

WESTERN REGIONAL HEALTH AUTHORITY

ANNUAL REPORT

2002

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A publication of the Western Regional Health Authority

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EXECUTIVE SUMMARY

The quest to enhance the health status of persons living within and/or visiting the parishes within the region continued through the delivery of a range of public health care services from hospitals and health centres. Although HIV/AIDS continued to require priority focus, the shift in the disease burden needs equal attention to the chronic non-communicable diseases as well as other lifestyle-related problems.

Additionally, efforts were made to meet the changing health needs of the population through:-

- the establishment of “Youth Friendly” clinics in Lucea and Montego Bay Type 5 Health Centres.
- training of Adolescent Youth Researchers to conduct surveys on adolescent sexuality and reproductive health issues.
- an examination of the relationship between the location of “go-go” clubs and the location of HIV cases.

Despite the challenges, the members of the health care team exhibited resilience and continued to be highly motivated and committed to the delivery of quality health care.

Intersectoral collaboration continued to be a major pillar of health care delivery, especially at the primary health care level. In this regard, the WRHA welcomed the participation of stakeholders through Boards, Parish Committees as well as the support obtained from local and overseas interests:

- Ministry of Water and Housing
- Natural Resource Conservation Authority
- Rural Agricultural Authority
- Social Development Commission
- Jamaica Tourist Board
- Hanover Charities
- Cancer Society
- Diabetes Association
- Futures Group

- Heart Trust/NTA
- UWI Department of Community Health and Psychiatry
- University of Texas
- Tulane School of Medicine – USA
- Lucea Hospital Organisation
- Jamaica Ecumenical Mutual Mission
- Jamaica Visionaries – Canada
- Noel Holmes Foundation – New York
- Caribbean Health Outreach
- Service Clubs
 - Rotary
 - Lions
 - Kiwanis

The 2002 report has been expanded to reflect more of the parish-based activities and performance:

Performance Highlights

The Board of the WRHA continued to ensure compliance with the applicable management and legal standards and together with the team worked to secure continuing improvement in the health status of the region's population.

Year 2002 was challenging as the WRHA sought to ensure that service delivery kept pace with cost. Thus, parishes identified and implemented cost containment strategies, e.g. consolidation of services.

In an attempt to ensure equitable access, the utilization data from the health information system along with examination of other important variables guided the re-configuration of service delivery to better meet the needs of the community.

While quality assurance continues to be a point of focus in the region, the programmes have been short on planning (clinical governance) and implementation (clinical audits) on an ongoing basis. A proposal was made to the Board that there be a medical/professional committee that sees to risk management among other roles.

The major complaints related to poor communication and the attitude of care providers.

Implemented efficiency measures included the establishment of a Procurement Department as well as monitoring the use of resources – human, material (e.g. paper) fuel and water.

The **Internal Audit Department** ensured improvements in stewardship and performance by implementing monitoring mechanisms that would lead to compliance with Government of Jamaica standards. Thus, policies and procedures ensured verification of the accuracy and reliability of financial and other data, operational efficiency and consistency with the Region's goals.

Other aspects of the department's accomplishments included:

- Active participation in the conversion of the Financial Management Information System to the Great Plains Accounting Software;
- 100% audits of gratuity payments;
- Commencement of an audit of regional motor vehicle/Transport Allowance to determine eligibility;
- Monitoring and assessment of losses reported by parishes;
- Verification of the accuracy of the Auditor General's responses.

The region's **Financial Management Services** revealed that total income for year 2002 was approximately 16.7% less than the former year. Likewise, total expenditure was 2.1% less. Outstanding liabilities increased by J\$157,204.146.

Although **the infrastructure** is old, preventive maintenance programmes continued, limiting downtime for critical equipment and motor vehicles to less the 20 percent throughout the year. Together with the available human and financial resources, there was continuity in service delivery from all delivery sites.

The programmes **promoting healthy lifestyles** focused on public participation and individual responsibility. Thus 147 community leaders and 62 schools were involved in several activities especially life skills related to special events, e.g. Safe Sex Week, No Tobacco Day. **Nutrition Services** and Home visits continued and with the latter focusing on children represented 42.1 percent of all visits.

Dental Health visits declined by 20 percent and preventive procedures in schools increased somewhat. Extractions declined when compared to the base year.

