

CHAPTER 6

FUTURE CHALLENGES FOR EFFECTIVE PUBLIC HEALTH SERVICE DELIVERY AT S.S.R.N.H.

6.1 INTRODUCTION

The previous chapter analysed issues related to the current national health policy that influence public health service delivery at S.S.R.N.H. In this chapter an attempt is made to assess the future health challenges that S.S.R.N.H. has to face especially challenges in the macro health environment such as political, technological, economic, physical and social. It further deals with the research question, what are the future challenges for effective public health service delivery at S.S.R.N.H.? Additionally, the micro health environment that is made up of variables such as regulators, clients, resource suppliers, ethical guidance and administrative provisions have been analysed in order to show the impact of these factors on public health service delivery at S.S.R.N.H.

6.2 MACRO HEALTH ENVIRONMENT OF S.S.R.N.H.

The macro health environment of S.S.R.N.H. refers to the influences from outside and usually involves uncontrollable health challenges, for example, in the social environment, the emergence of severe acute respiratory syndrome (SARS) which is an infectious disease associated with a novel corona virus and causing worldwide outbreaks. Another variable in the macro health environment is technological changes, for instance, gene cloning and the use of information from gene in the treatment of mental illness. The political challenges in the macro health environment refer to the health policy of the Ministry of Health and Quality of Life, Mauritius. It includes, for instance, introduction of new legislation on pregnancy control, dangerous chemical control, and In-Vitro Fertilization Bill. Political challenges also refer to protocols of World Health Organisation (WHO) for the prevention of infectious diseases, for example, the HIV/AIDS epidemic.

Moreover, the physical challenges in the macro health environment involves the impact of the public health infrastructure on the natural environment, for instance, the discharge of medical and non-medical wastes into the rivers or canals. Another factor that influences macro health environment is economic challenges which involve programmes of cost effectiveness and even cost savings in public health expenditure. All these variables will be analysed below in greater detail.

6.2.1 POLITICAL CHALLENGES

Public health is conducted in a political environment. In Mauritius the health policy-makers are the Minister of Health and Quality of Life, Mauritius and top Public Health Officials. All issues related to public health are discussed and analysed in the Cabinet. The draft health bills related to public health are submitted to Parliament for approval. Once a health bill is passed by the Parliament it becomes a law, which is binding. The Public Health Officials undertake all health actions in accordance with the political office bearer's instructions. Should significant changes take place in the political structure or in a Cabinet's policy, each health official will have to direct health functional activities accordingly. Seeing that the Public Health Manager has to ensure that the administrative arrangements are made in such a way that effective public health services can be rendered, these can be used as a point of departure for adjustments (Teshuva 2001:96).

Public health services are influenced by health policy goals of the Ministry of Health and Quality of Life, Mauritius. For instance, the development of mental health policy in Mauritius is guided by a set of goals. These goals aim to change the negative perception of mental disorders by the public, reduce the incidence and prevalence of mental disorders. Given the general tendency in the general public to regard mental illness as being synonymous with severe (mainly psychotic) disorders, should policy-makers produce one policy of mental health or several, reflecting the dichotomy between severe and common disorder? In

general, the needs of a psychotic patient are different from those with a neurotic disorder. On the other hand, the differentiation of mental disorders into severe and mild disorders is often arbitrary, and not based on the experience of suffering or disability among the victims. Also, the move towards 'mainstreaming' mental health services with those of general medicine goes with the effort to reduce the stigmatization of mental illness (Cumper 2000:90). Having separate policies for severe and common disorders could run counter to this effort. Therefore, health policy makers face such type of political challenge when making health policy decision on a particular health issue.

