CHAPTER 8

SUMMARY AND CONCLUSION OF PUBLIC HEALTH SERVICE DELIVERY AT S.S.R.N.H.

8.1 INTRODUCTION

At the beginning of the 21st century as public health service delivery at S.S.R.N.H. enters the ultra-modern society triggered by the accelerated forces of globalization, it faces the risks of being marginalized if it does not keep pace with development. The public health environment is constantly changing. The question that comes to the fore is, can S.S.R.N.H. achieve its paramount objective of excellence in public health service delivery? In the same vein, this objective is the crying need of the hour as S.S.R.N.H. continues to battle with scourge of endemic and pandemic diseases, absenteeism, personnel turnover, stress, burnout and sexual harassment. In this concluding chapter attention will be devoted to bring together the various issues and viewpoints established by the author through an analysis of public health service delivery at S.S.R.N.H.

8.2 SUMMARY

The section below addresses the issues concerning the historical development of public health service rendering at S.S.R.N.H., nature and scope of public health service delivery at S.S.R.N.H., obstacles and flaws to effective public health service delivery at S.S.R.N.H., current national health policy for improving public health service delivery at S.S.R.N.H., future challenges for effective public health service delivery at S.S.R.N.H. and recommendations strategies and mechanisms for improving public health service delivery at S.S.R.N.H. A self-administered questionnaire was used as a measuring instrument for the research survey conducted independently by the author between January 2003 and June 2003.

8.2.1 Historical development of public health service rendering by S.S.R.N.H.

An exploratory investigation was attempted in chapter 2 of this dissertation regarding the historical development of public health service delivery at S.S.R.N.H. Particular attention was devoted to the historical background of S.S.R.N.H. especially its opening, administration and historical problems

associated with effective public health service delivery. A locality map of the research area has been presented. Additionally, this chapter explored the organizational structure of S.S.R.N.H. in 1969 and ultimately presented the historical development of public health service delivery at S.S.R.N.H.

The Government of Mauritius decided to build a new hospital in 1956 so as to cater for the public health needs of the population particularly in the northern districts of Rivière du Rempart and Pamplemousses. In 1960 diarrhoeal diseases were the leading cause of infant mortality constituting 80% of the annual deaths. The major causes of the spread of diarrhoeal diseases were unhygienic food preparation, contamination of water by sewerages and improper disposal of human faeces.

Another major concern for public health was maternal deaths (over 60%) caused by abortion, infections, hypertension, obstructed labour and haemorrhage. Furthermore, the number of deaths registered in 1960 was 550 resulted from injuries and 38 caused by fires and flames respectively. Deaths caused by motor vehicle amounted to 188 in 1961. The prevalence of malnutrition among children in 1962 contributed to the causes of death. It was observed that 4.6% of children under five years old were stunted and 3.2% of children were underweight.

Messrs Fry, Drewand and Partners, the British Firm of Architects designed the "Central Hospital North" in October 1962. Consequently, a planning committee was established for coordinating work. Eventually, on 9th October 1963, Her Excellency Lady Rennie laid the foundation stones of the new hospital.

The project value was set at Rs30 million and it was divided into two phases. On 22nd December 1964, the memorandum of understanding was signed between Government of Mauritius and Messrs, Fry, Drew and Partners. The project Secretary, Mr D. K. White reached Mauritius in April 1965 and in June 1966 the contracts were signed for the "Central Hospital North". The first phase was completed in 1969 when the hospital building was erected. The second phase was related to health personnel and medical equipment. By May 1969, the hospital was named as Sir Seewoosagur Ramgoolam, the first Prime Minister of Mauritius.

The hospital was officially opened on 20 August 1969 by the Chairman of the British Council, Sir Maxime Rosenheim. On 15th December 1969, Dr J. C.

Mohith, the first Medical Superintendent was appointed and he was responsible for the overall administration of S.S.R.N.H. The Chief Nursing Officer was responsible for administration of nursing services and the "non-medical" services were under the responsibility of the Hospital Administrator.

