ISLAND OF RODRIGUES

An Analysis of the Health Situation

Rodrigues Island, administratively autonomous, is of volcanic origin, with an area of 104.0 km$^2$, and is located 560 km north-east of Mauritius. In general, the population is scattered over the island, with no dominant towns, except the administrative centre, Port Mathurin.

POPULATION AND VITAL STATISTICS

The estimated mid-year resident population of the Island of Rodrigues was 37,840 in 2010 as compared to 35,779 in 2000. The population density, at the end of 2010 was 364 inhabitants per square kilometer. During the 10-year period (2000-2010) the average annual growth rate was 0.6 %. During these years, there has been a notable positive net increase in the migration of Rodriguans to the main Island of Mauritius, mostly for economic reasons.

The proportion of population aged under 15 years slightly increased from 30.2 % in 2000 to 30.8 % in 2010, while the proportion of elderly population (aged 65 years and above) increased from 5.1 % to 7.3 %. During that period, the total dependency ratio has increased from 545.5 per 1,000 mid year population aged 15-64 years to 616.6. The young age dependency ratio increased from 466.8 to 498.4 while the old age dependency ratio increased from 78.7 to 118.3.

Life expectancy at birth, 69.1 years for males and 76.1 for females in 1999, was 70.9 years and 76.8 respectively in 2010.

The number of live births registered in 2000 and 2010 was 807 and 714 respectively, corresponding to a decrease in the crude birth rate from 22.6 per 1,000 mid-year population to 18.9. The number of deaths registered in 2000 and 2010 was 176 and 240 respectively, corresponding to an increase in the crude death rate from 4.9 per 1,000 mid-year population to 6.3.

The number of infant deaths, that is deaths among children aged under one year, registered in 2000 and 2010 was 16 and 10 respectively, corresponding to a decrease in the infant mortality rate (IMR) from 19.8 per 1,000 livebirths to 14.0. The lowest IMR, that is 12.3, was recorded in 2005 with only 11 infant deaths. However, as shown in the chart that follows, it drastically rose to 27.2 in 2006 then declined to 13.9 in 2009.

The number of still-births registered in 2010 was 8 corresponding to a still-birth rate of 11.1 per 1,000 total births. In 2000, the still-birth rate was 3.7 with three still-births. The lowest rate, that is 2.8, was recorded in 1995 and 1996 equally. As shown in the chart that follows, the still-birth rate drastically increased from 7.3 in 2002 to 17.9 in 2003 and 24.8 in 2004 then fell to 13.2 in 2005. However, it increased from 13.4 in 2006 to 17.5 in 2007 and then fell to 7.6 in 2008. It rose from 6.9 in 2009 to 11.1 in 2010.
HEALTH DELIVERY SYSTEM

In the Island of Rodrigues, at the end of 2010, there were one hospital with 123 beds and two health centres with in-patient facilities equipped with 54 beds. This brought the total number of beds in government institutions providing in-patient facilities to 177 as compared to 171 in 2000. Patients in need of tertiary health care are usually referred to Mauritius.

At the end of 2010, there were 14 Community Health Centres, providing basic services including treatment of common diseases and injuries, maternal and child care and family planning. There were three dental clinics, namely at Queen Elizabeth Hospital, Mont Lubin Health Centre, and La Ferme Health Centre. There was also a Health Office at Port Mathurin.

HEALTH PERSONNEL

At the end of 2010, there were 19 doctors in the Island of Rodrigues, that is one for 1,991 inhabitants, while in 2000, there were 18 doctors with one for 1,988 inhabitants. There were 2 dentists that is one for 18,919 inhabitants at the end of 2010 while in 1999 it was one for 17,773 inhabitants. Almost all of these health professionals are employees of the Ministry of Health & Quality of Life posted to the island on tour service basis.

The number of qualified nurses and midwives was 170 at the end of 2010, that is one nurse/midwife for 223 inhabitants while in 2000 there were 114 officers in this category, that is one for 314 inhabitants.

