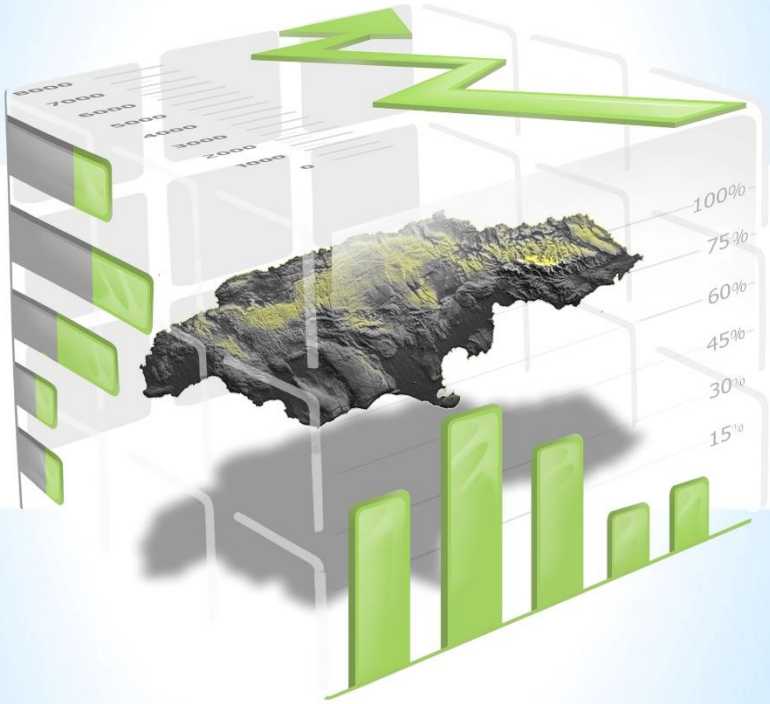
Epidemiological Profile of Selected Health Conditions and Services in Jamaica 2003-2007



Ministry of Health, Jamaica W.I.

EPIDEMIOLOGICAL PROFILE OF SELECTED HEALTH CONDITIONS AND SERVICES IN JAMAICA 2003-2007

REPORT OF THE HEALTH PROMOTION AND PROTECTION BRANCH

MINISTRY OF HEALTH

Natricha Levy McFarlane
Dr. Kevin Harvey
Health Promotion and Protection Branch, 2012

Published by the Ministry of Health
2-4 King Street
Kingston, Jamaica
Telephone: (876) 967-1100

Website: www.moh.gov.jm

Published December 2012

ISBN 978 976 610 945 5

Cover design by Hector Burrowes

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ACKNOWLEDGEMENTS

This publication has been produced through the valuable contributions of a number of individuals, departments and agencies. Whilst the list appearing below may not be exhaustive, the following acknowledgments are hereby made:

Ministry of Health

- Michele Roofe
- Karen Lewis-Bell
- Tonia Dawkins
- Tamu Davidson-Sadler
- Eva Lewis-Fuller
- Denise Duncan-Goffe
- Yasmin Williams
- Andrew Bennett
- Daisylyn Chin
- Sonia Copeland
- Jacqueline Ricketts
- Romae Thorpe
- Marjorie Hendricks
- Jasper Barnett
- Hank Williams

Other agencies

- The Statistical Institute of Jamaica
- The Registrar General's Department
- The Jamaica Constabulary Force
- The National Health Fund
- Road Safety Unit, Ministry of Transport and Works

EXECUTIVE SUMMARY

Structure of the Public Health System

The Public Health System in Jamaica includes the Ministry of Health (MOH) Head Office and four Regional Health Authorities (RHAs). The MOH Head Office provides a policy making, steering and regulatory role while responsibility for management and delivery of health services is delegated to the decentralized RHAs. There are four (4) RHAs each comprising of 3-4 of the fourteen (14) parishes in Jamaica: South-East Regional Health Authority (SERHA) home to 47% of the total population in 2007, ten (10) hospitals, three (3) health departments and eighty-eight (88) health centres; North-East Regional Health Authority (NERHA) representing 14% of the general population, four (4) hospitals, three (3) health departments and seventy-four (74) health centres; Southern Regional Health Authority (SRHA) with 22% of the total population, five (5) hospitals, three (3) health departments and seventy-six (76) health centres and Western Regional Health Authority (WRHA) comprising 18% of the total population, four (4) hospitals, four (4) health departments and eighty-one (81) health centres.

Twenty four (24) hospitals, inclusive of the University Hospital of the West Indies, form part of the public health system of Jamaica and provide over 95% of hospital-based care in the island. There are three (3) Type A hospitals, five (5) Type B, ten (10) Type C and six (6) Specialist hospitals. At the end of 2007, there were a total of 319 health centres in the public health system 140 type 1s 82 type 2s 66 type 3s 4 type 4s and 3 type 5s, the remaining 19 include community hospitals dental clinics and rural maternity centres.

In addition to the Ministry's Head Office and the RHAs, the Ministry of Health works closely with statutory bodies including the Registrar General's Department (RGD), Child Development Agency (CDA), National Family Planning Board, National Health Fund (NHF), National Council on Drug Abuse (NCDA) and the Government Chemist.

Health Information Systems

Existing data collection mechanisms include the primary care aggregated data collection system called the Monthly Clinic Summary Report (MCSR) and a LINUX-based computerized Patient Administration System (PAS) which exists in eleven (11) hospitals and supports the generation of the Hospital Monthly Statistical Report (HMSR). The Health Information System however, remains unable to capture private sector data and hence information presented in this report represents data garnered from the public health system and therefore though representative of the national situation does not provide the complete set of data for the country.