Industrial revolution brought many social changes as a result communicable and non-communicable diseases become more and more common in the Mauritian society. In 1970 parasitic and infectious diseases accounted for about 41% of deaths at the S.S.R.N.H.

Another historical problem associated with effective public health service delivery at S.S.R.N.H. was absenteeism (43%) in 1973 whereas in 1969 it was 21%. Additionally, personnel turnover increased steadily in 1980s. In 1990 the problems of nepotism, sexual harassment, dishonesty and corruption increased at S.S.R.N.H.

Chapter 2 has also presented historical development of public health service delivery at S.S.R.N.H. especially advances in surgery, laboratory diagnosis, pharmaceuticals and modern medical equipment such as CT Scan and MRI. As a result, new specialities emerged, for instance, microsurgery, nuclear medicine, oncology, kidney transplant and coronary artery by-passes at S.S.R.N.H.

8.2.2 Nature and scope of public health service delivery at S.S.R.N.H.

Chapter 3 of this dissertation focussed on the nature and scope of public health service delivery at S.S.R.N.H. The meaning of public health service delivery was explained, the type of public health services available at S.S.R.N.H. was also presented. Moreover, the current organizational structure of S.S.R.N.H. has also been dealt with in this chapter. The scope of public health service delivery as regard to contextual and peripheral factors as well as modernization was analysed. Particular emphasis was laid on "health for all" by 2040.

In order to promote and maintain public health it is essential to have fresh air, sunlight, safe water supply, healthful shelter, balanced diet, sanitation and good control of non-communicable and communicable diseases. Therefore, a host of factors contributes to maintain a balance between mind and body. Public health service delivery envelopes social, curative and preventive

medicine which is important for the promotion of positive health in the society. Chapter 3 emphasized the old saying " Prevention is better than cure".

Public health also embraces social, economic, cultural, environmental, psychological and genetic factors in the community. Further, it deals with epidemiological and statistical aspects of community. While defining public health, the psychological and physiological components of the environment need to be considered. In chapter 3 all these have been explained.

Moreover, expenditure on public health services for the year 2004-2005 is expected to be Rs 360 million compared to the year 2002-2003 which was Rs 280 million. The expenditure on public health services may reach Rs 6 billion in the financial year 2009 if the Action Plan for Public Health is implemented. The definition of public health from the World Health Organisation point of view has also been incorporated in chapter 3 of the dissertation.

A list of public health services offered by S.S.R.N.H. has been presented in table 3.1. Section 3.2.2 gave a detail analysis of medical, surgical, clinical support, general support, intensive, obstetrics and gynaecological services available at S.S.R.N.H. Additionally, the current organizational structure of S.S.R.N.H. in 2004 is described in section 3.2.3.

The scope of public health service delivery covers contextual and peripheral factors. Contextual factors have a direct influence on public health, for instance, incidence of disease, malnutrition and quality of water. A detail analysis of these factors has been made in section 3.3.1. Studies regarding incidence of disease recorded in 2001 at S.S.R.N.H. was parasitic diseases 6.2%, leukemia 4%, diarrhoea 4.8%, pneumonia 3.1%, veneral disease 5.4%, bilharzias 9% and septicaemia 5.2%. In the same year 18,067 children were immunized against poliomyelitis, diphtheria and tetanus at S.S.R.N.H. In addition, malnutrition curtails efficient and effective public health service delivery. In 2001, 163 cases of infant deaths were recorded at S.S.R.N.H. which happened as a result of malnutrition. Another contextual factor is quality of water. Infected water is a medium for diseases transmission for example cholera, dysentery, helminthic infections and gastroenteritis.

Regarding peripheral factors such as education, demography and women's reproductive health, section 3.3.2 provided a detail analysis of these factors which have a direct bearing on public health service delivery at S.S.R.N.H.