In future the public health service delivery at S.S.R.N.H. would change owing to the introduction of new health legislation. The government-of-the-day has worked on a set of legislative reforms particularly on health sector such as Dangerous Chemicals Control Bill, Human Tissue (Removal, Preservation and Transplant Bill), In-Vitro Fertilisation Bill, Pharmacy Council Bill, and Pregnancy Control Bill. This new health legislation, would bring many changes in the public health care environment. Under such circumstances, the Public Health Manager would have to ensure that adequate administrative arrangements are developed to bring about change whilst honouring community values and norms (Beach 2001:53). For instance, the objectives of Dangerous Chemicals Control Bill are to provide for the prevention of damage to public health, the natural environment and for the provision of better protection to health personnel and members of public. As far as Human Tissue Bill is concerned its objective is to provide the legal framework for carrying out the removal, preservation and transplant of human tissue. Additionally, a proper legislative framework will be enacted to regulate In-Vitro Fertilisation. In this context, the Ministry of Health and Quality of Life, Mauritius has enlisted legal assistance through the WHO. Moreover, a draft Bill has been prepared for the establishment of Pharmacy Council to regulate the activities of the health profession. It will provide a legal framework for the registration of pharmacists and the establishment of a code of ethics for the health profession. Eventually, a draft Bill on Pregnancy Control has been

prepared in consultation with the Ministry of Women's Rights, Child Development and Family Welfare to address to issue, concerning the termination of pregnancies especially in case of sexual assault (Clark 2001:60).

Furthermore, the impact of WHO as a specialized agency of the United Nations (UN) serving as the directing and coordinating authority for international health matters and public health cannot be overlooked. The WHO provides internationally applicable guidelines and standards, reviews and analyses health policies, programmes and research, offer technical advice and recommendations for health decision makers. It also plays a vital role in the prevention control of infectious diseases like SARS, HIV/AIDS, Malaria, Tuberculosis and Poliomyelitis. Its aim is to prevent these diseases reaching the pandemic stage. Countries where these diseases are endemic need notification to WHO. Hence, the public health personnel are evolving in a volatile political environment and future challenges become evident as new diseases which were hitherto unknown suddenly become a great threat to mankind, for instance, HIV/AIDS and SARS (Regester 2003:41).

6.2.2 TECHNOLOGICAL CHALLENGES

The rapid technological developments that are taking place in the medical field is astonishing. Perhaps the most significant technological advancement in recent years has been in the field of genetic engineering which allows genes to be manipulated, altered and transferred from organism to organism through the transformation of deoxyribonucleic acid (DNA). This has enabled health researchers to use rapidly reproducing organisms producing useful and often life saving substances such as antibiotics, hormones, interferon and vitamins for effective patients care (Simon 2000:80).

Many of the comfortable and relatively simple models regarding the nature of mental disorders, causes and neural substrates now appear quite frayed. Gone

is the idea that symptom clusters, course of illness, family history and treatment response would coalesce in a simple way to yield valid diagnosis. Also too simple was the concept, born of early pharmacological successes, that abnormal levels of one or more neurotransmitters would satisfactorily explain the pathogenesis of depression or schizophrenia (Wellington 1986:40). Gone is the notion that there is a single gene that causes any mental disorder or determines any behavioral variant. The concept of the causative gene has been replaced by that of genetic complexity, in which multiple genes act in concert with non-genetic factors to produce a risk of mental disorder. Discoveries in genetics and neuroscience can be expected to lead to better models that provide improved representation of the complexity of the brain (Dix 1990:6). It has been noted that the crowning complexity of the brain, however, is not static. Every time something new is learnt, whether a new name, a new skill or a new emotional reaction, the active neurons alter the synaptic architecture of the circuit in which the learning has occurred this is called plasticity, new synapses may be formed and old one may be pruned; existing synapses may be strengthened or weakened (Simon 2000:23). Thus Doctors, Scientists, Nurses and other health personnel of S.S.R.N.H. must keep pace with rapid technological development in medicine so as to provide effective public health services to the community.

Another major technological development in public health is gene cloning in which multiple copies of a specific gene are produced which may then be used to manufacture large quantities of valuable products such as insulin, erythropoietin and calcitonin which can be used to treat diseases and disorders in patients (Human cloning 2003).

Dolly the sheep is dead – possibly the world’s most famous animal was put to sleep on 14th February 2003 developing progressive lung disease. Dolly was cloned from a dead adult sheep using frozen cells and born on 5th July 1996. There have been many reports that Dolly may have been getting old before her time, developing arthritis and other problems. Scientists are waiting for the

results of a post mortem to try to understand whether Dolly's latest problems were linked to the cloning technique (Human Cloning 2003). Clonaid claims birth of first human clone (Eve) by caesarian section on 26 December 2002 and a second child in Europe (Netherlands) to a lesbian couple on 8 January, a third on 20 January to a Japanese couple who cloned their dead son, plus another to a couple from Saudi Arabia and a further child – country of origin not declared (Human cloning 2003).

