status and this continues to perpetuate inequities in the current health system (World Bank, 2012). As with many other developing countries in demographic transition, the annual Demographic and Health Survey bears evidence that South Africa still faces the quadruple burden of disease (Department of Health, 2010) and the development of the National Health Insurance is being aggressively rolled out to ensure that all citizens have access to appropriate, efficient and quality health services (South African Government, 2012). The National Development Plan 2030

envisions a South Africa that has an overall life expectancy of at least 70 years; a largely HIV free generation of under-20s; and a significantly reduced burden of disease with an infant mortality rate of less than 20 per 1 000 live births and an under-five mortality rate of less than 30 per thousand live births (The Presidency, Republic of South Africa, 2012).

An integrated approach for addressing the social determinants of health is essential to the attainment of these targets. Figure 5.2 depicts a combination of poverty-related infectious diseases, lifestyle-related non-communicable diseases and violence-related trauma which together account for the burden of disease in South Africa.

Threats to health

- Natural disasters
- Interpersonal violence

* Residual of infectious diseases

Cholera, Tuberculosis

Emerging epidemics

- HIV/AIDS
- Drug resistance (TB, Malaria, etc.)
- New infections (avian flu)

❖ Epidemiological transition

- Chronic diseases and injuries
- Occupational & environmental ill-health
- Mental health
- Obesity & tobacco related

Figure 5.2: Table depicting quadruple burden of disease

Source: South African Government, 2013

The main areas of concern would be poverty and its social impact on health; leading out of that would be the infrastructure interventions of water, sanitation and housing. Each of these areas that have a direct impact on health will now be addressed.

5.2.2. Current state of poverty

The relationship between poverty and health was extensively discussed in Chapter 4 (section 4.2.). In addition, it has been established that apart from traditional variables such as income, assets, education and direct health interventions, better access to basic infrastructure services has an important role to play in improving the health of the nation.

For example, lower infant mortality rates would depend crucially on clean water (Leipziger et al., 2003).

According to the latest report issued by Statistics South Africa, "the number of South Africans living in poverty has increased since 2010. In 2010, 20 percent of South Africa's population fell below the poverty line, this figure has increased to 21.5 percent in 2014" (Statistics South Africa, 2014). It is clear from these statistics that South Africa is not winning the war against poverty, despite all the programmes and interventions being implemented.

The gains to be derived from multi-sectoral interventions such as maternal and child health interventions (health, nutrition and family planning), as well as interventions in infrastructure, such as water, sanitation and housing, have been shown to yield results individually (Chong, Hentschel & Saavedra, 2003). Each of these will now be discussed individually to present a complete picture of the state of health.

5.2.3. Current state of housing

According to the General Household Survey (Statistics South Africa, 2013b), more than three-quarters (77.7%) of South African households lived in formal dwellings in 2013. A total of 13.6 percent were still living in informal dwellings with 7.8 percent living in traditional dwellings.

5.2.4. Current state of sanitation

Despite the improved access to sanitation facilities, many households continue to be without any proper sanitation. In 2013, 77.9 percent of households had access to sanitation (Statistics South Africa, 2013b).

5.2.5. Current state of water supply

Minister of Water Affairs Edna Molewa stated the following in her foreword to the 2013/2014 departmental report:

Water is a basic human need and a guarantor of a sustainable social and economic development. Its centrality is underpinned by its strategic role in the economy which is articulated in the country's 2030 vision. (Department of Water Affairs, 2013:4)

In her statement in the same annual report, Deputy Minister Rejoice Mabudafhasi stated that 95.2 percent of South Africans had access to potable water in 2013. She continued by saying that although the success should be celebrated, cognisance needed to be taken of the challenges that still remained (Department of Water Affairs, 2013:6).

According to Kleinert and Horton (2009), South Africa has witnessed remarkable achievements in terms of poverty reduction, housing and sanitation; however, there have also been remarkable failures, as noted with regard to the health sector. The authors note that one of the most far-reaching consequences would be former President Thabo Mbeki's denial to acknowledge the "importance of the HIV epidemic and the unconventional approach of the then Minister of Health Manto Tshabalala-Msimang. South Africa's failure to address this issue still continues to have an effect on HIV in South Africa and on the burden of disease" (Kleinert & Horton, 2009).

5.3. REACHING THE MILLENNIUM DEVELOPMENT GOALS

5.3.1. Introduction

The common holistic vision for human development adopted by world leaders in September 2000 supported by a strategy and a timeline, together with the 2005 Report issued by the World Health Organization, entitled *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*, was the pledge and commitment needed by world leaders to bring about the much needed change (UN Millennium Project, 2005).

What the millennium development goals have done is to quantify basic human rights and set targets for addressing extreme poverty in all of its facets. Specific targets include income, hunger, disease, lack of adequate shelter, gender inequality and the lack of environmental sustainability.

A common error would be to address the goals without fully appreciating the transformational process required to achieve them. In 2005 the Government of South Africa produced its first national report on progress made towards achieving the millennium development goals and it concluded that considerable progress had been made towards the achievement of national development targets, specifically economic growth (GDP), poverty reduction, gender equality, primary education and maternal health.

Concurrently, there was an increasing trend in HIV and AIDS, and unemployment levels remained high (Statistics South Africa, 2010).

Subsequent to this report, government interventions in the form of antiretroviral treatment implemented post 2006 brought a significant improvement in the life expectancy of South Africans in the period 2009–2011. In 2011 the life expectancy increased to 58.1 years (Statistics South Africa, 2013b).

This progress report was compiled again in 2007/2008 to summarise the achievements and challenges that still needed to be achieved by 2015, which is the set target date for achieving the millennium development goals (Statistics South Africa, 2010). Cognisance needs to be taken of the fact that achieving the millennium development goals is a process and not an end in itself and this process needs to be constantly reviewed, improved and perfected (Boston, 2013).

South Africa has a well-developed infrastructure and private sector, which together with a stable macroeconomy differentiate South Africa from the problems and challenges that plague most other sub-Saharan African countries. South Africa also benefits from a developed data infrastructure enabling reliable monitoring and measuring of millennium development goals and targets and the impact of related programmes and projects (Boston, 2013).

The individual goals and targets of the Millennium Declaration are interrelated and should be seen as a whole when implementing action plans. South Africa's commitment to achieving the millennium development goals is further demonstrated by the "domestication" of the millennium development goals in the form of the Medium Term Strategic Framework (The Presidency, Republic of South Africa, 2009) which identified the development challenges and outlined the strategy for improving them.

The Medium Term Strategic Framework identifies five development objectives (refer to Figure 5.3 below).



Figure 5.3: Development objectives according to the Medium Term Strategic Framework

Source: South African Millennium Development Country Report (Statistics South Africa, 2010:16).

As part of this process ten priority areas have been outlined to give effect to these five objectives. The overall objective of this framework is to develop and implement a comprehensive development strategy that will meet the needs of all South Africans. South Africa has taken ownership of the millennium development goals as the development mandate explicitly takes the goals into account.

Table 5.1 below demonstrates how the millennium development goals have been "domesticated" into the current South African government priority agenda. The Medium Term Strategic Framework is government's blueprint of how the ten strategic policies will give effect to the five strategic objectives and how they should be translated into reality. Each strategic priority has been linked to at least one of the millennium development goals, and this is necessary to ensure that in working towards, for example, strategic priority 3, a comprehensive rural development strategy, the government takes an integrated and comprehensive approach that will reflect a range of millennium development goal-related targets and indicators, including those on poverty, food security, education, gender, health, access to services and environmental sustainability (Statistics South Africa, 2010).

