

CHAPTER ONE

BACKGROUND AND LITERATURE REVIEW

1.1. Introduction

According to Management Sciences for Health, “most leading causes of death and disability in developing countries can be prevented, treated, or at least alleviated with cost effective essential drugs”.¹ However, hundreds of millions of people do not have regular access to essential drugs, despite the fact that essential drugs can prevent many deaths.¹

In South Africa many districts have reported that district health facilities (mostly PHC facilities) do not have essential drugs on stock.²

Within a decade after the first modern pharmaceuticals became available, efforts began to ensure their widespread availability. From the mid 1950s to the mid 1970s, basic management concepts began to evolve in countries such as Norway, Papua Guinea, Sri Lanka, Cuba and Peru.¹ In 1975 WHO defined essential drugs as those drugs that meet the health needs of the majority of a country’s population.³ These drugs and medicines are intended to be available within the context of functioning health systems at all times in adequate quantities, in the appropriate dosage forms,

with assured quality and adequate information, and at a price that the individual and the community can afford.

Since the change of government in 1994, South Africa has witnessed major transformation in the health care system, re-orienting health services to primary health care.⁴ One of the cornerstones of the country's constitution is the Bill of Rights, which specifies the rights that should be enjoyed by all South African citizens.⁵ Among these is the right to access health care services. The National Health Policy is one of the vehicles used by the DoH to realise the imperatives of the constitution. The Health Policy is guided, amongst others, by two important principles⁶:

- ❖ A commitment to improving the health status of the South African population
- ❖ A commitment to achieving equitable access to primary health care services

The National Drug Policy (NDP) was launched by the then Minister of Health Dr. Nkosazana Dlamini-Zuma in 1996. The NDP is within the framework of the National Health Policy and it aims to improve access to health services through ensuring the availability of appropriate drugs whenever and wherever they are needed in the most cost effective manner.⁷ The South African Drug Action Programme (SADAP) was officially launched on the 1st January 1997. It was funded by the United Kingdom Department for International Development and executed by the WHO Drug Action Programme.⁸ The aim of the programme is to assist the National DoH and the nine provinces with implementation of the NDP by means of the essential drugs programme.

In South Africa 80% of the population is dependent on the government to provide for their health care needs, mainly through the PHC facilities. It is thus crucial for the government to ensure efficient availability of essential medicines for its citizens at the PHC facilities. Availability of medicines has been shown to enhance utilisation of health facilities and the reputation of health professionals and the entire health care system in general.⁹ Suleman, McCoy and Gray report that many patients view access to drugs as an indication of good health care management.¹⁰ The country's socio-economic contrast poses a unique challenge to the DoH to make cost-effective healthcare accessible to all the inhabitants of the country.¹¹ In keeping with the National Drug Policy, the Standard Treatment Guidelines and Essential Drug List for PHC was developed as a valuable tool that should be used to meet this challenge. It was expected that healthcare providers would embrace the Standard Treatment Guidelines and Essential Drug List to promote access to affordable healthcare to all persons in South Africa.⁶

In the health objectives of the National Drug Policy, the government of South Africa clearly outlines its commitment to ensuring availability and accessibility of medicines and all people. These are as follows:¹¹

- To ensure the availability and accessibility of essential medicines to all citizens.
- To ensure the safety, efficacy and quality of drugs.
- To ensure good prescribing and dispensing practices.

- To promote the rational use of drugs by prescribers, dispensers and patients through provision of necessary training, education and information.
- To promote the concept of individual responsibility for health, preventive care and informed decision-making.

The main objective of the Essential Drugs Programme, a subset of the NDP, is to achieve access and equity through effective management of the selection, procurement, distribution and use of drugs. The criteria for the selection of essential drugs for PHC in South Africa were based on WHO Guidelines for drawing up a national Essential Drug List (EDL).¹¹

1.2. Rationale for the study

According to the Management Sciences for Health, “most leading causes of discomfort, disability, and premature death can be prevented, treated or at least alleviated with cost effective drugs”.¹ According to the NDP (1996), drugs have bestowed enormous health benefits on people all over the world. They have transformed the treatment and prevention of many diseases, thus resulting in many lives being saved from death and a greater improvement of the quality of life of others. For example, essential drugs have an important role in reducing health problems such as; acute infections, skin diseases, gastrointestinal complaints, musculoskeletal conditions and injuries¹.