Education involves literacy and it is worth mentioning that 86% of patients attending S.S.R.N.H. are literate. This has a direct influence on disease prevention and control as patients comprehend better the information transmitted on public health matters. Furthermore, table 3.2 and table 3.2A presented population growth and vital statistics from 1980 to 2000. Table 3.2B was concerned with population and vital statistics rates from 1926 to 2000 and chart 3.3 indicated the trends of growth of population from 1926 to 2000. Demography and women's reproductive health have a bearing on public health service delivery. Growth of population is linked with fertility rate. Section 3.3.2.2 explained in detail this peripheral factor.

Chapter 3 also dealt with the way to "health for all by 2040". The major objective of S.S.R.N.H. in future is to attain a level of public health that will enable the citizens to be socially and economically productive in life. The promotion of "health for all by 2040" involves reducing infant mortality and raising life expectancy from 65 years to 75 years.

Modernisation of public health service delivery at S.S.R.N.H. involves electronic communication systems, transparency and increased access to S.S.R.N.H. A new Lupus Unit has been erected at this health institution. Moreover, diagnosis and treatment of leukaemia has been strengthened. New technology in public health services has been added, for example, computerized surgery.

8.2.3 Some major obstacles and flaws in effective public health service delivery at S.S.R.N.H.

Chapter 4 addressed some major obstacles and flaws identified at S.S.R.N.H. The research methodology was stated. This section of research also explored abnormal behaviours and actions that could have a bearing on effective public health service delivery.

The research survey on some of the major obstacles and flaws in public health service delivery at S.S.R.N.H. was effected between January 2003 and June 2003 independently by the author. Several visits were carried out to different patients' wards, sections and units of this hospital. A self-administered questionnaire was used as a measuring instrument. A total of 100 participants were involved in the research survey. The participants were 30 Doctors, 50 Nurses, 8 Health Supervisors and 12 Health Managers. The reasons for selecting these participants and the importance of this research

survey were mentioned in section 4.2. The survey questionnaire (Annexure 1) was administered in different parts and included the following questions:

Question number 1: Absenteeism at S.S.R.N.H. among Doctors, Nurses, Health Managers and Health Supervisors.

Question number 2: Personnel turnover among Doctors, Nurses, Health Managers and Health Supervisors.

Question number 3: Stress among Doctors, Nurses, Health Managers and Health Supervisors.

Question number 4: Burnout among Doctors, Nurses, Health Managers and Health Supervisors.

Question number 5: Morale among Doctors, Nurses, Health Managers and Health Supervisors.

Question number 6: Sexual harassment among Doctors, Nurses, Health Managers and Health Supervisors.

Question number 7: Abnormal behaviours and actions that influence public health service delivery at S.S.R.N.H.

Details regarding these questions are stated in section 4.2 of chapter 4. Some of the major obstacles and flaws identified at S.S.R.N.H. in public health service delivery include absenteeism, personnel turnover, stress, burnout, morale and sexual harassment.

Absenteeism has a major effect on public health service delivery. Figure 4.1 shows the trend in the percentage of attendances among Doctors, Nurses, Health Managers and Health Supervisors from 1988 to 2002. Section 4.3.1. provided a detail analysis of absenteeism at S.S.R.N.H. during the above period. The data collected from the questionnaire concerning absenteeism is indicated in table 4.1(a). Furthermore, detailed analysis of the major causes of absenteeism is also presented in section 4.3.1. High personnel turnover has a direct bearing on the efficiency of public health service delivery at S.S.R.N.H. The impact of personnel turnover and the major causes of personnel turnover were examined in sections 4.3.2.1 and 4.3.2.2

respectively. The collected data from the questionnaire are indicated in table 4.2(a) and table 4.2(b).

Stress is another major obstacle that was explored in this chapter particularly in section 4.3.3. Stress leads to emotional misbalance thereby affecting the potential and ability of a person to perform efficiently and effectively. The views of participants concerning the experience of stress at S.S.R.N.H. are shown in table 4.3(a). As regard to the major factors influencing stress, the results obtained are indicated in table 4.3(b).

Burnout is a state of emotional exhaustion, it starts with frustration and disillusionment. Table 4.4(a) presented the data on whether there is burnout of health personnel at S.S.R.N.H. The factors contributing to burnout were analysed from table 4.4(b). As regard to physical symptoms of burnout, table 4.4(c) shows detail results obtained through the survey questionnaire.