Table 5.1: Table linking Medium Term Strategic Framework Priorities to Millennium Development Goals

	Linkage between South Africa's national development planning and the MDGs								
	MTSF STRATEGIC ELEMENTS	RELEVANT MDGS							
1.	Strategic Priority 1: Speeding up growth and transforming the economy to create decent work and sustainable livelihoods	MDG 1, MDG 2, MDG 3, MDG 8							
2.	Strategic Priority 2: Massive programme to build economic and social infrastructure	MDG 1, MDG 3, MDG 8							
3.	Strategic Priority 3: Comprehensive rural development strategy linked to land and agrarian reform and food security	MDG 1, MDG 2, MDG 7							
4.	Strategic Priority 4: Strengthen the skills and human resource base	MDG 2							
5.	Strategic Priority 5: Improve the health profile of all South Africans	MDG 4, MDG 5, MDG 6							
6.	Strategic Priority 6: Intensify the fight against crime and corruption	MDG 2, MDG 3							
7.	Strategic Priority 7: Build cohesive, caring and sustainable communities	MDG 2, MDG 3, MDG 7							
8.	Strategic Priority 8: Pursuing African advancement and enhanced international cooperation	MDG 8							
9.	Strategic Priority 9: Sustainable resource management and use	MDG 2, MDG 3, MDG 7							
10.	Strategic Priority 10: Building a developmental state, including improvement of public services and strengthening democratic institutions	MDG 1, MDG 2, MDG 3, MDG 8							

Source: South African Millennium Development Country Report Statistics South Africa, 2010.

At an implementation level these strategic policy intentions have been further broken down into Negotiated Service Delivery Agreements per sector to enhance the efforts towards accelerating progress in achieving the millennium development goals (Government Communication and Information Systems, 2011). Continuous efforts have been made to ensure that globally designed targets and indicators are in line with local realities of the country. An example of this would be the National Methodology Workshop held in 2009 (Statistics South Africa, 2010) which considered the efforts being made towards the millennium development goals and the effectiveness at ground level.

For purposes of this study specific emphasis will now be placed on the three millennium development goals that are directly related to this research, namely Goal 4 (to reduce child mortality), Goal 5 (to improve maternal health) and Goal 6 (to combat HIV/AIDS, malaria and other diseases). These three goals have been specifically linked to Strategic Priority Number 5, to improve the health profile of all South Africans (refer to Table 5.1), of the

Medium Term Strategic Framework. This detail is presented to enable a determination of whether the current health and health systems will enable South Africa to achieve these goals by 2015 or not.

5.3.2. Progress made towards achieving Goal 4; to reduce child mortality

In terms of Millennium Development Goal 4 a target of 20 per 1000 live births is the goal to be reached by 2015 (United Nations, 2000).

The level of childhood mortality is a reflection of a country's health status in general and, specifically, of the health status of the children in that country. It is also a reflection of the quality and efficiency of the health system operating in a particular country (McKerrow & Mulaudzi, 2010a). It has been further argued that reducing childhood mortality to achieve the millennium goal of child survival depends on whether effective and sustainable health interventions can be delivered to high proportions of children and mothers (Bryce, Gilroy, Jones, Hazel, Black & Victora, 2010).

A healthy society requires an environment that enables children to grow into healthy, secure and productive adults. The opposite of this would be an environment in which the poor health of children poses a threat to their individual development as well as the development of the country as a whole (Statistics South Africa, 2010). The health of South African children needs to be aggressively addressed to ensure that their basic needs are met through an equitable and effective public health system. This would ensure that the dangerous cycle of poverty, social marginalisation, chronic poor health and malnutrition is destroyed.

The South African government has put in place a comprehensive set of initiatives such as the Negotiated Services Delivery Agreement 2010–2014, the Strategic Plan for Maternal, Newborn, Child and Women's Health, and the Campaign for Accelerated Reduction of Maternal and Child Mortality (Department of Health, 2012b). These initiatives are aimed at providing quality data on the one hand and the extension of wide-ranging health interventions on the other (Republic of South Africa, 2013). In 2011 the Committee on Morbidity and Mortality in children under 5 years was appointed for a second term with an expanded set of objectives to oversee the facilitation of sound clinical governance and assist in the development and monitoring of health care for South African children (South African Aids Council, 2012).

Between 1998 and 2007 there was an upward trend in the under-five mortality rate based on the civil registration and vital systems data. The increase was from 38 to 67 deaths per 1000 live births. Between 2007 and 2010 the under-five mortality rate declined to a level of 53 deaths per 1000 live births (Republic of South Africa, 2013). It is important to acknowledge the limitation of reliable data as estimates are probably underestimated because they are based only on deaths that are registered at the Department of Home Affairs. Cognisance should be taken of the reality that many people living in the rural areas do not report or record the births or deaths within their families and this is what gives rise to inaccurate statistics (Statistics South Africa, 2013a).

Worldwide, the leading causes of death among children under five include pneumonia (18%), preterm birth complications (14%), diarrhoea (11%), intra-partum-related complications (9%), malaria (7%), and meningitis and tetanus (6%). Infectious diseases are typical of those who are poor and vulnerable and who lack access to basic prevention and treatment interventions (UNICEF, 2012). Evidence shows that the lowering of underfive deaths in all regions was principally as a result of expanded efforts against infectious diseases. The largest percentage fall, more than three-quarters, was evident in measles infections through the use of national vaccination programmes (UNICEF, 2012). In South Africa, childhood mortality has been further negatively affected by HIV/AIDS (Republic of South Africa, 2013).

A target of 18 per 1000 live births for the infant mortality rate has been set for the 2015 millennium development goals. The infant mortality is significantly influenced by endogenous factors such as congenital conditions in the first month of life as well as exogenous factors such as social conditions and adverse environmental conditions. The incidence of diarrhoea and pneumonia has also shown downward trends, which are contributing factors to infant mortality, as well as the under-five mortality rate (Republic of South Africa, 2013).

Immunisation is a vital element in the prevention of child mortality and child survival, hence immunisation directly affects infant and under-five mortality rates. The millennium development goals have set the following indicators:

- i. The proportion of one-year-old children immunised against measles;
- ii. The proportion of under one-year-old children who received all the immunisations (primary vaccines for tuberculosis, diphtheria, whooping cough, tetanus, polio, measles, hepatitis B and haemophilus influenza).

In South Africa, immunisation coverage has significantly improved: the percentage of children under one year in health facilities who received all vaccines (indicator ii) increased from 70.4 percent in 2003 to 92.8 percent in 2011 (Health Systems Trust, 2012). Refer to Figure 5.4.

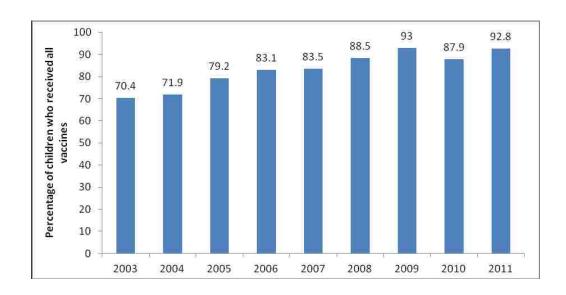


Figure 5.4: Percentages of children under one year in health facilities who received all vaccines, 2003–2011

Source: Department of Health, 2012c.