Research has proven that essential drugs have a major impact on common causes of morbidity and mortality. The huge burden of illness due to acute respiratory infections (ARIs), diarrhoea diseases, measles, malaria, sexual transmitted illness, tuberculosis, chronic diseases and other illnesses can be substantially reduced if essential drugs are available and properly utilised¹.

There is no doubt therefore that whilst it is important to invest in prevention through health education and other programs to improve nutrition, sanitation, water supply, housing, environment and personal hygiene, the availability of essential drugs in response to many diseases is also of importance.

Despite all these benefits, drugs have not been available to all South Africans. This has been the case even after the NDP and the essential drugs programme were adopted to ensure that essential drugs are available at all times, in adequate quantities and in the appropriate dosage forms⁷. It has already been mentioned earlier that many district health facilities do not have drugs in stock². For example, a study by Health Systems Trust (HST) found that the Kgalagadi District of the Northern Cape had a problem of drug shortages.² The Mopani District, the focus of this research is no exception. At Mopani District, Drug Management Workshop, held on August 2002 in Tzaneen, the participants, who were all drug managers at their health facilities, agreed that their facilities faced serious shortages of essential drugs. However the reasons behind these were unknown. The study therefore aims to outline the factors associated with essential drug shortages in PHC facilities in the Mopani District. These factors must be specific to Mopani. We cannot therefore generalize the results

of other studies that have been done elsewhere to Mopani. Mopani is different politically, culturally, economically and otherwise. Hence, this study is necessary to determine the factors associated with the causes of essential drug shortages in the Mopani District.

1.3. Factors associated with drug shortages

According to WHO effective pharmaceutical procurement and distribution processes are central to the availability of drug supplies³. Effective pharmaceutical procurement practices include the formulation of a national/provincial essential drugs list; the determination of order quantities based on reliable needs estimation, the separation of key functions, prompt payment and regular audits. Effective distribution management includes the availability of an efficient network of storage facilities, keeping reliable records of drugs stock balance and consumption, maintaining accountability procedures, ensuring adequate and secured storage, reliable transport systems and reinforcing reporting and supervisory practices. Muko argues that a third of procurement and distribution processes are compromised by lack of adequately trained staff¹. He argues that, “the professionals who are expected to ensure proper purchase, utilization and appropriate use of those drugs often lack basic knowledge on the management of drug supplies”.¹²

The Health Systems Trust’s initiative for sub-district support argues that, “ensuring an adequate supply of medicine to clinics is only addressing half the problem²”. They argue that it is also necessary to address drug use patterns and ensure that drug use is

rational. Rational prescribing refers to “the process of making sure that the diagnosis, advice and treatment for any given patients are correct, and if a medicine is used, that it is the correct choice...[and] correct dose...”.¹³ Quite often poorly trained prescribers, prescribe irrationally resulting in drug shortages. In Kenya, for example, Muko indicates that inadequately trained staff has been found to be an important contributing factor to drug shortages as a result of irrational prescribing.¹²

Other studies attribute drug shortages to drug misuse and abuse by patients who collect treatment even if they are not sick, or those who accumulate more drugs than they require. Harris, for example argues that in the US “hoarding drugs is not an uncommon practice [especially] among elderly women”.¹⁴

Unreliable transport for drug supplies has also been cited as a major problem in many health care programs in developing countries¹. Transport is either difficult to plan and manage, or is inadequate to health care delivery. Unavailability of reliable transport systems contributes to drug shortages.

According to the WHO, medicines are the second highest expense after staff costs in a country’s health care system. The World Bank indicates that in many developing countries, a high percentage of medicine losses occur in the state procurement, storage, distribution, and utilisation system. The World Bank estimates that in Africa, the patient receives only 12 cents out of every dollar spent by the government on medicines. Inefficiency is the major contributor to these losses. Out of the 100% budget allocated for medicines, 10% is lost through inadequate buying practices, 14%

through quantification problems, 27% through procurement, 19% through inefficient distribution, 15% through irrational prescribing, and another 3% through patient non-compliance. All these losses that occur in the supply chain add up to 88% of the original budget.^{15, 16}

1.4. Aims and Objectives

The study was aimed at conducting a situation analysis on the Drug Supply Management (DSM) System in the Mopani District in order to describe the factors responsible for the drug shortages. The specific objectives are:

- To describe the current Drug Supply Management System
- To obtain a preliminary understanding/measurement of the extent of drug shortages, in particular to determine which essential drugs are most commonly out of stock
- To determine the factors associated with drug shortages
- To make recommendations to the Mopani District Management Team on the improvement of the Drug Supply Management System