IN-PATIENT SERVICE

The number of admissions at Queen Elizabeth Hospital and the two Health Centres (Mont Lubin and La Ferme) providing in-patient services was 10,102 in 2010, while in 2009 it was 10,502. The percentage decrease in admissions during the one-year...
period was about 3.8 %. The highest number of admissions ever recorded was in 2006 with 13,695, probably due to the outbreak of chikungunya.

OUT-PATIENT SERVICE

The total number of attendances at the out-patient departments, that is the Accident & Emergency and the Sorted/Unsorted Unit at Queen Elizabeth Hospital, Mont Lubin and La Ferme Health Centres was 204,726 in 2010, while in 2000 it was 117,336, representing an average annual increase of about 7.4 %.

In 2010, the number of attendances for the treatment of common diseases and injuries at Community Health Centres was 48,711 as compared to 45,462 in 2009.

MATERNAL AND CHILD HEALTH

In 2010, a total of 719 births (10 stillbirths and 709 live births) occurred at Queen Elizabeth Hospital, Mont Lubin HC and La Ferme HC. Out of the 709 livebirths attended by trained personnel, 82 were with a low birth weight (less than 2500 grammes) representing 11.6 % of live births as compared to 10.0 % in 2009; it was 10.6% in 2000.

A total of 710 livebirths were reported by the MCH services in 2010. The number of babies immunized against *Tuberculosis (BCG)* by MCH staff was 709. 727 babies were immunized against *Diphtheria, Haemophilus influenza type B, hepatitis B and oral Polio Vaccine (3rd dose)* and 652 against *Measles/mumps/rubella (MMR)*. The number of vaccinations performed in 2010 exceeded that of livebirths registered in the same year probably due to the return to Rodrigues of babies born in Mauritius.

DENTAL HEALTH

The total number of attendances at the three dental clinics in 2010 was 15,934 while in 2000 it was 12,130. This represented a percentage increase of 31.4 % during the 10-year period.

MORBIDITY

The number of discharged patients in 2010 was 9,726 of whom 653 (6.7 %) were treated for *Complications of pregnancy, childbirth and the puerperium* (excluding *Normal deliveries and Complications following abortions*), 718 (7.4 %) for *Delivery without mention of complications* and 499 (5.1%) for *Injuries (crushing & superficial injuries, fractures, open wounds, dislocation, sprain and strains)*.

In 2010, the diseases responsible for the highest number of first attendances at the 14 Community Health Centres for the treatment of common diseases and injuries were *tonsilitis, laryngitis, nasopharyngitis (common cold), sore throat and URTI* with 2,672 attendances (17.0%) followed by *cough, pain in throat, chest pain, wheezing, hiccup and sneezing* with 2,318 attendances (14.7%). *Dermatitis, eczema, itching, ingrowing nail, acne, vitiligo and other diseases of the skin and subcutaneous tissue* with 602 attendances (6.2%) stood in the third position.
Diseases grouped by ICD chapters indicate that Diseases of respiratory system which was 18.8 % of total first attendances in 2000 increased to 22.1 % in 2010. During the same period, Infectious and parasitic diseases increased from 10.0 % to 10.3 %. Diseases of the musculoskeletal and connective tissue were 9.1 % of first attendances in 2000 as compared to 7.9% in 2010; in 2006, they represented 14.7% probably due to the outbreak of chikungunya.

CAUSE OF DEATH

In 2010, 240 deaths were registered in Rodrigues. The distribution of deaths by the chapters of the International Classification of Diseases (ICD-10), as shown in the pie–chart below, indicates that Heart and other diseases of the circulatory system were responsible for 37.9 % of the deaths. Diabetes and other endocrine, nutritional & metabolic disorders with 22.9% were in the second position followed by Cancer and other Neoplasms with 8.8 %, Diseases of the respiratory system (8.8 %) and Accidents and other consequences of external causes (7.5%)

In 2010, Diabetes Mellitus and Heart diseases were the two principal causes of death with 22.5 % and 20.9% respectively. In 2009, when there was a total of 237 deaths, they represented 18.1 % and 18.6 % respectively.

During the period 2000-2010, five maternal deaths have been registered in the Island of Rodrigues: one in 2000, one in 2001, 2 in 2002 and one in 2010.