There were 20,098 less visits to WRHA **primary health care** facilities in 2002 and although total attendance at **Accident and Emergency (A & E)** declined marginally, Self Referral increased by 905.

The **595 beds** in the WRHA provided medical, surgical, obstetric, paediatric and psychiatric services. Surgical interventions increased generally and in the day surgery category. Both the total and new cases seen in **Outpatient Specialist Clinics** continued to increase in 2002.

The clientele for **Laboratory services** increased (29,954) while that for **Radiography** declined (698). Therapeutic Services – **Pharmacy, Physiotherapy and Radiation/Oncology** all registered an increase in patient load and treatments.

The **Morbidity profile** of the region's people differed somewhat at the primary health care and hospital levels. While the **primary health care level** reflected Diseases of the Circulatory System (especially hypertension), Diseases of the Genito-Urinary System and Gynaecological conditions and Diseases of the Skin were the major causes of visits; the latter (**Hospital level**) showed Accidents and Injuries, Diseases of the Circulatory System and Diseases of the Respiratory System as the three top causes of discharge.

The Health Priorities focused on environmental health, communicable disease control, specific population groups as well as disease entities. **Environmental Health** Practitioners continued to address food safety, water quality, sanitation and vector control activities to ensure that the region's health status was maintained.

The WRHA continued its thrust to **control communicable diseases** by achieving higher than national levels of immunization coverage for the vaccine preventable diseases. The surveillance activities relating to notifiable diseases have been ongoing.

The emphasis on monitoring of the **Chronic, Non-Communicable Diseases** revealed that in 2002 there was:-

- A decline in PHC visits and an increase in A & E cases and treatment in A&E Departments.
- An increase in the number of referrals for Abnormal Smears and an increase in the number of oncology treatments.
- A decline in visits to primary health care facilities for hypertension.

- A decrease in the number of visits to primary health care facilities for diabetes and also a decrease in leg ulcers due to diabetes.

The **Other Monitored Diseases** at the primary care level – Respiratory Tract Infection excluding Asthma; Skin Diseases; Musculo-Skeletal Disease; Other Gastro Intestinal Disorders and Diabetes and Hypertension all demonstrated decline in the number of visits.

The data relating to **Child and Adolescent Health** revealed that there were declines in the number of live births and the number of low birth weight babies at both the community and hospital levels. Above normal nutritional levels among those in the 0-35 month group continued to decline in 2002. Total and new child guidance cases have increased. Perinatal Conditions, Diseases of the Respiratory System and Accidents and Injuries were the leading causes of hospital discharge.

Data for the adolescent reproductive health variables have shown decline and the major causes of hospital discharge among the group included Obstetric Conditions and Accident and Injuries.

Improvements in some **Reproductive health** variables have not been consistent when compared to year 2001. The morbidity profile based on PHC visits and A & E cases have demonstrated decline in numbers.

Data relating to the **Mental Health** variables monitored in the WRHA have not been consistent in all areas. The number of patients with psychotic disorders increased as did the percentage receiving consistent care.

Despite a decline in the utilization of services for **Accident and Emergencies** (PHC visits and A & E cases) total treatments in A & E increased by 8,129 – due mainly to increases in nebulization and “other”. Medical, Paediatric, Surgical Conditions and Injuries dominated the conditions treated in A & E while the major intentional injuries were Blunt Injuries and Lacerations. Falls registered the major cause of unintentional injuries.

Casualty Deaths increased by 31 in 2002 and the major causes of **Hospital deaths** continued to be Diseases of the Circulatory System, Neoplasms and Infectious and Parasitic Diseases.

1.0 THE CONTEXT

1.1 National

1.2 Western Regional Health Authority (WRHA)

1.3 Population Profile

1.0 THE CONTEXT

1.1 National

Jamaica is positioned 45 kilometres south of Cuba and 161 kilometres west of Haiti. The island has a total land mass of 10,991 square kilometres - a land of mountains, plateaux and plains, the highest peak is the Blue Mountains at an elevation of 2,256 metres.

The island has a maritime tropical climate with temperatures ranging from 26.2 degrees Celsius to 31 degrees. The island lies in the hurricane belt and the rainfall occurs mainly in May and October. There are fourteen parishes and two major urban centres – Kingston in the South East and Montego Bay on the North West coast.

An independent state in the Commonwealth of Nations, since 1962, the Governor General represents the Queen. The executive arm of the parliamentary democracy is headed by the Prime Minister.