The facility-based data shows that about 72 percent of children under one year were immunised against measles in health facilities (indicator i) in 2003 and in 2011 this figure has increased to 99 percent, which is almost universal (Statistics South Africa, 2012). Refer to Figure 5.5.

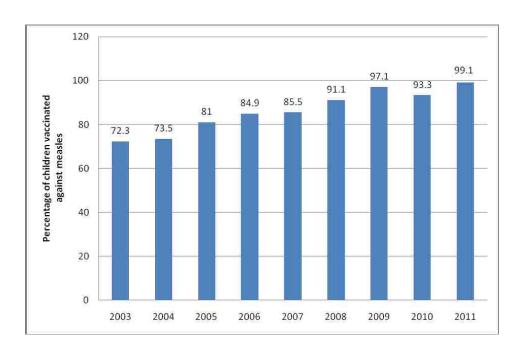


Figure 5.5: Percentage of children under one year in health facilities immunised against measles, 2003–2011

Source: Department of Health, 2012c.

Infant mortality and child mortality have a profound effect on life expectancy. The more people die in early ages of life the more life years are lost and hence the general life expectancy will be lower. In the case of infant and child deaths it is noticeable that the decrease in both these rates from 2002 onwards has led to an improvement in life expectancy from 2006 onwards. In this regard, whilst the effect of mortality at younger ages reduced life expectancy, in the earlier period of the 2000 decade, there is evidence to suggest gains in life expectancy from 2006. Life expectancy for both sexes increased from a low of 51.6 in 2005 to 58.7 in 2012 (Statistics South Africa, 2011a).

There has been no change in the leading causes of death over the past three years: neonatal disorders, gastrointestinal tract infections, acute respiratory illnesses and non-natural deaths are the main causes of death in South Africa (South African National Aids Council, 2012). Although there has been no target set for the incidence of diarrhoea and pneumonia, the decrease from 2009 to 2011 (refer to Table 5.2) is encouraging, considering what a significant contributing factor this is to child mortality. A comprehensive discussion on this issue was presented in Chapter 4, section 4.4.2.1.

Table 5.2: Comparison of morbidity and mortality rates

Achievability Criteria		Description				
1.	Achieved	The set target has been achieved.				
2.	Likely	Likely that the set target will be achieved.				
3.	Unlikely	Unlikely that the target will be achieved.				

Goal 4: Reduce child mortality									
Indicators	1994 baseline (or nearest year)	2010 status (or nearest year)	(2013 or		Target achievability	Indicator Type			
Target 4: Reduce by	Target 4: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate								
Under 5 mortality rate (per 1 000 live	59 (1998)	104 (2007)	* - (2011)	20	Likely***	MDG			
births)		**67 (2007)	**53 (2010)	20					
Infant mortality rate (per 1000 live	54	53 (2007)	* - (2011)	18	Likely***	MDG			
births)	(1998)	**48 (2007)	**38 (2010)	10	LINGIY	IVIDO			
Proportion of one- year-old-children immunised against measles (%)	68.5 (2001)	97.1 (2009)	99.1 (2011)	100	Likely	MDG			
Immunisation coverage under one year of age (%)	66.4 (2001)	93 (2009)	92.8 (2011)	100	Likely	Domesticated			
Life expectancy at birth (years): • Males	50.0 (2002)	51.7 (2007)	56.8 (2012)	70	Unlikely	MDG			
• Females	55.2 (2002)	56.1 (2007)	60.5 (2012)	7.0	Grankery	INIDO			
Diarrhoea incidence under 5 years of age (per 1 000 children)	138.0 (2001)	130.6 (2009)	102.1 (2011)	No Target	NA	Domesticated			
Pneumonia incidence under 5 years of age (per 1 000 children)	21 (2003)	100.0 (2009)	83.2 (2011)	No Target	NA	Domesticated			

*Note: Mortality estimates from Census 2011 are not available at time of writing.

Estimates based on mortality data from the Civil Registration and Vital Štatistics Systems (CRVS) data.

*** Following the introduction of the PMTCT programme and the introduction of the pneumococcus and rota virus vaccines, there has been an accelerated reduction in the infant and under five mortality rates

Source: South African Millennium Development Country Report (Republic of South Africa, 2010).

In conclusion, the benefits of the initiatives instituted by the South African government are being experienced. However, they cannot be fully ascertained at present and it remains to be seen if the millennium development targets will be met by 2015.

5.3.3. Progress made in achieving Goal 5, to improve maternal health

Millennium Development Goal 5 has been broken down into two targets, target 5A being the reduction of the maternal mortality ratio by three quarters by 2015 and target 5B, which is to achieve universal access to reproductive health by 2015. In terms of the millennium development goals, South Africa needs to reach a mortality rate target of 38 per 100 000 live births by 2015. The level of maternal mortality is still a concern to the South African government as expressed in its population policy and the Negotiated Service Delivery agreement of 2010–2014 (Republic of South Africa, 2013).

In developing countries, complications relating to pregnancy and childbirth are amongst the leading causes of mortality among women of reproductive age. Increased maternal mortality further increases overall mortality due to increased risk of mortality to their children (McKerrow & Mulaudzi, 2010a). Thousands of women throughout the world do not experience pregnancy and childbirth as the joyful event that it should be, but rather as a time of suffering and sometimes death. The report on trends in maternal mortality for 1990–2008 developed by the WHO, UNICEF, United Nations Population fund and the World Bank indicates that globally maternal mortality resulting from pregnancy and childbirth accounts for more than half a million deaths annually (World Health Organization, 2010b).

The Department of Health has put in place a number of extensive policy initiatives aimed at reducing maternal mortality and improving the quality of health care throughout the health care system. Together with this a number of common elements have been identified which would form the foundation of the health care system, namely optimising the level of care offered at health care facilities, providing training for all frontline health care providers,

and taking cognisance of matters stemming from poverty, as addressed in section 5.2.3 (Department of Health, 2012a).

According to the Millennium Development Country Report of 2013, maternal mortality ratios in South Africa are highly contentious, owing to estimates from different data sources and varying estimation procedures. The 1998 Demographic and Health Survey was used to set the baseline indicator for Goal 5 (Improve Maternal Health) which estimated the maternal mortality ratio as 150 maternal deaths per 100 000 live births during the period 1992–1998 (World Health Organization, 2010b).

Since 1998 there have been no comparable estimates of maternal mortality ratios in the country. The 2003 Demographic and Health Survey did not provide estimates of the maternal mortality ratios and no other similar data source is currently available. The only other information available is the 2001 Census and the 2007 Community Survey which collected information that measures pregnancy-related maternal mortality ratios (World Health Organization, 2010b).

In the 2013 Millennium Development Country Report, the estimates of maternal mortality ratios are derived from data on causes of death from the country's civil registration system which is South Africa's only national source of information on mortality and causes of death and although this system has shown improvement over time the completeness and accuracy of data is still highly questionable as it suffers from incomplete registration, a high proportion of ill-defined causes of death as well as the misclassification of the causes of death (Republic of South Africa, 2013).

The Department of Health has attempted to address some of these limitations by applying a percentage factor of 1.5 to adjust the number of deaths upwards to account for misclassification of causes of death (Department of Health, 2011a). Figure 5.6 plots the annual maternal mortality ratios, showing that the ratio increased from 133 maternal deaths per 100 000 live births in 2002 to 299 in 2007. The years 2008 and 2009 saw a respective increase to 300 and 312 and then there was a drop to 269 maternal deaths per 100 000 live births in 2010. Based on these results it can be concluded that South Africa is still lagging behind the millennium development goal target of 38 maternal deaths per 100 000 live births (Republic of South Africa, 2013).