Financing the Health Sector Response

The health budget approximately doubled moving from J$10.8 billion in 2003/2004 to J$21.0 billion in 2007/2008 while revenue from user fees collected increased from J$1.01 billion in 2003/2004 to J$1.70 billion in 2006/2007 and falling to J$1.3 billion in 2007/2008. The health sector also receives funding through the National Health Fund and Loans and Grants such as those supporting the HIV programme, these are summarized in the respective specialist reports.

Hospital Capacity and Utilization

Total average bed complement in public hospitals island wide fluctuated but remained relatively unchanged at the end of 2007. Both the South East and the Western regions ended 2007 with lower average bed complements than they had in 2003. However, the North East Region ended with an 8% increase in 2007 over 2003 the SRHA also registered an increase.

Bed Occupancy

Bed occupancy levels Island wide remained relatively stable at 67% over the period. All regions recorded above 60% bed occupancy levels every year except in the SERHA where occupancy levels was 49% in 2007; this may have been associated with a significant fall in occupancy levels at the Bellevue Hospital in that year. KPH consistently operated at the highest occupancy levels in the region, above 80%, while the Linstead Hospital operated at below 30% occupancy levels yearly except for 2006 where occupancy levels reached its highest at 33%.

In the NE region, the St. Ann's Bay Hospital with bed occupancy ranging from 73.6-86.5% had the highest occupancy levels, while Port Maria (43-55.9%) and Port Antonio (46-55.5%) had the lowest. This picture was similar in the other two regions where the major (type B) hospitals operated at near capacity while the others were only approximately 50% utilized.

Accident and Emergency

Accident and Emergency Departments showed an overall increase in visits of 6.5% (746,844 to 795,477) between 2003 and 2007with the highest increase recorded in the Western region at 25% followed by the NE region at 20%. The SE region and the Southern region recorded a decline of 1% and 5% respectively. Per capita utilization was however highest in the NE region ranging from 361/1000 population to 432/1000 population each year and lowest in the SE region a range of 205/1000 to 228/1000 population. Medical, paediatrics, respiratory tract (URTI, LRTI and asthma) and injuries together accounted for over 77% of these visits.

Obstetric conditions were responsible for 29% of the discharges from public hospitals in 2007. This was followed by accidents and injuries (9%) and diseases of the circulatory system (8%) making up the top three main causes for discharge. Psychiatric conditions accounted for the highest average length of stay (ALOS) in government hospitals in 2007 with 21.6 days followed by skin and subcutaneous tissue (11.9 days), congenital malformations (9.9 days), neoplasm (9.3 days) and diseases of the musculoskeletal system (9.2 days)

Health Centre Capacity and Utilization

Visits to health centres declined steadily between 2003 and 2007 from 1,586,630 in 2003 to 1,496,733 in 2007; a 6% decline. The NE region had the highest utilization of health centre services each year at over 690/1000 population while the SE region recorded the lowest utilization yearly at under 550/1000 population. In all instances females were twice as likely to utilize the health centres compared to males. Forty percent of visits were for curative services, child health 17%, family planning 14%, dental health 11% and antenatal services 8%. Eighteen percent of curative visits were for Hypertension, 15.9% diseases of the respiratory Tract, 13.3% skin diseases, 10.0% Diabetes Hypertension and 9% for sexually transmitted infections. Note that a further 3.6% of clients had diabetes but no hypertension making 13.5% of visits were diabetes related and 25.9% related to Hypertension.

Burden of Illness

Class 1 Notifiable Conditions

An increase in AIDS cases of almost 25% was reported between 2003 and 2005 (40.6 to 50.7 per 100,000 population) and a 42.4% decline recorded between 2005 and 2007 (50.7 to 29.2 per 100,000 population) with an overall decline 28.1%.

The rates of TB also fluctuated but declined by an overall statistically significant (at 95% confidence interval) 15.6% over the period, with values ranging between 2.9 and 4.5 per 100,000 population.

The Maternal Mortality Ratio was 91.6/100,000 live births in 2003, peaked at 111/100,000 live births in 2005 and ended 2007 at 92.9/100,000 live birth, however there were no suspected or confirmed case of cholera, congenital rubella syndrome, diphtheria, neonatal tetanus or plague over the review period.

An outbreak of Malaria occurred in the latter part of 2006 continuing into 2007 with a total of 383 locally transmitted cases.

Causes of Mortality

Mortality from the chronic diseases, diabetes, hypertension, malignant neoplasms and cerebrovascular disease, while fluctuating over the period under review, all showed an overall increase from 2003 to 2007. Malignant neoplasms, cerebrovascular disease, assault and hypertension were the first, second, fifth and sixth leading causes of death in Jamaica from 2003 to 2007, respectively with heart disease fluctuating between third and fourth over the period.

HIV/AIDS recorded a constantly declining mortality on a yearly basis with an overall statistically significant (at 95% confidence interval) decrease of 51% between 2003 and 2007 and at the end of 2007 ranked as the 9th leading cause of mortality in the country. Of note also, at the end of 2007, transport accidents ranked a significant 8th in mortality statistics.

Conclusion

The health conditions facing the public health sector remained essentially unchanged over the period of review. Except for reducing HIV/AIDS related mortality the chronic diseases remained as the top five causes of mortality and the majority cause of morbidity. Though the capacity of the health system to deliver overall health care seems adequate, the distribution and type of services and programmes may need to be reviewed and streamlined to have greater impact on the main causes of morbidity and mortality in the country. As such, programmes targeting chronic diseases using a primary health care approach and focusing on health promotion should be strengthened.