Born outside the United States to an American women, Eve was apparently created using the Dolly technology – a skin cell and a human egg from the “mothers” who is infertile. Clonaid claims 3 other “mothers” will give birth soon, one of which is carrying a twin of a dead child (Human Cloning 2003).

A secret human cloning laboratory run by Clonaid is said to be based in the Nevada desert, where the first human cloned baby was born in 2001. Clonaid says many couples including homosexual men have asked to be cloned (Human Cloning 2003). Moreover, Clonaid says that gene technology will allow “magic bullets” to hunt and destroy cancer cells by detecting bad genes. It will allow correction within five to ten years of gene defects such as cystic fibrosis. Also gene technology will be used to produce a new generation of complex drugs at low cost, as well as vaccines for diseases like malaria, and perhaps one day an effective treatment or vaccine for HIV/AIDS (Cumper 2000:67).

All these technological developments that are taking place worldwide have an impact on S.S.R.N.H. and this hospital must prepare for the implications of these technological developments, for instance, the fear that the ability to manipulate genes could allow human characteristics and behaviour to be modified. There is, no doubt, that the genetic revolution will present health personnel with the greatest moral questions in human history. Take the humanized monkey: how many human genes does a monkey have to have to win human rights? Since monkeys differ from humans only 3% in their genes the answer is that if the right

1.6% of human genes are added, it is likely the courts would recognize that the new creature was more human than animal (Scott 2003:10). Thus gene technology strikes at the very heart of humanity, raising not only philosophical and moral questions but also spiritual ones. It is important to take note of the future technological challenges that the health personnel of S.S.R.N.H. have to encounter while rendering public health services.

6.2.3 ECONOMIC CHALLENGES

Government expenditure on running public health services in Mauritius is currently (Year 2003-2004) Rs 2,820 million a year. This represents a per capita recurrent expenditure on government health services of Rs 2,190 a year. In addition, the capital expenditure on public health services in 2003-2004 is expected to be Rs 400 million. This gives a total for state expenditure on public health of Rs 3,100 million of the predicted gross domestic product (GDP) for the year (Roberts 2003:25).

Estimates show that the Action Plan for Public Health, if fully implemented by the financial year 2008/9, will require 80 percent increase in expenditure on public health services, with Rs 5 to 6 billion in capital expenditure (Roberts 2003:61). It is to be noted that an extra Rs 100 million is required yearly to maintain and keep the present buildings and equipment in proper working order at S.S.R.N.H. But a large part of the new commitment will be in developing health services to meet the growing epidemic of non-communicable diseases such as diabetes, cardiovascular diseases, hypertension, cerebro-vascular diseases, cancer, mental illness and substance abuse related diseases. This will require additional funding beyond the limits likely to be provided from existing budget sources.

Public health service delivery is currently financed through general taxation. The Action Plan for Public Health has proposed new health services to be provided to the community. To fund the Action Plan for Public Health and the continued

provision and development of existing public health services will require extra funds. The Public Health Manager, for instance, will have to look for alternative sources of funds taking into account the economic conditions of the country. Financing future public health services may be from general taxation, health insurance schemes, service charges, health taxes on tobacco and alcohol (Roberts 2003:21).

Hence, the major economic challenge is the establishment of an ongoing major efficiency drive within the public health services with the objective of achieving annual recurring economies and greater effectiveness in delivery of patient care and better value for money in procurement, the yield from which can be ploughed back into public health service development.

6.2.4 PHYSICAL CHALLENGES

The physical challenges in the macro health environment involve the handling of hospital wastes and the impact of both the medical and non-medical wastes on physical environment. The challenges facing the Public Health Managers and health officers in the physical environment are treatment, handling, recycling and disposal of medical wastes, for instance, wound dressings, corpses, parts of human organs, dialysis waste, plastic injections and laboratory animals (Mulloo 1992:23).

Between 75% and 90% of the waste produced by S.S.R.N.H. is non-risk health care waste. The remaining 10% to 25% of health care waste is regarded as hazardous.