Morale of health personnel has an impact on public health service delivery at S.S.R.N.H. Section 4.3.5.1 analysed the question whether low morale at S.S.R.N.H. has an impact on public health service delivery. The major causes of low morale were examined from table 4.5(b).

Sexual harassment is another major obstacle to effective public health service delivery. It involves a manifestation of misconduct. Table 4.6(a) indicates the opinion of personnel on whether there is sexual harassment at S.S.R.N.H. Detailed analysis of the types of behaviours that are considered as sexual harassment and the effects of sexual harassment are presented in sections 4.3.6.1 and 4.3.6.2 respectively.

Attention was devoted in this chapter on abnormal behaviours and actions that could have a bearing on effective public health service delivery at S.S.R.N.H. The following components of abnormal behaviour and actions were researched:

- Lethargy and disobedience.
- Nepotism.
- Shirking responsibility.
- Alcohol and drug abuse.
- Active political interference.
- Bribery and corruption.

- Dishonesty and retaliation.
- Neglect of duty.

Section 4.3.7 of this chapter explored the abnormal behaviours and actions in greater details. Table 4.7 indicated the results obtained from the survey questionnaire.

8.2.4 Current national health policy for improving public health service delivery in Mauritius.

The current national health policy for improving public health service delivery was examined in chapter 5 of this dissertation. The health objectives of the Ministry of Health and Quality of Life, Mauritius were presented. Similarly detail analysis of the National Policy for Public Health Act 17 of 2000, the Mental Health Act 4 of 1992 and the Dental Health Service Act 30 of 1990 were made. The chapter also threw light on the White Paper on Health Sector Development and Reform 2003. Particular attention was paid to decentralization and strengthening of primary health care in Mauritius, modernization of the Mauritius Institute of Health and School of Nursing, establishment of non-communicable disease centres and, implementation of family planning, maternal and child health programmes. Ultimately, this chapter focussed on the contributing instruments to achieve the national health policy objectives of public health service delivery.

The current national health policy for public health 2000 aims at treating the sick, protecting the vulnerable groups and raising the basic health status of the whole community. The objectives of the Ministry of Health and Quality of Life, Mauritius cover a broad spectrum of areas, for instance, health promotion, epidermiological surveillance of essential communicable diseases, rehabilitation of the disabled and control the practice of dentistry, pharmacy and medicine. Section 5.2 of this chapter highlighted these objectives.

The importance of the **National Policy for Public Health Act 17 of 2000** was presented in section 5.3 of this dissertation, for example, the policy improves procedures, identifies the principal stakeholders and prioritizes disease prevention. Moreover, section 3 of the **National Policy for Public Health Act 17 of 2000** is concerned with legislation on public health, human resources, promotion of health education and financing new projects. A detail explanation on the above was presented in this chapter.

Additionally, the **Mental Health Act 4 of 1992** is very important for complementing and strengthening mental health policy thereby providing a legal framework for attaining its objectives. Section 2 of this Act makes provision for, for example, establishment of a Mental Health Review Board, protection of mentally ill people, mental health care at primary, mental health commission and secondary and tertiary levels of public health. Furthermore, the role and responsibilities of the Mental Health Commission and Mental Health Review Board respectively were stated in this chapter.

The **Dental Health Service Act 30 of 1990** has a special role and concern for the public health service delivery. In April 2002 at S.S.R.N.H. a mobile dental health clinic was launched so as to make dental health services available to the people of the northern districts. Section 5.5 provided a detail explanation on dental health services in Mauritius.

This chapter also enlightened the White Paper on Health Sector Development and Reform 2003. The aims were mentioned and the proposition for new legislation was presented in greater detail in section 5.6 of this dissertation.