The Western Region of the island occupies portions of the northern and southern coasts and all of the western coastline. Included are the parishes of Trelawny (874.6 km); St. James (549.9 km); Hanover (450.4 km); and Westmoreland (867.4 km). The area has mostly calm, clear seas and white sand beaches, backed by flat, raised plains and coral reefs. Home to the island's second airport and teeming with beaches, hotels and guest houses, the area serves as the tourist mecca of Jamaica.

The major economic activities emanate from the tourism product. Agriculture, fishing, manufacturing and information also contribute to the economy. HEART Trust/NTA operates two vocational centres in the region.

1.2 The Western Regional Health Authority (WRHA)

The WRHA was established by an Act of Parliament in 1997 to respond to the health needs of clients and visitors to the region. It began operations in 1998.

The management structure consists of a:

- ⇒ Board of Directors nominated by the Honourable Minister of Health
- ⇒ Regional Director (RD) that manages all the related affairs of the Region
- ⇒ Regional Technical Director (RTD)
- ⇒ Director of Finance
- ⇒ Director of Human Resource
- ⇒ Director of Management Information Systems
- ⇒ Director of Operations and Maintenance

The coordination and delivery of all health care services reside at the parish level.

1.3 Population Profile

Table 1.1 End of Year Population: Jamaica, WRHA and Parishes 2000-2002

| Year | Jamaica | WRHA | PARISHES | | | |
|-------------------------|-----------|---------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| 2000 (Base Year) | 2,597,080 | 452,739 | 73,075 | 174,043 | 67,128 | 138,493 |
| 2001 | 2,612,396 | 455,199 | 73,084 | 175,729 | 67,018 | 139,305 |
| 2002 | 2,624,696 | 457,466 | 73,346 | 176,976 | 67,326 | 139,956 |

Source: Demographic Statistics 2006

In year 2002, Jamaica's end of year population was estimated to be 2,624,696; 9,061 persons above the 2001 population. The population of the WRHA grew by an estimated 2,267 persons (0.8%) (Table 1.1).

While all the parishes experienced some growth, St. James had the highest number - 1,247 persons (Table 1.1).

Table 1.2 End of Year Population by Age Groups – Jamaica, WRHA and Parishes 2002

| AGE GROUP (IN Years) | Jamaica | WRHA | PARISHES | | | |
|----------------------|-----------|---------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| 0-4 years | 265,095 | 48,091 | 8,174 | 17,825 | 7,436 | 14,656 |
| 5-9 years | 293,057 | 52,436 | 8,586 | 20,258 | 7,414 | 16,178 |
| 10-19 years | 528,480 | 88,141 | 14,791 | 34,590 | 13,079 | 25,681 |
| 20-49 years | 1,091,270 | 184,866 | 27,079 | 77,160 | 25,813 | 54,864 |
| 50-59 years | 178,262 | 33,085 | 5,536 | 11,861 | 4,979 | 10,709 |
| 60-64 years | 67,135 | 12,427 | 2,210 | 4,065 | 1,891 | 4,261 |
| 65 and Over | 200,379 | 38,420 | 6,970 | 11,318 | 6,624 | 13,608 |
| Total Population | 2,624,696 | 457,466 | 73,346 | 176,976 | 67,236 | 139,956 |

Source: Demographic Statistics 2006

The estimated end of year (2002) population of the WRHA was 457,466 with the largest portion 184,866 (40.4%) being in the 20-49 age group (Table 1.2). The parish of Westmoreland has the largest number of persons in the 65 and over age group (Table 1.2).