Table 6 Different categories of waste generated by S.S.R.N.H.

Waste category	Descriptions and examples
Infectious Waste	Waste suspected to contain pathogens e.g. laboratory cultures, waste from isolation wards: tissues (swabs), materials or equipments that have been in contact with infected patients; excreta
Pathological waste	Human tissues or fluids e.g. body parts: blood and other body fluids; fetuses
Sharps	Sharp waste e.g. needles, infusion sets; scalpels; knives; blades; broken glasses.
Pharmaceutical waste	Waste containing pharmaceutical e.g. pharmaceutical that have expired, or are no longer needed; items contaminated by or containing pharmaceuticals (bottles, boxes).
Genotoxic waste	Waste containing substances with genotoxic properties e.g. waste containing cytostatic drugs (often used in cancer therapy); genotoxic chemicals
Chemical waste	Waste containing chemical substances e.g. laboratory reagents; film developer; disinfectants that are expired or no longer needed; solvents
Wastes with high content of heavy metals	Batteries; broken thermometers; blood pressure gauges.
Pressurized containers	Gas cylinders; gas cartridges; aerosol cans
Radioactive waste	Waste containing radioactive substances e.g. unused liquids from radiotherapy of laboratory research; contaminated glassware, packages or absorbent paper; urine and excreta

Source: Documentation unit (2003:28)

Improper disposing of hospital wastes could cause ecological disbalances. Chemicals, drugs and detergents rich in phosphates once discharge in rivers or lakes provide nutrients for vegetation, which cause eutrophication. A result of toxic by - product from algal blooms death is Mutation thereby altering the bases of D.N.A. which leads to sterility and death. Burning of sharps, pharmaceutical waste, genotoxic waste, chemical waste, pressurized containers and heavy metals produces carbon monoxide, nitrogen oxides, sulphur dioxide, ammonia hydrogen sulphide and other gases which are harzadous not only human beings but also to environment (Cumper 2000:90). Hence, an increasing awareness of the importance of the ecological environment gives rise to organize efforts such as pollution prevention team, waste management team by the S.S.R.N.H. authorities in order to preserve and ensure sustainable physical environment while rendering public health services.

The physical challenges in the macro health environment also involve natural calamities such as storms, tornados, earthquakes and floods (Gordon 1993:66). Although tornados are not common in Mauritius, cyclones very often damage the physical infrastructure, for example, health institutions. Therefore, the Public Health Managers face the challenges of rendering health services to the citizens during and after the passage of a natural disaster such as a cyclone.

6.2.5 SOCIAL CHALLENGES

The social environment is changing very fast as a result of altering lifestyle of people. Cardiovascular disease (CVD) is the greatest public health epidemic in Mauritius. It is the number one killer and a major cause of disability, ill health and human suffering. The major causes of CVD are well known and have been well documented: smoking, poor dietary habits lack of exercise, and high cholesterol. Up to 29% of all deaths in Mauritius are caused by CVD (Bailey 2002:86). About 40% of the myocardial infarction and cardiovascular stroke attacks are fatal. About half of the deaths for CVD occur among people bellow 70 years of age,

including many who are relatively young (Damar 2002:12). This fact, together with the associated disability, is the reason why coronary heart disease in the society is estimated to be the greatest cause of disability adjusted life years in Mauritius. 45% of patients admitted at S.S.R.N.H. daily are associated with CVD. In the years to come this figure is expected to increase which will undoubtedly put pressure on Doctors, Nurses, Health Managers and other health officials of S.S.R.N.H. in the provision of public health services.

Another social challenge that health personnel are expected to face in the future is the harm done by tobacco, alcohol and illicit drugs which contributes up to 24% of the total disease burden facing S.S.R.N.H. There is a direct relationship between the number of cigarettes smoked, the duration of smoking and the risk of CVD, cancers and respiratory illness (Damar 2002:60). There is a direct relationship between the volume of alcohol consumed and the risk of liver cirrhosis, raised blood pressure and haemorrhagic stroke. Between 40% and 60% of all injury-related deaths, either intentional or unintentional are attributable to alcohol consumption (Denmark 2000:18). Moreover, illicit drugs increase the risk of poisoning, dependence, psychosis, suicide, overall mortality and crime and, through contaminated injection, the spread of HIV and hepatitis (Cumper 2000:80).