Decentralisation of public health is related to the concepts of control and hierarchy. It is also a means to an end, and not an end in itself. The current National Health Policy 2002 makes provision for decentralized management of primary health care. The requirements for strengthen primary health care in Mauritius are stated in section 11 of the National Health Policy 2002. Section 5.7 of this chapter examined decentralization and strengthening of primary health care in Mauritius.

Modernisation of the Mauritius Institute of Health was explored in section 5.8 of this chapter. Furthermore, section 12 of the National Health Policy 2002 stipulates the modernization of the Mauritius Institute of Health.

This chapter presented a detail analysis of the establishment of non-communicable disease centres particularly emphasizing primary, secondary and tertiary levels of prevention. Moreover, the current national health policy also aimed at the implementation of family planning, maternal and child health programmes. Section 24 of the **Family and Child Protection Act 5 of 2001** makes provision for, for instance, protection from domestic violence, protection of mothers, child care centres and nurseries. All these were examined in section 3.10 of this chapter. The policy objectives on child health were also mentioned in this chapter.

Eventually, this chapter provided an exposition of contributing instruments to achieve the current National Health Policy 2002 of the Ministry of Health and Quality of life, Mauritius. Section 5.11 of this chapter discussed these instruments namely, job expansion of personnel, job enrichment of personnel, flexitime of personnel, quality circles, job design, job sharing, condensed working week, job rotation of personnel and employee-centred job redesign.

8.2.5 Future challenges for effective public health service delivery at S.S.R.N.H.

Public health service delivery at S.S.R.N.H. is conducted in a volatile environment and not in a vacuum. Chapter 6 of the dissertation addressed the future health challenges in the macro health environment such as political, technological economic, physical and social challenges that S.S.R.N.H. has to face. Attempts were also make in this chapter to examine the micro health environment particularly regulators, suppliers, clients, competitors, ethical guidelines and administrative provisions so as to show the influence of these variables on public health service delivery at S.S.R.N.H.

The macro health environment of S.S.R.N.H. involves uncontrollable variables and influence this health institution from outside, for instance, the emergence of severe acute respiratory syndrome (SARS). The influence of technology particularly gene cloning in health domain forms part of the macro health environment. Additionally, political challenges, for example, introduction of new health legislation and protocols of World Health Organisation (WHO) were examined in this chapter. Furthermore, this chapter analysed physical challenges, for instance, discharge of medical and non-medical wastes into water. Another factor that was discussed was economic challenges particularly with the focus on cost effectiveness and cost savings.

A detail analysis of political challenges was made in section 6.2.1 of this chapter. All matters concerning public health are analysed and discussed in the Cabinet. The health officials function in a political environment subject to changes in the political structure or Cabinet's policy decisions. Under such circumstances, the public health manager has to make administrative arrangements so that public health services can be efficiently and effectively delivered.

Moreover, health policy goals of the Ministry of Health and Quality of Life, Mauritius also influence public health services, for example, developing

mental health policy is guided by different goals related to mental disorders. The second and third paragraphs of section 6.2.1 focussed particularly on arguments related to policy goals of mental health, new health legislation, for instance, Dangerous Chemicals Control Bill, Human Tissue, In-Vitro Fertilization Bill, Pharmacy Council Bill and Pregnancy Control Bill. In addition, attention was also paid to the role of the WHO on infectious diseases prevention, for example, SARS, HIV/AIDS, Tuberculosis, Poliomyelitis and malaria.

As regards technological challenges, this chapter emphasized genetic engineering particularly mental disorders with reference to brain complexity, gene cloning especially on treatment of diseases and recent human cloning using Dolly technology. Likewise, the moral impact on human beings as a result of human cloning was also analyzed in section 6.2.2 of this chapter.

Furthermore, economic challenges were also addressed in chapter 6 taking into account government expenditure on public health service in Mauritius. Attention was also paid on physical challenges with reference to handling of hospital medical and non-medical wastes. A detail analysis of different categories of waste generated by S.S.R.N.H. was presented in table 6 of this chapter. Improper disposal of hospital wastes has a serious impact on the physical environment. In this chapter, the problems of ecological disbalance, entrophication, radiation and death were analysed. Particular attention was also devoted to natural calamities which form part of the physical challenges in the macro health environment.