2.0 MANAGEMENT AFFAIRS

2.1 Organizational Chart

2.2 Management Team

2.3 Health Services Management

2.4 The Health Services

2.1 ORGANIZATIONAL CHART – Western Regional Health Authority

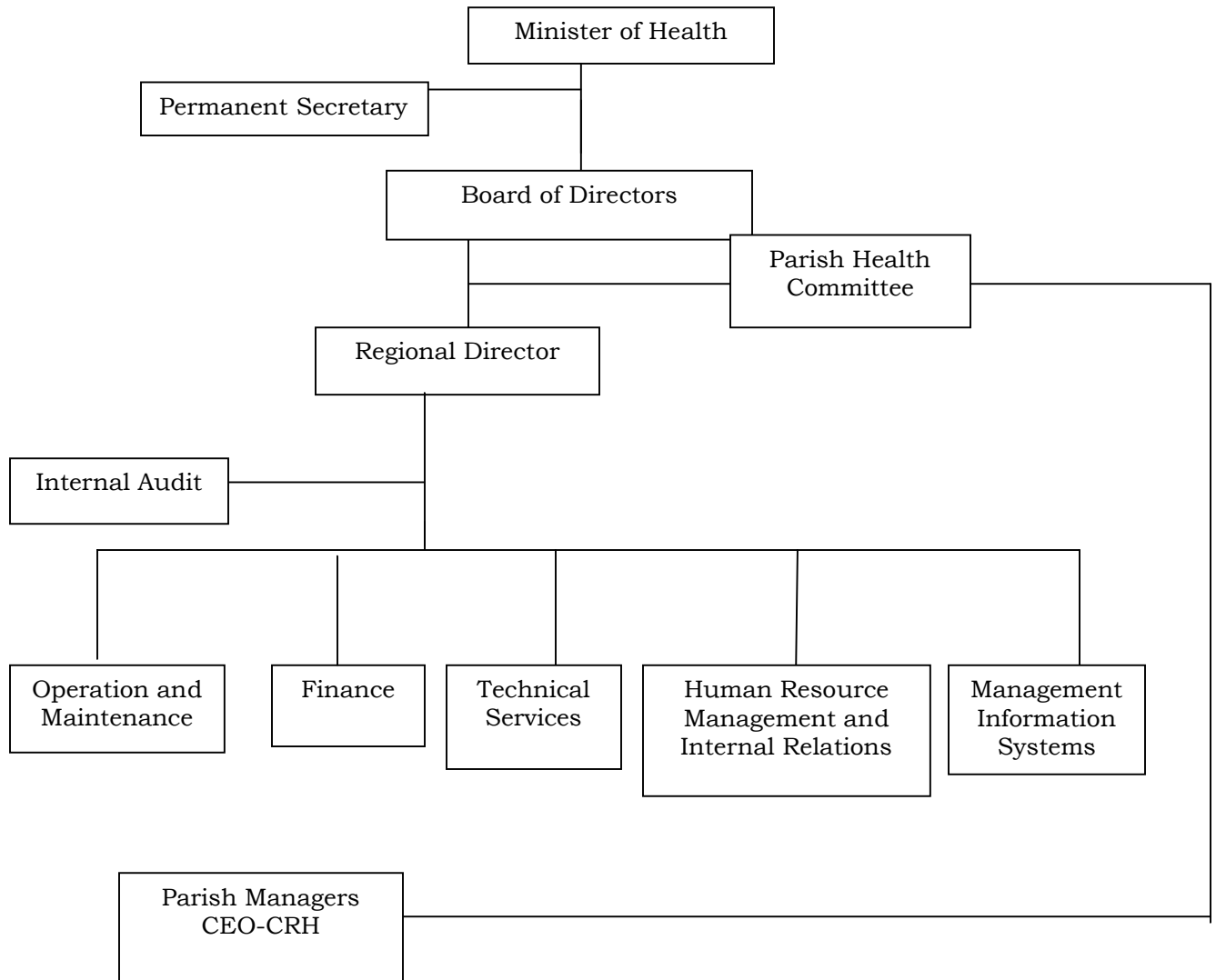


Figure 1.1 Organizational Chart – WRHA

2.2 THE MANAGEMENT TEAM

The Board of Directors

| | |
|------------------------------|----------------|
| Mr. George Duncan | Board Chairman |
| Councillor Ronald Anglin | |
| Mr. Winston Comrie | |
| Dr. Barrington Dixon | |
| Mr. Delro Hewling | |
| Ms. Michelle Levermore | |
| Mrs. Florence Logan | |
| Mr. Clive Mullings | |
| Mrs. Stephanie Reid | |
| Mrs. Erma Ridguard | |
| Ms. Faith Thomas | |
| Councillor Dr. Ucal Thompson | |
| Mrs. Mavis Whitter-King | |
| Mr. Winston Wright | |

The In-house Managers

| | |
|-------------------------------|---|
| Dr. Sheila Campbell Forrester | Regional Director (RD) |
| Dr. Alexander Konstantinov | Regional Technical Director (RTD) |
| Mr. Raymond Kitson-Walters | Director of Finance |
| Mr. Arthur Warren | Director, Human Resource and Industrial Relations |
| Miss Thora Palmer | Director, Operations and Maintenance |
| Mr. Paul Anderson | Director, Management Information System |