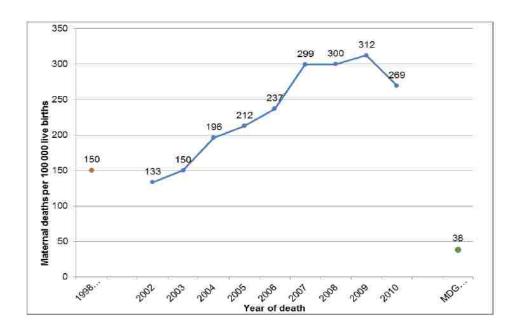


Figure 5.6: Maternal mortality ratios by year of death: 2002–2010 and the 2015 Millennium Development Goals target

Source: Civil Registration and Vital Statistics System, Statistics South Africa cited in Republic of South Africa (RSA). 2013.

According to the information in Table 5.3 below, the percentage of births attended by skilled health professionals significantly improved to 94 percent in 2009 and it is likely that this target will be met in 2015. Prenatal care and professionally assisted deliveries are instrumental in reducing the maternal mortality ratio and an improvement in this target would contribute towards reducing the overall maternal mortality ratio.

The data depicted in Table 5.3 highlights a huge disparity between the ratios based on the 2007 Community Report and the ratios derived from data using the civil registration and vital statistics systems. Reliable data is invaluable for the assessment and monitoring of the health status of the population and for planning of adequate health interventions. These statistics are also vital in tracking the progress and monitoring the trends of the millennium development goals in a country. In conclusion, the Millennium Development Country Report of 2013 also makes a recommendation for the country to undertake a Demographic and Health Survey and a commitment to improve the country's civil registration and vital statistics systems (Republic of South Africa, 2013).

Access to and use of contraceptive and antenatal care services are components of reproductive health that are key indicators for achieving target 5B, universal access to reproductive health by 2015. The percentages depicted in Figure 5.3 again highlight the lack of available information, the latest available figure relates to 2003 and at that stage there was a 50 percent contraceptive prevalence rate.

According to the report issued by the Department of Health in 2011, there are a number of factors which are hindering the process of reducing maternal mortality in South Africa, such as poor transport facilities, lack of proper health care facilities and lack of appropriately trained staff, which leads to the inability to follow standard procedures and poor initial assessment and diagnosis (Department of Health, 2012b). Socio-economic factors as referred to above and the investment in infrastructure development and its impact on health have already been extensively addressed in Chapter 4 (see section 4.4.3.).

Table 5.3 shows the improvement in antenatal care. The adolescent birth rate has shown only an insignificant increase from 1998 to 2011; however, this is not one of the millennium development goals and will not be further addressed.

To conclude, it seems unlikely that the maternal mortality rate of 38 per 100 000 live births will be met by the target date in 2015. However, South Africa should, besides bettering health systems and improving the level of primary health care, also take steps towards lowering the maternal mortality by fostering economic development, empowering women, reducing fertility rates, improving educational levels and improving health systems (Department of Health, 2012b). A committee was established in 1997 to enquire into the maternal deaths in South Africa and the Fifth Report on the Confidential Enquiries into Maternal Deaths in South Africa reaffirmed that obstetric haemorrhage and hypertensive disorders are some of the main causes of maternal death in South Africa (Department of Health, 2012b).

Table 5.3: Maternal health improvements

Goal 5: Improve Maternal Health								
Indicators	1994 baseline (or nearest year)	2010 status (or nearest year)	Current status (2013 or nearest year)	2015 Target	Target achievability	Indicator Type		
Target 5A: Reduce b	y three quarte	er, between 19	990 and 2015,	the maternal	mortality ratio			
Maternal mortality ratio (per 100 000	150 (1998)	625 (2007	*- (2011)	38	Unlikely	MDG		
live births)		299 (2007)	269** (2010)	30				
Proportion of births attended by skilled health personnel (%)	ded by skilled 76.6 94.3 No update		100	Likely	MDG			
Target 5B: Achieve by	y 2015, univers	al access to re	productive hea	alth				
Contraceptive prevalence rate (for all women using all methods) (%)	50.1 (1998)	50.2 (2003)	No update available	100	NA	MDG		
Adolescent birth rate (%)	12.5 (1996)	No data	No data 13.7 (2011)		NA	MDG		
Antenatal care coverage (at least one visit) (%) 76.6 (2001) (2009)		100.6 (2011)	100	Achieved	MDG			

*Note: Mortality data from Census 2011 is not available yet

Source: South African Millennium Development Country Report (Republic of South Africa, 2013).

5.3.4. Progress made in achieving Goal 6, to combat HIV/AIDS, malaria and other diseases

HIV/AIDS, tuberculosis and malaria are the three major global public health problems that undermine development in most Sub-Saharan African countries, and they contribute significantly to the burden of disease faced by South Africans (Department of Health, 2014).

^{**} Data source: Causes of deaths data from civil registration and vital statistics systems (CRVS).

Millennium Development Goal 6 has been broken down into three identifiable targets, namely 6A, to halt and reverse the spread of HIV/AIDS by 2015; target 6B, to achieve universal access to the treatment for HIV/AIDS for all those to need it by the year 2010; and target 6C is to halt and reverse the incidence of malaria and other major diseases by 2015 (Republic of South Africa, 2013).

South Africa has the largest population of people living with HIV/AIDS, with 5.2 million estimated in 2013 (Statistics South Africa, 2013). Besides being a handicap on its own, the HIV epidemic severely hampers the country's ability to achieve several developmental goals, including the target of halting and reversing tuberculosis by 2015. It is for this reason that the government has decided to put a concerted effort into addressing HIV and AIDS and tuberculosis in an integrated manner. The HIV and AIDS Counselling and Testing Campaign is a government initiative which was launched in 2010 to address this global problem (Department of Health, 2014) and their commitment thereto is again reiterated in the new National Strategic Plan (NSP) 2012–2016 (South African National Aids Council, 2011).

With reference to Table 5.4, the country is starting to see the effects of government interventions which include substantial improvements in access to condoms, the expansion of tuberculosis control efforts, and the scaling up of free antiretroviral therapy, as well as the HIV and AIDS Counselling and Testing Campaign which has seen 20.2 million people tested since the start of the campaign. During the 2011/12 years, 617 147 additional individuals started receiving treatment on the HIV treatment and care programme (South African National HIV Prevalence, Incidence and Behavioural Survey, Human Sciences Research Council, 2012). The downward trend (refer Table 5.4) in the HIV prevalence among the population aged 15–24 years is evidence of the government interventions taking root and it is considered likely that this Millennium Development target will be met (Republic of South Africa, 2013).