The fight against HIV/AIDS poses enormous social challenges worldwide, generating fears that success may be too difficult or even impossible to attain. In 1983-84, the discovery that HIV was etiological agent of AIDS raised hope that a preventive vaccine would soon be developed but up-to-now no vaccine has been developed (Dean 1984:40). Despite international efforts to control the HIV/AIDS pandemic, through behavioural modification and other interventions, more than 15 000 people become infected with HIV everyday, 95% of whom live in developing countries, particularly in Sub-Saharan Africa (Cumper 2000:94).

In Mauritius 68 males and 34 females patients suffering from HIV were known to have passed away in the year 2001. The number of HIV cases is increasing in Mauritius which poses a great threat to public health. The best long-term hope for controlling the pandemic would be a preventive vaccine that is safe, highly effective and affordable (Damar 2002:64).

What is stunning is that humanity is still fighting to find out treatment for HIV patients that another severe disease called SARS hitherto unknown to mankind has emerged in the 21st century. The first cases of SARS are now known to have emerged in mid-November 2002 in Guangdong Province, China. The first official report of an outbreak of atypical pneumonia in the Province, said to have affected 305 persons and caused 5 deaths, was received by WHO on 11 February 2003. SARS was first identified in Vietnam on 28 February 2003, when Dr Carlo Urbani, an epidemiologist from the WHO office in Hanoi, examined a patient with a severe form of pneumonia with unknown cause. Unfortunately Dr Carlo Urbani died at the age of 46 in Bangkok with severe SARS. From March 24, 2003, a major outbreak of SARS involving 321 patients occurred in Amoy Gardens, a high-rise housing estate in Hong Kong. As at 5 June, 2003 Hong Kong has reported a cumulative total of 1209 cases with 38 deaths. SARS demonstrates dramatically the global havoc that can be wreaked by a newly emerging infections disease. At this moment, public health authorities, Doctors, Nurses, Scientists and laboratory staff around the world are struggling to cope with SARS. Economists and market are simultaneously struggling to calculate the present and future social costs. Public panic is widespread, some government officials have lost their jobs and social stability has been jeopardized, forcing health authorities to resort to control tools dating back to the earliest days of empirical microbiology: isolation and quarantine. A novel virus, the SARS-associated coronavirus has been identified as the causative agent (SARS pneumonia 2003).

With the notable exception of HIV/AIDS, most new diseases that emerged in the social environment during the last two decades pose a major threat to international public health. Many (avian influenza, Nipah Virus, Hendra virus, Hanta virus) failed to establish efficient human-to-human transmission. Diseases such as West Nile Fever and Rift Valley Fever that have spread to new geographical area are transmitted by a disease vector. Still others (Neisseria meningitides W/35, and the Ebola, Marburg and Crimean-Congo haemorrhagic fevers) have a strong geographical focus. Hence, these are the social challenges that the Public Health Manager, health authorities, Doctors, Nurses, laboratory staff and health Scientists have to face in future planning of public health services at S.S.R.N.H.

6.3 MICRO HEALTH ENVIRONMENT OF S.S.R.N.H.

The description of the macro health environment within which the Public Health Manager functions clearly indicates that high demands are made on the potential and ability of the Public Health Manager in the provision of public health services at S.S.R.N.H. In view of the fact that the management function is performed within the S.S.R.N.H., it is important to look at the micro health environment as well. The challenges in this environment are rules and regulations pertaining to public health. In the provision of public health services, clients refer to patients. Another component of micro health environment is resource suppliers such as Treasury and Public Service Commission. Moreover, Public Health Manager also faces challenges from competitors such as Ministry of Agriculture, Ministry of Education, Ministry of Public Infrastructure and Ministry of Women and Child Development for the availability of resources. Additionally, ethical guidelines form part of micro health environment which public health officials have to follow while rendering public health services. The variables contained in administrative provisions are another component of the micro health environment which influence public health service delivery at S.S.R.N.H. (Damar 2002:42).