The Senior Members of the Parish Team

| | |
|---------------------|--|
| Mrs. T. Fider | Parish Manager, Trelawny |
| Dr. Ponnado | Medical Officer (Health), Trelawny |
| Mrs. Doreen Bernard | Parish Manager, St. James |
| Dr. Olukoga | Medical Officer (Health), St. James |
| Dr. Michele Roofe | Parish Manager/Medical Officer (Health), Hanover |
| Mr. Verley James | Parish Manager, Westmoreland |
| Dr. Kyaw Tint | Medical Officer (Health), Westmoreland |

2.3 HEALTH SERVICES MANAGEMENT

2.3.1 Vision

Healthy families living in healthy communities

2.3.2 Mission

The mission of Western Regional Health Authority encompasses the tenets of public health:

- To provide quality preventative, curative and rehabilitative health care that is affordable, accessible and reliable to the population of the region;
- To provide and maintain facilities and conditions conducive to the promotion of health;
- To attract, train, motivate and retain a high calibre of staff and to provide opportunities for the development of our employees to their fullest capabilities.

2.3.3 Resources for the Health Sector

The health sector is resource intensive in all its major operations.

As a statutory body, the WRHA is funded through grants. The Government of Jamaica's FAA Act as well as International Financial Accounting Standards governs the accounting policies of the Region.

2.3.3.1. Finance

Table 2.1 Health Service Financing \$'000: WRHA 2000-2002

| SOIURCES | Base Year 2000 | 2001 | 2002 |
|------------------------------|-----------------------|-------------|-------------|
| Budgets, Grants | 948.4* | 1,072,745 | 1,047,153 |
| Actual Fees Collected | 156.2* | 156,190 | 196,711 |
| Other income | DNA | 10,678 | 5,434 |
| TOTAL | | 1,623,062 | 1,350,805 |

Source: WRHA Finance & Accounts Department 2000-2002

*MOH Jamaica Annual Report 2002

Total income was J\$1,350,805 million dollars approximately 16.7% less than that obtained in 2001. User fees demonstrated an increase of approximately J\$40,521 in year 2002 when compared to 2001 (Table 2.1).

Table 2.2 Health Service Delivery Expenditure \$'000: WRHA 2001-2002

| Objects of Expenditure | 2001 | 2002 |
|------------------------------------|------------------|------------------|
| Staff Cost | 1,366,924 | 1,302,176 |
| Rental | 1,683 | 2,247 |
| Public Utilities | 46,155 | 65,415 |
| Other Operating Expenditure | 206,427 | 215,515 |
| Capital Items | 2,165 | 4,569 |
| TOTAL | 1,623,354 | 1,589,922 |

Source: WRHA – Finance and Accounts Department Report 2001-2002

In 2002, total expenditure was J\$1,589,922, which was 2.0% less than year 2001. Although representing a 4.8% decline, staff cost continued to dominate expenditure (Table 2.2). When income (Table 2.1) and expenditure (Table 2.2) are examined, there was a deficit of approximately J\$239 million.

Table 2.3 Outstanding Liabilities \$'000: WRHA 2000-2002

| Liabilities | 2000 | 2001 | 2002 |
|-------------------------------------|--------------------|--------------------|--------------------|
| Drugs & Medical Supplies | 73,951,541 | 83,221,087 | 52,319,259 |
| Statutory Deductions | 45,826,362 | 21,307,532 | 215,881,533 |
| Utilities | 19,346,397 | 21,584,028 | 19,517,345 |
| Other | 20,648,137 | 8,241,093 | 3,839,749 |
| TOTAL | 159,772,437 | 134,353,740 | 291,557,886 |

Source: WRHA – Finance and Accounts Department Report 2000-2001

Outstanding liabilities amounted to J\$291,557,886 an increase of J\$157,204,146. Unpaid statutory deductions represented approximately 74% of the outstanding sums owed (Table 2.3).