Table 5.4: Combating HIV/AIDS, Malaria and Other Diseases

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases									
Indicators	1994 baseline (or nearest year)	2010 status (or nearest year)	Current status (2013 or nearest year)	2015 Target	Target achievability	Indicator Type			
Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS									
HIV prevalence among population aged 15-24 years (%)	9.3 (2002)	8.7 (2008)	7.3 (2012)	4.2	Likely	MDG			
Condom use at last high risk sex (%)	27.3 (2002)	62.4 (2008)	59.9 (2012)	100	Unlikely	MDG			
Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS (%)	66.4 (2005)	42.1 (2008)	48.5 (2012)	95	Unlikely	MDG			
Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years	1:1 (2002)	1:1 (2008)	1:1.01 (2011)	1:1	Achieved	MDG			
Target 6B: Achieve by 2010, uni	versal acce	ss to treatn	nent for HIV	//AIDS for a	II those who ne	ed it			
Proportion of population with advanced HIV infection with access to antiretroviral drugs (%)	13.9 (2005)	41.6 (2009)	75.2 (2011)	80	Likely	MDG			
Target 6C: Have halted by 2015 diseases	and begun	to reverse t	he incidend	ce of malari	a and other ma	jor			
Incidence of tuberculosis	253 (2004)	283 (2009)		< 253	NA				
per 100 000 population	993 (2011)			449*	NA	MDG			
Prevalence of tuberculosis per 100 000 population	768 (2011)			392*	NA	MDG			
Death rates associated with tuberculosis per 100 000 population	147 (2002	50 (2010)	49 (2011)	< 147	Achieved	MDG			
Proportion of tuberculosis cases detected and cured under directly observed treatment short course (%)	53.5 (2004)	67.4 (2008)	73.8 (2011)	100	NA	MDG			
Incidence of malaria per 100 000 population	64 622 (2000)	8 066 (2010)	6 846 (2012)	32,311	Achieved	MDG			
Death rates associated with malaria per 100 000 population	459 (2000)	87 (2010)	72 (2012)	229	Achieved	MDG			
Indoor Residual Spraying (IRS) operational coverage in targeted areas (%)	87.4 (2001)	NA	91.1 (2012)	80	Achieved	MDG			

Source: Republic of South Africa, 2013

Condom use is one of the most effective ways to prevent HIV infection; for the period 2002 to 2008 there was a sharp increase to 62.4 percent (refer Table 5.4) followed by a slight decline in 2012, which is cause for concern as there should be a consistent increase, and at this point it seems unlikely that the target of 100 percent will be met. The 2012 National HIV Prevalence, Incidence and Behaviour survey found a decreasing pattern in knowledge about HIV and the 48.5 percent achieved in 2012 leads to the conclusion that it is unlikely that the target of 95 percent will be met by 2015 (South African National HIV Prevalence, Incidence and Behavioural Survey, Human Sciences Research Council, 2012).

An expanded antiretroviral treatment programme has culminated in a significant improvement in the proportion of the population who have access to antiretroviral drugs. In 2011, there was a 75.2 percent coverage, which indicates that the target of 80 percent by 2015 will be met.

The 4th South African Tuberculosis Conference was held in Durban in June 2014 to review the evidence, debate and recommend innovative approaches to fight the tuberculosis epidemic in the era of HIV and increasing multi-drug resistant tuberculosis and extensive drug-resistant tuberculosis epidemics (Department of Health, Media release, 2014).

South Africa has made steady progress in controlling malaria and the fight against the reduction of malaria is evident in the achievements made to date. The most recent levels show drastic declines in malaria incidence, prevalence and death rates, thus indicating that 2015 targets have been achieved.

5.3.5. Conclusion

A number of policy developments have occurred in South Africa since the Millennium Development Country Report of 2010 and according to the 2013 Millennium Development Country Report, South Africa has strengthened important strategic linkages with other developing countries through the BRICS (Brazil-Russia-India-China-South Africa) partnership (Republic of South Africa, 2013).

At a domestic level the most significant policy developments are the New Growth Path and the National Development Plan, which is the framework for industrial and economic development. It provides an overview of the challenges and needs of the country to ensure that South Africa achieves set targets by 2030 (Republic of South Africa, 2013).

According to the National Development Plan, the following is envisaged:

By 2030, we seek to eliminate poverty and reduce inequality. We seek a country wherein all citizens have the capabilities to grasp the ever-broadening opportunities available. Our plan is to change the life chances of millions of our people, especially the youth; life chances that remain stunted by our apartheid history. (South African Government, 2013)

In conclusion, it can be said that South Africa has achieved mixed success towards achieving the millennium development goals, while the implementation of the National Development Plan has placed the country on a path that will ensure both unmet millennium development goals as well as emerging development issues will remain part of the country's future development agenda, especially in addressing the triple challenge of poverty, unemployment and inequality (Republic of South Africa, 2013).

5.4. PROPOSED IMPLEMENTATION OF NATIONAL HEALTH INSURANCE

The National Health Insurance is a system that will make sure that all citizens of South Africa are provided with essential healthcare, regardless of their employment status and ability to make a direct monetary contribution to the National Health Insurance Fund. This is the vision of the Department of Health (Department of Health, 2014b). The rationale for introducing National Health Insurance is to eliminate the current tiered system where those with the greatest need have the least access and have poor health outcomes. National health insurance will improve access to quality healthcare services and provide financial risk protection against health-related catastrophic expenditures for the whole population (Department of Health, 2011c).

The National Health Insurance Policy Paper (green paper) which was published in 2011 mapped out policies to move towards universal health coverage over a fifteen-year period. In order to implement "an effective National Health Insurance, there will be a reconfiguration of the institutions and organizations involved in the funding, pooling, purchasing and provision of health care services" in the South African health system. "The National Health Insurance Fund will be established as a government-owned entity that is publicly administered". It will be a single payer entity and the main responsibility of the National Health Insurance Fund will be to pool funds and use these funds to purchase health services on behalf of the entire population using contracted public and private health care providers (Department of Health, 2011c:41).

The transitional process from the current to the proposed National Health Insurance environment within the South African health system will require a well-articulated implementation plan. The implementation of National Health Insurance will be done in a phased and systematic manner at both the national and sub-national levels. The migration period will occur in three phases over the fourteen years of implementation.

In the first phase, the emphasis was on investing in improving access to and the management and quality of public sector health services, particularly at the primary health care level (Ataguba, Day & McIntyre, 2014). The first five years included pilot studies and strengthening the health system in the following areas: management of health facilities and health districts; quality improvement; infrastructure development; medical devices including equipment; human resources planning; development and management; information management and systems support; as well as the establishment of a National Health Insurance Fund (Department of Health, vote 16, 2014).

The costing estimates provided in section 5.5. (Proposed Financing of National Health Insurance) indicate that the National Health Insurance is affordable for South Africa; however, the present system of fragmentation, associated with the high cost, curative and hospicentric approach and excessive and unjustifiable charges, especially within the private health sector, is unsustainable. No amount of funding will be sufficient to ensure the sustainability of the National Health Insurance unless the systematic challenges within the health system are also addressed.

The National Health Insurance will need additional resources to meet its objectives. These priority areas are important as the costing of these activities needs to be added to the current cost to ensure sufficient funding is provided to create a sustainable National Health Insurance in South Africa. The financing thereof lies at the heart of this discussion and the proposed financing will now be expanded upon.

5.5. PROPOSED FINANCING OF NATIONAL HEALTH INSURANCE

According to the World Health Organization (2000), the purpose of health financing is to make funding available as well as to set the right financial incentives for providers to ensure that all individuals have access to effective healthcare. In this way society reduces or eliminates the possibility that a person will not be liable to pay for his/her health services, or that the family will be impoverished as a result (WHO, 2000).

This report (WHO, 2000) goes on to explain that health financing is much more than a matter of raising money for the provision of healthcare; it needs to extend itself to ascertain "who is asked to pay, when they pay, and how the raised funds are spent" (WHO, 2010). McIntyre (2010) notes that "while it is difficult to predict healthcare needs and the resultant costs for an individual, it is however feasible to predict these for a group of people drawing on epidemiological and actuarial data". The 2011 Green Paper on National Health Insurance put forward that universal coverage to affordable healthcare services can be best achieved through a prepayment health financing mechanism that will require that payments for healthcare be made in advance of an illness. These payments will then be pooled and used to fund health services for the general population. These funds could be drawn from a combination of sources (e.g. the fiscus, employers and individuals) (Department of Health, 2011c).