6.3.1 REGULATORS

The actions of the personnel at the S.S.R.N.H. are continually subject to different rules and regulations. Section 5 of **Medical Council Act 49 of 1988** for example stipulates regulatory functions of the Council, namely:

- to exercise and maintain discipline in the practice of medicine in Mauritius;
- to advise the Minister of Health and Quality of Life, Mauritius on any matter governed by the provisions of this Act;
- to establish a code of practice for the medical profession on standards of professional conduct and medical ethics; and
- to publish an annual list of medical practitioners.

Furthermore Section 11 of **Medical Council Act 49 of 1988** makes the following provisions, namely:

- no person shall be entitled to practice medicine in Mauritius unless he is registered as a medical practitioner under this Act;
- no person shall, unless he is duly registered under this Act, take or use any name, title, addition or description implying a qualification to practice medicine in Mauritius;
- no person who has been suspended from the practice of medicine shall practice medicine during the period of suspension; and
- no person whose name has been removed from the register under Section 21 or 22 shall practice medicine.

Under the **Lunacy Act 509 of 1999** the following provisions have been made in section 20 of this Act, namely:

- for the care, treatment, lodging, dietary and general welfare of the patients in mental hospital; and
- for the proper management of any mental hospital including the duties and discipline of all members of the staff.

It is the responsibility of these regulators to impose enforceable rules and regulations with which the Public Health Officials have to comply. It is important for the Public Health Manager to take cognizance of the provisions of the regulators because these in effect represent the will of the patients at S.S.R.N.H. The Public Health Manager faces the challenges of the regulators while providing public health services at S.S.R.N.H.

6.3.2 RESOURCE SUPPLIERS

It is the function of resource suppliers to provide S.S.R.N.H. with resources such as money and health personnel. These resources may be obtained in various ways, of which the most common is undoubtedly the levying of taxes and service charges by revenue authorities. Once resources have been obtained, it is the responsibility of the Parliament to allocate the funds because it approves the budgets of health institutions such as S.S.R.N.H. In addition, institutions such as Treasury and the Commission for Administration are also involved in the resource supply function because these institutions also make executive decisions on resource allocation (Eriksen 2001:11). As far as human resources are concerned, it is the responsibility of Public Service Commission to recruit health personnel for S.S.R.N.H. Human resource is the most critical resource in the public health service delivery. A workforce with a high level of commitment is central to any programme for public health service. The Public Health Manager

is responsible for the effective utilization of resources such as money and people. The challenges facing a Public Health Manager in this micro health environment are identification of these resources in good time, bring the most important needs of the client to the attention of the abovementioned institutions and the efficient management of the resources.

6.3.3 CLIENTS

The clients are those people who make use of the public health services of S.S.R.N.H. (the patients). The patients may be conceptualized as an individual, family, group, community or society by different nurse theorists. An individual has a distinct identity, in addition to being a member of a family, and community and is in constant interaction with the hospital environment. While rendering public health services to patients, it is important for the health personnel to take note of the different needs of patients, for instance, biological needs such as intake of oxygen, food, rest and sleep. Significant psychological needs include, a sense of security, identity, a sense of being wanted and an opportunity for socializing. Additionally, respect and dignity of patients should be taken into account while providing public health services (Damar 2002:12). Hence these are the challenges that must be investigated by the Public Health Manager and the provision of public health services must be adjusted accordingly.

6.3.4 COMPETITORS

The Ministry of Health and Quality of Life, Mauritius experiences a problem with the availability of resources. Other Ministries such as Ministry of Agriculture, Ministry of Education, Ministry of Public Infrastructure and Ministry of women and Child Development are constantly competing with one another for available resources. All the different public institutions are struggling to obtain resources such as money and people for the provision of services (Damar 2002:19) Funds, for example, is made available to S.S.R.N.H. in the annual budget for rendering

public health services. The challenge facing Public Health Manager is to use the limited money effectively and frugally while providing public health services.

Moreover, the S.S.R.N.H. would require some additional 3,900 staff members in the year 2020. This is because of the increasing demand of health services in the community. The Public Health Manager faces the challenges of negotiation for various resources. Hence, the Public Health Manager constantly strives to identify competitors and devises plan to obtain scarce resources for the provision of public health service delivery at S.S.R.N.H.