Table 2.4 Emoluments (J\$) for Senior Managers: WRHA 2002

| Position | EMOLUMENTS | | | | |
|---|------------------------------------|--|------------------------------|--------------|-----------------|
| | Salary | Motor Vehicle/ Upkeep/ Travelling | Uniform/ Clothing | Other | Vacation |
| - Regional Board Member | AS STIPULATED BY GOVERNMENT SCHEME | | | | |
| - Regional Director | 3,714,013.63 | 166,196.00 | 3,472.00 | 1,320,474.23 | 14 v/1 |
| - Regional Technical Director | 1,701,207.55 | 176,360.00 | 41,664.00 | 1,185,472.92 | |
| - Director of Finance | 2,125,114.94 | 323,390.00 | 8,443.50 | | 20 4/1 |
| - Director of Human Resource and Industrial Relations | 2,323,003.44 | 332,390.00 | 8,443.50 | 16,263,25 | 15 v/1 |
| - Director of Operations and Maintenance | 2,309,682.70 | 249,410.10 | 8,443.50 | 18,306.60 | |
| - Director of MIS | 2,002,588.83 | 284,800.10 | 8,443.50 | 1,596,00 | 33 v/1 |

Source: WRHA - Finance and Accounts Department Report, 2002

2.3.3.2 Human Resource

A complex mix of human resource is utilised to carry out the labour-intensive activities involved in health care delivery. The retention of adequate staffing is influenced by conditions of service, remuneration and the availability of resources all of which act as a “push” factor to developed countries.

There were fifty-four (54) separations from the WRHA human resource team – thirty-nine (39) resignations and fifteen (15) retirements. Among this group were health personnel - midwives, nurses, pharmacists and public health inspectors – all included in the category of scarce skills needed for efficient delivery of health care. In this regard, a recruitment drive was instituted.

One hundred and thirty (130) members of staff were appointed by the Office of the Services Commissions and fifty-six (56) by the WRHA. A pension scheme was established with West Indies Trust Company for 112 employees.

The staff was encouraged to be proactive in their personal and professional development. Special training programmes were offered to 693 staff members in areas such as customer service, budget and financial management, healthy lifestyle e.g. stress management, exercise and relaxation among others.

Industrial Relations activities related mainly to the reclassification of Medical Technologists as opposed to the job functions of Scientific Officers.

2.3.3.3 The Infrastructure

The infrastructure includes buildings; expensive, complex equipment as well as vehicles. It follows that considerable amount of financial resources is required to maintain them.

While preventive maintenance programmes are implemented, replacement is always problematic due to cost as well as obsolescence.

Table 2.5 The Infrastructure, Operations and Maintenance: WRHA and Parishes 2002

| VARIABLES | WRHA | | Trelawny | | St. James | | Hanover | | Westmoreland | |
|------------------------------------|----------|-----|---------------|-----|--------------|-----|------------------|-----|---------------|-----|
| | Hospital | PHC | Hospital Fal. | PHC | Hospital CRH | PHC | Hospital Noel H. | PHC | Hospital Sav. | PHC |
| Buildings | | | | | | | | | | |
| - Maintenance Plan | 4 | - | 1 | - | 1 | - | 1 | - | 1 | - |
| - No. of maintenance activities | 2,989 | | 308 | 40 | 1,850 | 120 | 123 | 45 | 463 | 40 |
| - Total Work Order Recorded | 4,743 | | | | | | | | | |
| Equipment | - | - | - | - | - | - | - | - | - | - |
| - % on PPM Programme | 60% | | 70% | - | 50% | - | 60% | - | 60% | - |
| - No. of PPM activities | 493 | | 50 | - | 291 | 4 | 6 | - | 143 | - |
| - % Downtime on | | | | | | | | | | |
| - Standby Generator | 10 | - | - | - | 0 | 5 | 5 | - | 20 | - |
| - Elevators | 17.5 | | - | - | 5 | - | - | - | 30 | - |
| - Boilers | 6.5 | | 3 | - | 10 | - | 3 | - | 10 | - |
| - Laboratory | 7.5 | | 5 | - | 10 | - | - | 10 | 5 | - |
| - X-Ray | 5 | | - | - | 5 | - | Nil | - | 5 | - |
| - Anaesthetic | 5 | | 5 | - | 5 | - | - | - | 5 | - |
| - Autoclave/Sterilizer | 18.7 | | 20 | - | 30 | - | 10 | - | 15 | - |
| - Operating Table | 6.6 | | 5 | - | 5 | - | - | - | 10 | - |
| - Operating Theatre: - light | 8.3 | | 10 | - | 5 | - | - | - | 10 | - |
| - Equipment | | | | | | | | | | |
| - Laundry Equipment | 30% | | 30% | - | 30% | - | 30% | - | 30% | - |
| - Central A C | 28.3 | | 15 | - | 30 | - | 30 | - | 30 | - |
| - Incinerators | 12.5 | | - | - | 10 | 10 | 15 | - | 15 | - |
| Motor Vehicle | | | | | | | | | | |
| - No. of Vehicles - Ambulances | * | | | | | | | | | |
| - Other | * | | | | | | | | | |
| - % on PPM Programme | 32.1 | * | * | * | * | * | * | * | * | * |
| - Average Annual Downtime: | * | * | * | * | * | * | * | * | * | * |
| - Ambulances (Days) | * | * | * | * | * | * | * | * | * | * |
| - Other | * | * | * | * | * | * | * | * | * | * |
| Assets Management | | | | | | | | | | |
| - % Inventorized | * | * | * | * | * | * | * | * | * | * |
| - % replaced | * | * | * | * | * | * | * | * | * | * |
| - % on Replacement Plan | * | * | * | * | * | * | * | * | * | * |