In 2009 the African National Congress (ANC) released an article titled "A Unified, Equitable and Integrated National Health system that benefits all South Africans", in which it states that the National Health Insurance would be funded through a "combination of current sources". Additionally, it was projected that the contribution would be less than what members and their employers currently pay to medical schemes (*ANC Today*, 2009). Although termed a National Health Insurance, it would be tax funded, through allocations from general tax revenue and possibly additional earmarked taxes (Department of Health, 2011c).

The following table gives the preliminary cost estimates of the health care package, implementation as well as administration costs. Further costing will be undertaken by the National Treasury and the Department of Health to further refine the model and to look at long-term fiscal implications and effects of the National Health Insurance contribution on households.

Table 5.5: Healthcare delivery and National Health Insurance implementation:

Preliminary cost estimates 2011–2025

Year	Non- AIDS- related services	AIDS-related services	Additional services	Total direct healthcare costs	NHI operational costs	Total costs in delivering services	NHI implementation costs	Total costs modelled
2011	0	0	0	0	0	0	103,315,363	103,315,363
2012	57,773,124,913	17,166,207,505	42,270,916,229	117,210,248,647	586,051,243	117,796,299,890	7,562,523,092	125,358,822,983
2013	63,018,663,899	19,715,909,555	43,466,836,571	126,201 410,025	873,313,757	127,074,723,782	7,688,065,131	134,762,788,914
2014	68,743,700,878	21,986,952,564	44,663,128,851	135,393,782,293	1,196,881,035	136,590,663,329	7,817,527,358	144,408,190,686
2015	74,548,475,525	26,244,506,794	45,874,322,881	146,667,305,200	1,578,140,204	148,245,445,404	7,950,910,914	156,196,356,317
2016	80,827,911,456	28,728,750,718	47,094,626,628	156,651,288,802	1,986,338,342	158,637,627,144	8.088,221,201	166,725,848,345
2017	87,641,230,832	31,030,939,052	48,325,812,591	166,997,982,475	2,438,170,544	169,436,153,019	8,229,467,732	177,665,620,751
2018	95,052,680,344	33,149,581,757	49,568,979,121	177,771,241,221	2,936,780,905	180,708,022,126	8,374,663,993	189,082,686,119
2019	103,126,628,663	35,111,160,178	50,824,874,097	189,062,662,938	3,486,315,505	192,548,978,442	8,417,349,306	200,966,327,749
2020	111.940,398,283	36,941,489,310	52,094,075,790	200,975,963,382	4,091,870,614	205,067,833,997	8,568,371,192	213,636,205,189
2021	121,576,843,333	38,660,495,022	53,376,896,309	213,614,234,664	4,759,325,148	218,373,559,813	8,723,363,285	227,096,923,097
2022	127,854,878,098	40,285,667,400	53,611,943,556	221,752,489,054	5,366,410,235	227,118,899,289	8,882,352,922	236,001,252,211
2023	134,559,644,807	41,834,116,750	53,831,486,738	230,225,248,294	6,013,483,485	236,238,731,780	9,045,370,841	245,284,102,621
2024	141,730,835,738	43,303,832,918	54,036,013,619	239,070,682,276	6,703,541,931	245,774,224,207	9,212,451,095	254,986,675,302
2025	149,406,746,586	44,715,842,637	54,225,907,657	248,348,496,879	7,450,454,906	255,798,951,786	16,410,894	255,815,362,679

Source: National Health Insurance Policy Paper (Department of Health, 2011b).

The costing estimates in the table provide an indication of the estimated resource requirement for achieving universal coverage, based on cost-effective delivery of services. A costing model was applied to project future costs and although these are not 100 percent accurate, they make it possible to assess key design elements of the National Health Insurance (Department of Health, 2011c). Prior to the release of the green paper background work was done on two costing models. The costing model was based on work done by McLeod et al. (2010) and it estimated fully comprehensive benefits to cost R234 billion; however; the cost range varied greatly from R78 billion to R334 billion, depending on the comprehensiveness of benefits included and the service delivery efficiency assumed (Department of Health, 2013). Subsequent to the initial projections, the National Treasury and the National Department of Health have now taken forward more detailed costing work in order to determine the most realistic version of costs.

The green paper further states that it will take considerable time for the supply capacity (facilities and health professionals) to grow to accommodate such utilisation increases. Consequently, these increases will be phased in over a 14-year period. This model indicates that resource requirements under this model increase from R125 billion in 2012 to R214 billion in 2020 and R255 billion in 2025 if implemented gradually over a 14-year period.

These figures should be placed in context: in 2010/11 the budget for health was R101 billion and in 2012/13 it increased to R110 billion. These figures do not include spending by other departments such as the Department of Defence or the Department of Correctional Services. Further amounts are being spent on medical scheme contributions: R90 billion in 2009 and an estimated R92 billion in 2010. This represents a total of R227 billion being spent on health services in South Africa in 2010, which is equivalent to almost 8.5 percent of GDP (Department of Health, 2011c).

The document states that the increased spending on the National Health Insurance will be partially offset by the likely decline in spending on medical schemes. In addition, in 2013 the Department of National Health and National Treasury stated that they were completing their work for the future National Health Insurance and were considering a payroll tax (payable by both employees and employers), a higher value-added tax rate or surcharge on taxable income, or some combination of these (Department of Health, 2013). At the conference held in South Africa in 2010 various financing options were put forward for

consideration as well as new more innovative financing options, and these may also be considered by government.

Researchers from the University of Cape Town's Health Economics Unit conducted a survey of the perceptions on the "pre-requisites for a National Health Insurance" (Gilson & McIntyre, 2007) and found that spending on the National Health Insurance would roughly match what the government was spending on healthcare at the time (Gilson & McIntyre, 2007). According to McIntyre, it was "misleading to speak about how many billions of Rand the National Health Insurance system would cost." "Yes it will cost a lot of money but what we're talking about is something that is growing in line with GDP".

Parker also commented that South Africa spent just over eight percent of GDP on healthcare, which was more than any other country on the continent (Parker, 2010). The ANC was proposing to spend much more money on healthcare, although the amount that South Africa was spending compared favourably with that spent by other countries with a gross national income per person that was closest to ours (Van den Heever, 2011).

On 26 February 2014 Pravin Gordhan, the Minister of Finance at the time, was quoted as having said that the white paper on National Health Insurance and Treasury's financing paper for the programme would be tabled "shortly"; however, at the time of writing, 3 February 2015 there had been no progress in this regard.

5.6. CONCLUSION

This chapter has provided a picture of health in South Africa in order to assess the health status of the nation and its progress towards achieving Universal coverage. Universal coverage is no longer a dream for South Africa and if all stakeholders work together, it will become an increasing certainty. This chapter has summarised the progress and future plans for the introduction of National Health Insurance in South Africa. Considerable progress has been made since the implementation of the green paper in 2011 in many areas but in others there is still work to be done (Department of Health, 2013).

The key challenges have been addressed; more specifically, South Africa's current progress towards achieving the millennium development goals specific to health. South Africa is now in the final stage, with 2015 being the deadline which was set for goals to be achieved.