6.3.5 ETHICAL GUIDELINES

Public Health Officials are authorized to perform only such functions or follow only such procedures as are provided for in health legalization. For example, a Hospital Servant administers injection to a patient then such staff has to account for such an action, which is *ultra vires*. Nor, unfortunately does this accountability end here: not only the responsible health officer but also the departmental heads and political functionaries – even president – may be seriously embarrassed by such an unauthorized action (Teshuva 2001:61).

S.S.R.N.H. and Public Health Officials are therefore expected to act fairly, reasonably, justly and within the rules of the law. No action should be questionable under the law and all actions should be visibly lawful. Public Health Officials at S.S.R.N.H are there to provide public health services to all members of the community and may not on the ground of creed, culture, race or political persuasion take inequitable or inconsistent health decisions or actions. Also, Public Health Officials who are guilty of dishonest and irregular conduct must face the inevitable consequence of glaring publicity in the media. Hence the Public Health Manager has to take the lead at S.S.R.N.H. for ensuring that ethical guidelines laid down by the legislative authority are obeyed.

6.3.6 ADMINISTRATIVE PROVISIONS

The variables contained in administrative provisions are another component of the micro health environment which influence public health services delivery at S.S.R.N.H. The Public Health Manager is responsible for a wide spectrum of health activities and the generic administrative functions form part of this task. It is essential, however, to point out that the Public Health Manager is used as an instrument of government to bring about and direct the abovementioned activities in pursuit of the set health objectives namely the promotion of the general well being of society through effective public health service delivery (Cumper 2000:92). The challenges facing Public Health Manager are implementation of health policy as effectively and efficiently as possible, in other words to make the necessary health decisions, devise health plans, introducing control measures and ensure that the health policy is implemented.

6.4 SUMMARY

From the decision above it is obvious that public health services are subject to various influences of macro health environment and micro health environment. It is the Public Health Manager's duty to reconcile the various influences in such that effective public health services are guaranteed.

This chapter examined the macro health environment of S.S.R.N.H. with particular attention to political, technological, economic, physical and social challenges. These are uncontrollable variables that influence S.S.R.N.H. from outside. Public health service delivery at S.S.R.N.H. is affected by political influences. The Public Health Manager undertakes all health actions in accordance with the political office bearer's instructions. This chapter has analysed various health policy goals, health legalisation and the impact of WHO health matters such as SARS, HIV/AIDS, Malaria, Tuberculosis and poliomyelitis.

Technological challenges such as genetic engineering, gene cloning with special reference to recent human cloning using Dolly technology and the moral impact on human being have been analyzed in this chapter. Attention has also been devoted to social challenges such as altering lifestyle of people, smoking, poor dieting habits, lack of exercise and high intake of cholesterol which causes CVD. The enormous social challenges of HIV/AIDS and SARS have been examined.

Moreover the chapter discussed the economic challenges with reference to health expenditure and future funding of public health services at S.S.R.N.H. The chapter paid attention to physical challenges also particularly handling of hospital medical and non-medical wastes. The impact on physical environment owing to improper disposal of hospital wastes such as ecological disbalance, eutrophication, mutation, radiation, sterility and death has been analysed. In addition, this chapter has emphasized on micro health environment of S.S.R.N.H, which consists of regulators, suppliers, clients, competitors, ethical guidelines and administrative provisions.

In rendering public health services, the Public Health Manager is responsible to take cognisance of the various health rules and regulations. The regulating role of **Medical Council Act 49 of 1988** and **Lunacy Act 509 of 1999** were explained in this chapter. Attention has been paid to resource suppliers with particular reference to Parliament and Public Service Commission. This section of study threw light on clients with particular emphasis on different health needs. Furthermore, this chapter also indicated the importance of ethical guidelines which the Public Health Manager is responsible for its application at S.S.R.N.H. Another challenge in the micro health environment, which has been examined in this chapter is competitors particularly different institutions of Ministries struggling to obtain resources such as money and people. Ultimately, the variables contained in the administrative provisions have been highlighted in this chapter.

In order to perform public health delivery activities successfully, the Public Health Manager has to take cognisance of the challenges in the macro and the micro health environments and adjust the work processes at S.S.R.N.H. accordingly so as to provide a public health service of high quality. The next chapter deals with recommendations, strategies and mechanisms for improving public health service delivery at S.S.R.N.H.