Additionally, the impact of social challenges on public health service delivery at S.S.R.N.H. was examined in this chapter, for instance, altering lifestyles of people especially smoking, lack of exercise, high intake of cholesterol and poor dieting habits. Moreover, social challenges of HIV/AIDS and SARS were analysed in greater detail.

Emphasis was also laid on the micro health environment of S.S.R.N.H., for example, rules and regulations concerning public health services in the hospital, source suppliers such as the Treasury and Public Service Commission. Furthermore, the micro health environment consists of competitors such as different ministries, ethical guidelines and administrative provisions. All these were discussed in chapter 6. As far as regulators are concerned, section 6.3.1 presented a detail description of different rules and regulations. Section 6.3.4 discussed competition for obtaining resources

particularly between different ministries. Furthermore, the importance of ethical guidelines for public health officials at the hospital was also indicated in this chapter. Eventually, the administrative provisions which form part of the micro health environment were highlighted in section 6.3.6. of Chapter 6 of this dissertation.

8.2.6 Recommendations, strategies and mechanisms for improving public health service delivery at S.S.R.N.H.

Chapter 7 of this dissertation focussed on recommendations, strategies and mechanisms for improving public health service delivery at S.S.R.N.H. These were based on the shortcomings identified at S.S.R.N.H. through the empirical research. Issues such as participation, accountability, transparency, empowerment, training, reduction of absenteeism, reduction of personnel turnover, morale, work satisfaction, coordination and communication, reduction of sexual harassment, promotion of professionalism, work climate, reduction of stress, reduction of burnout and avoidance of the abnormal behaviours and actions were explored in chapter 7.

In order to improve public health service delivery at S.S.R.N.H. it is important to allow citizen participation in public health policy-making. Staff also should be involved in policy-making and implementation. Lack of citizen participation leads to abuse and misuse of political power and administrative power. Nevertheless, over participation by citizen should be avoided. Participation was discussed in greater detail in section 7.2.1 of chapter 7.

Moreover, accountability must be exercised in public health service delivery. This was also analysed in section 7.2.2 of chapter 7. As regard to transparency, section 7.2.3 provides a detail discussion on transparency.

Public health service delivery at S.S.R.N.H. can be improved through empowerment. Moreover, section 7.2.6 concentrated on induction training for the new recruit.

In order to improve public health service delivery it is crucial to reduce absenteeism and personnel turnover. Sections 7.2.7 and 7.2.8 of chapter 7 explained the importance for reducing absenteeism and personnel turnover.

Furthermore, public health service at S.S.R.N.H. can also be improved through high morale. Factors such as respect, trust, recognition of good

performance, favourable conditions of employment, opportunities for promotion, standard of supervision, coordination and communication, work satisfaction, reduction of sexual harassment, promotion of professionalism, work climate reduction of stress and reduction of burnout were discussed in chapter 7.

Public health service delivery can also be improved by avoiding the abnormal behaviours and actions by health personnel such as lethargy and disobedience, nepotism, shirking responsibility, alcohol and drug abuse, active political interference, bribery and corruption, dishonesty and retaliation and neglect of duty. All these were discussed in section 7.2.17 of chapter 7 of this dissertation. It is expected that applying all these recommendations, strategies and mechanisms, the public health service delivery at S.S.R.N.H. will improve.

8.3 CONCLUSION

Public health service delivery needs to be reconsidered because of globalism. S.S.R.N.H. in this era of breathtaking change needs to re-engineer its public health service delivery in order to meet the growing health needs of people. This concluding chapter presented a summary of the various chapters established through research conducted at S.S.R.N.H. Attention was devoted to the historical development, nature and scope, obstacles and flaws, current national health policy and the future challenges. The shortcomings identified in public health service delivery at S.S.R.N.H. were followed by recommendations, strategies and mechanisms for improving public health service delivery. Applying all these will contribute to make S.S.R.N.H. a glimmering star in public health service delivery in the Island Republic of Mauritius.