CHAPTER 6 CONCLUSION

6.1. INTRODUCTION

Economists and health policy analysts tend to provide detailed prescriptions on what should be done, but without clear instructions on how to do it and without good explanations of why things go wrong. (Reich, 1996:60)

Global health is at the threshold of a new era. At few times in history has the world faced challenges as complex as those now posed by a trio of threats; first, the unfinished agenda of combatting infections, malnutrition, and reproductive health problems; second, the rising global burden of non-communicable diseases and their associated risk factors, such as smoking and obesity; and third, the challenges arising from globalisation itself, such as the health effects of climate change and trade policies, which demand engagement outside the traditional health sector (Frenk, Gómez-Dantés & Chacón, 2011).

Health continues to be a national responsibility, yet owing to globalisation the intensified transfer of health risks across borders means that the determinants of health and the means to fulfil that responsibility lie increasingly beyond the control of any one nation (Jamison, Frenk & Knaul, 1998). The World Health Organization was born out of the need for global governance of health, but 66 years later this organisation now stands on a crowded stage and is no longer the sole authority on global health, as it is surrounded by many diverse contributors (Frenk & Moon, 2013).

It is in this complex and challenging environment that South Africa now hopes to implement a National Health Insurance for the first time. The millennium development goals as compiled by the World Health Organization are the driving force behind this ambitious task and through the 2010 Millennium Development report National Health Insurance was identified as the vehicle by which countries can move towards universal coverage in health.

The implementation of National Health Insurance cannot happen overnight. There are many uncertainties to be "sorted out in the design and eventual implementation of National Health Insurance, not least of which is the human and managerial capacity that will be required to support a scheme of this magnitude and complexity" (Ncayiyana, 2008:229). It

is therefore imperative that realistic timelines be set and that the collective work, knowledge and wisdom gathered be taken into consideration.

The governance and the financing of National Health Insurance are two separate issues and this dissertation has focused on the financing of National Health Insurance to determine the optimal balance between the various financing options as depicted in the model below. (Refer to Figure 1.1, copied here for easy reference.)

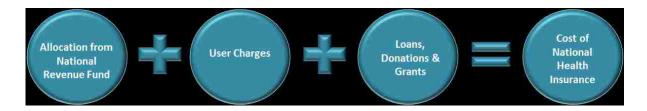


Figure 6.1: Model for the financing of health care

Source: Own.

Drawing from the experiences of more developed countries who have implemented National Health Insurance systems and taking cognisance of South Africa's historical inheritance, the optimal financing solution has been sought.

In this study various aspects have been highlighted that should be considered to ensure South Africa has a sustainable National Health Insurance as discussed. This chapter will thus firstly provide a synthesis of the study, secondly highlight the most obvious implications and contributions, thirdly draw conclusions, and lastly make some recommendations.

6.2. RESEARCH QUESTION AND OBJECTIVE

The guiding research question of this study was:

What Factors can influence the financial sustainability of South Africa's proposed National Health Insurance?

In order to answer the research question, the objective set for the study was to investigate sustainable financing options for the new South African National Health Insurance. The financing option(s) selected should take cognisance of the history of the country in order to correct the imbalances of the past whilst ensuring that the system will be sustainable in the long run. The long-term sustainability also needs to consider the managing of cost

associated with the system. In order to have an effective financing system we need to have the costs required.

6.3. RESEARCH FINDINGS

In order to meet the objective of the study and answer the research question, various subquestions were developed (Chapter 1, section 1.3.). The results of the investigation in each of these sub-questions will now be provided.

1. What are the funding options for a National Health Insurance fund that can be included in the financing framework?

The theoretical framework for the financing of National Health Insurance was developed in Chapter 2, investigating the various financing options available to fund the required cost of National Health Insurance. For any health care system to be functioning at optimal efficiency the cost of providing services should balance with the income allocated or collected for health care. The funding options can be summarised as follows:



The optimal combination of different funding options will depend on country specific factors:

In the first financing option, national revenue collected from various taxes can be used. The discussion investigated different taxing options including direct or indirect tax as well as general or hypothecated taxes. Previous studies found that using tax to finance health care can be effective but always creates tension between the 'healthy and wealthy' and the 'unhealthy and unwealthy', as the first group is expected to subsidise the second. Cognisance should also be taken of the fact that hypothecated tax financed systems could be under-resourced in times of economic downturn or crisis, which might require additional resources to be allocated or a reduction in services provided (Evans, 2002).

The next option investigated was financing by way of user charges. The investigation looked at the balance that needs to be found between the actual amounts being charged

and acceptability in relation to optimal health care, as studies found that higher user charges exclude more people from the system. As a large portion of South Africa's population is living in poverty, high user charges will result in a substantial portion of the population being excluded from the system, which is contrary to the universal coverage principle, the main objective of introducing the system. Authors in general agree that some user charges are required to ensure the sustainability of a system, not only by providing additional funding but also by preventing abuse of the system.

The final financing option investigated was loans, grants and donations. Although these might be accessible in some cases, they normally carry conditions and opportunity costs that would have an impact on long-term sustainability.

Currently the South African healthcare system is financed through the national revenue fund. The main source of these funds is from direct taxes such as personal income tax (35.7%), company income tax (20.8%) and value added tax (26.6%) (National Treasury, 2015). If the projected cost of introducing the National Health Insurance is accurate, additional funding will need to be obtained. Although studies have indicated direct taxes as the most effective, several countries are using a combination of direct and indirect taxes to finance their systems. In view of the limited fiscal space to increase direct taxes, a combination of direct and indirect taxes will probably be employed in South Africa.

It is important to note that the "macro-economic context of a country influences both its ability and the need to achieve universal coverage" (Ataguba & Akazili, 2010:74). While South Africa contributes about half of the total economic output in sub-Saharan Africa, it is still battling to overcome its income inequality. The Gini index, which measures income inequality (the closer to 1, the greater the inequality), decreased from 0.65 in the late 1990s to 0.578 in 2007 (World Health Organization, 2010c). This alarming mal-distribution of income is accompanied by high poverty and unemployment figures.

The South Africa government stated in an article titled "A unified, equitable and integrated national health system that benefits all South Africans" (*ANC Today*, 2009) that the National Health Insurance would mainly be funded through a "combination of current sources" of Government "health spending, including the removal of the tax subsidy for medical schemes and a modest mandatory or compulsory" employer-employee contribution which will be divided "equally" (*ANC Today*, 2009).

The article further projected that the "contribution will be less than what members and their employers currently pay to medical schemes. Certain categories of workers, due to their low-income status, will be exempted from the contribution. All of these funds would be placed in a single pool that would be available to fund all healthcare in the public and private health sector" (*ANC Today*, 2009).

2. What factors influence the funding models used by other countries?

There have been fundamental changes in the global dynamics of the world and these challenges have increased the focus on health; not only are health problems global, they also provide lessons, insights and solutions. The global demographics have shifted and this needs to be accounted for by nations who are striving for universal coverage in health.

With South Africa on the brink of implementation of its first national health scheme, it is necessary to draw from the experiences of both developing and developed countries. Challenges and lessons from these countries have been analysed and summarised as a basis from which South Africa can draw.

Achieving universal coverage with National Health Insurance is difficult and many long-standing schemes, for example Germany, Latin America and the Netherlands, now need to readdress the financing of social health, grappling with issues of how to provide universal coverage when a relatively small proportion of the working population is still in formal employment.

South Africa needs to benefit from and apply the experiences of other nations in order to ensure that it does not make the same mistakes. The South African health system is plagued by a number of interrelated challenges, ranging from shortages of human resources, and the inequitable distribution of resources between the public and private health sectors, to the poor financial management of allocated resources.