Source: WRHA Operations and Maintenance

*DNA

During year 2002, 2,989 maintenance activities were carried out in the Western Region. Approximately 60% of the region's hospital equipment was on a Planned Preventive Maintenance Programme and there were 493 such activities. Downtime for motor vehicles and equipment has a direct relationship to age and obsolescence.

Laundry equipment located on hospital premises and central air conditioners recorded the highest percentage annual downtime at 30% and 28.3% respectively (Table 2.5).

2.3.3.4 Disaster Preparedness

In keeping with the Ministry of Health's Disaster Preparedness guidelines the WRHA used collaborative efforts to maintain a state of preparedness for disaster through:

- Inspection of buildings slated for shelter and ensuring their suitability
- Ensuring and managing supplies for emergency management
- Ensuring the safety of medical records.

2.4 THE HEALTH SERVICES

2.4.1 Provisions of Services/Programmes

Health services include the public, private and NGO institutions, facilities/departments that are managed, equipped and staffed to deliver promotive, preventive, curvative and/or rehabilitative health care to individuals, families or communities.

The WRHA provided public health care services that are in keeping with nationally mandated programmes that address epidemiological, age, gender, diagnostic and medical/surgical concerns/interventions.

2.4.1.1. Health Promotion

2.4.1.1.1 Health Education

Health promotion/health education is a strategy that is implemented in all health care services/programmes to encourage the acquisition and use of knowledge/information in order to maintain/improve individual, family and community health. It promotes changes in behaviour/lifestyle and thus the messages are transmitted using varying media and are designed to encourage and support these changes.

Although the majority of health promotion/health education strategies were implemented at the primary health care level, there were activities in hospitals which tend to use the model of face to face interpersonal communication among patients and caregivers.

In year 2002, the Health Promotion/Education division of the WRHA focused on the promotion of public participation, community involvement and individual responsibility for health.

Approximately 110 communities were supported in various health promotion interventions in all the parishes in the WRHA. Additionally, 147 community leaders were trained in all four parishes.

Sixty-two schools in the four parishes of the WRHA were involved in school health programmes in activities such as health fairs, distribution of educational materials. Life skills programmes related to special events, e.g. World Health Safe Sex Week, No Tobacco Day involved 8,443 children across all the WRHA parishes.

The emphasis on Adolescent Health was addressed through training of 184 new Peer Counsellors in the parishes of St. James, Hanover and Westmoreland. Life skills activities engaged 22,910 adolescent residents throughout all the parishes.

In addition to the mandate of the Health Education division, each coordinated health programme implemented its own activities. Thus communicable diseases control, chronic non-communicable disease, dental health, environmental health, maternal and child health, mental health and nutrition among others offered targeted programmes.

2.4.1.1.2 Nutrition

Nutrition is intimately related to the delivery of health care and as a specific strategy is threaded throughout several programmes - Child Health, Reproductive Health, Chronic, Non-communicable and other nutrition related diseases and Communicable Disease Control.