It is with this in mind that consultation and research should be carried out with local and international experts in the areas of health financing and health systems reform to determine how these should be undertaken in the South African context to ensure that universal coverage of quality health services is achieved for the entire national population.

The problems and challenges being experienced by other countries operating National Health Insurance are inefficiency, long waiting time for medical procedures and

appointments with specialists, unequal access to health care and treatment, lower quality healthcare than private systems, cost control by way of health rationing, and limitations on medical technology used.

The investigation into the most significant themes related to national health care revealed that universal health insurance does not necessarily mean universal access to health care. Rising health care spending is a global phenomenon (health care has become more expensive), single-payer systems have their limitations, dissatisfaction and discontent with a nation's health care system seems to be a common theme, and the overall sustainability of health care expenditure has become questionable.

As health policies, guidelines and actions are developed, there is a need to monitor and evaluate the performance of health systems, generate local evidence for policy and action and to identify determinants of successes and failures.

A visible and effective monitoring and evaluation framework needs to be put in place that will ensure that corrective action is taken timeously, unintended consequences are dealt with accordingly, and that set targets are met by service providers.

3. How has the historical inheritance of South Africa affected the current state of health in the country?

Colonisation and apartheid have left the majority of South Africans living in a highly unequal society in which poverty and social dislocation have had profound and traumatic effects on the social fabric of the country. Apartheid South Africa was generally unhealthy primarily because the majority of the population was forced to live under conditions that were incompatible with health and not because it was an inherently disease-ridden country.

To illustrate the link between the social injustice in South Africa's history and its current state of health, Chapter 4 described the disease profile in South Africa. The history of South Africa's health care was analysed in three distinct periods, namely the colonial era, the apartheid era and the post-apartheid era, as the choices and decisions made in those periods resulted in the state of South Africa's health today. The analysis revealed that South Africa is different from other developing countries. The marked discrepancies in the health of the different racial groups confirm the belief held throughout this thesis that the

adverse health situation in South Africa is directly and indirectly related to the history of the country.

The inequitable distribution of resources in both the public and private domain in terms of the size of the population as well as the inefficient use of resources has ultimately contributed to the poor health of most South Africans. Without disputing the strides that the ANC government has made with the various policies and programmes in place, the health profile of the country in terms of the distribution of resources and poor delivery of health services suggests that the government has not yet been successful in righting the wrongs of the past and fulfilling its constitutional mandate to deliver quality healthcare to all. The introduction of the National Health Insurance Fund could make an important contribution to righting these wrongs.

4. What progress has been made by South Africa with regard to the proposed implementation of the National Health Insurance?

The National Health Insurance Policy Paper (Green Paper) was released in August 2011, as the cornerstone of the proposed National Health Insurance system to achieve Universal Coverage. The millennium development goals are the motivation behind the implementation of the National Health Insurance in South Africa and South Africa's commitment to achieving the millennium development goals is demonstrated by the "domestication" of the millennium development goals in the form of the Medium Term Strategic Framework 2009–2014 (The Presidency, Republic of South Africa, 2009) which links the millennium development goals to the framework's priorities (refer to Chapter 5, Table 5.1).

The progress made in achieving the millennium development goals specific to health was addressed as it is the culmination of this progress that will effectively give life to National Health Insurance in South Africa.

South Africa has achieved mixed success towards achieving the millennium development goals and the implementation of the National Development Plan has placed the country on a path that will ensure that it meets both unmet millennium development goals as well as emerging development issues.

The first five years of the introduction of the National Health plan (phase one) included pilot studies and strengthening the health system. A range of activities was initiated in

phase one to get the country ready for implementation as the second phase is intended to introduce a strategic purchasing mechanism by establishing a semi-autonomous National Health Insurance Fund.

Information regarding the financing of the National Health Insurance still remains unclear as the technical details will be made available in the "white paper". On 26 February 2014, Pravin Gordhan, the Minister of Finance at the time, was quoted as having said that the white paper on National Health Insurance and Treasury's financing paper for the programme would be tabled "shortly"; however, as at 2 February 2015 the white paper was still forthcoming (Gordon, 2014).

Initial costing projections were made by National Treasury but these have had to be revised and more detailed costing work carried out and despite it being termed a National Health Insurance, all evidence at this stage suggests that it would be funded through allocations from general tax revenue and possibly additional earmarked taxes. In the National Health Insurance Policy Paper (Department of Health, 2011b) there is a clause that states, "the precise combination of these sources is subject to continuing technical work and will be further clarified in the next six months in parallel to the public consultation". The document further states that "the revenue base should be as broad as possible in order to achieve the lowest contribution rates and still generate sufficient funds to supplement the general tax allocation to the National Health Insurance" (Department of Health, 2011b).

According to the Department of Health, National Treasury is completing its work for the future National Health Insurance and it is considering a payroll tax (payable by both employees and employers), a higher value-added tax rate or surcharge on taxable income, or some combination of these (Department of Health, 2013).

At the time of completion of this study, April 2015, this was the only information available.

The sustainability of National Health Insurance systems is at the core of this study; more specifically, the financing of these systems needs to be addressed. The world has changed dramatically in the last 20 years and the health needs of the population have been dramatically altered due to demographic changes. Ageing populations, globalisation, and the growing global burden of disease have all impacted on the way in which countries

plan for and provide social health insurance. These factors need to be built into the planning for National Health Insurance to be sustainable in the future.

Resulting from these changes, several countries have had to look at alternative options to National Health Insurance and this has highlighted the issue of sustainability. South Africa needs to draw from the experience gained by countries that have been operating national or social health insurance for decades, and instead of repeating the mistakes, lessons should be learnt and built into our National Health Insurance to ensure long-term sustainability. To go even further would be to plan for sustainability by identifying and earmarking additional sources of funding such as sin taxes.

The preliminary costing estimates provided indicates that National Health Insurance is affordable for South Africa (Department of Health, 2011a). However, the present system of fragmentation associated with the high cost, curative and hospicentric approach as well as excessive and unjustifiable charges, especially within the private health sector, is unsustainable. No amount of funding will be sufficient to ensure the sustainability of the National Health Insurance unless the systematic challenges within the health system are concurrently addressed. The challenges of sustainable financing do not apply only to South Africa but have also been experienced in other countries that have followed the route that is currently dominant in the South African private health sector.

6.4. CONCLUSION

The study investigated "What factors can influence the financial sustainability of South Africa's proposed National Health Insurance?"

The literature suggests that a national health system should mainly be funded through allocations from national government. Different countries use different taxes to collect the required funds for the national health, with the vast majority using direct taxes. The use of user charges is important however, although not purely for a revenue collection point, but from a cost control point of view as well. Some studies have revealed that the lack of user charges results in a misuse of the system.

Although the development of an overall financing structure for any national health system is important, this structure should be flexible to ensure a sustainable system. Changes in economic or social conditions in a country need to be made as quickly as possible to

ensure sufficient funds are obtained to maintain the system, but also to ensure that the cost of providing the health care remains affordable for the country.

The study also revealed that there is no standard financing structure that would work for all countries. The historical development of the country and its health care system needs to be considered as well as the needs of its citizens and the resources available. Government should be congratulated with the bold step towards achieving universal coverage in health. However, the question should be raised as to whether this gesture has been too late, especially considering the fact that countries are now moving away from National Health Insurance as sustainability has become an issue. Or will South Africa be able to address these sustainability issues in the design of its national Health Care System?

There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning. (Krishnamurti, 2003:57)

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