2.4.1.1.3 Home Visits

Table 2.6 Home Visits: WRHA 2000-2002

| HOME VISITS | 2000 | 2001 | 2002 |
|-------------|--------|--------|--------|
| Total | 50,547 | 49,387 | 46,262 |
| Maternal | 11.6 | 11.4 | 10.7 |
| Child | 41.4 | 44.0 | 42.1 |
| Other | 47.0 | 44.6 | 47.3 |

Source: MOH: MCSR 2000-2002

Although the WRHA experienced a 6.3% decline in total home visits in 2002, 10.7% of all home visits were for maternal purposes; 42.1% were for child health and 47.3% for other purposes (Table 2.6).

Table 2.7 Home Visits: Jamaica, WRHA and Parishes 2002

| Home Visits | Jamaica | WRHA | PARISHES | | | |
|---------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total | 357,720 | 46,262 | 11,296 | 10,146 | 15,560 | 9,259 |
| Maternal (%) | 8.9 | 10.7 | 24.1 | 17.3 | 24.8 | 33.8 |
| Child (%) | 49.0 | 42.1 | 27.2 | 17.2 | 37.9 | 18.7 |
| Other (%) | 42.0 | 47.3 | 21.9 | 27.3 | 32.8 | 18.0 |

Source: MOH MCSR 2002

There were 46,262 home visits in the Western Region in 2002, approximately 13% of the national level figures. Hanover performed 33.6% of all WRHA's home visit. While 37.9% of all home visits in the parish of Hanover were for children, 33.8% of visits in Westmoreland were for mothers. Generally, home visits for "other" registered in excess of 40% of all WRHA home visits. The highest visit for "other" being in Hanover (32.8%) (Table 2.7).

2.4.1.2 Services/Facilities

Table 2.8 Provisions/Availability of Public Health Services: Jamaica, WRHA and Parishes 2002

| Health Facilities | JA | WRHA | PARISHES | | | |
|--------------------------------|-----|------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Health Centres: | 128 | 42 | 10 | 14 | 8 | 10 |
| - Type I | | | | | | |
| - Type II | 87 | 25 | 7 | 6 | 7 | 5 |
| - Type III | 72 | 13 | 2 | 3 | 2 | 6 |
| - Type IV | 6 | 3 | 1 | 0 | 1 | 1 |
| - Type V | 4 | 1 | 0 | 1 | 0 | 0 |
| Dental Clinic | 8 | 4 | 1 | 1 | 1 | 1 |
| Family Planning Clinic | 3 | | | | | |
| Rural Maternity Centres | | | | | | |
| Hospitals: | | | | | | |
| - Type A | 3 | 1 | 0 | 1 | 0 | 0 |
| - Type B | 4 | 1 | 0 | 0 | 0 | 1 |
| - Type C | 11 | 2 | 1 | 0 | 1 | 0 |
| - Specialist | 6 | 1 | 0 | 0 | 0 | 0 |
| Laboratory Services | 13 | 2 | 1 | 1 | 0 | 1 |
| Radiography Services | 16 | 2 | 1 | 1 | 0 | 1 |
| Pharmacy: Hospital | 20 | 4 | 1 | 1 | 1 | 1 |
| Physiotherapy | 9 | 2 | 0 | 1 | 0 | 1 |
| Blood Banking | 11 | 2 | 0 | 1 | 0 | 1 |
| Radiation/Oncology | 2 | 1 | 0 | 1 | 0 | 0 |

Source: MOH: HMSR, MCSR 2002

In 2002, there were approximately thirty five (35) hospitals on the island – twenty three (23) public, one (1) quasi-public and eleven (11) private.

The WRHA boasts one hospital in each of its four parishes. Based on classification there are:

- Two (2) type Cs (Falmouth and Noel Holmes) providing basic, non-specialist inpatient and outpatient care in medicine, surgery, obstetric, gynaecology and paediatric services
- One type B (Savanna-la-mar) delivering specialist medical, surgical, obstetric/gynaecological and paediatric services

- One Type A (Cornwall Regional) providing interdependent, complex diagnostic, curative and emergency services (Table 2.8).

In year 2002, there were (88) primary health care facilities that met the basic health care needs of the region's population. Diagnostic services were offered through two (2) laboratories and two (2) radiographic units; while pharmaceuticals were dispensed from four (4) hospitals and several primary health care facilities (Table 2.8)

2.4.2 UTILIZATION OF SERVICES/PROGRAMMES

The Western Regional Health Authority responds to a variety of individual, family and community health needs at the primary, secondary and tertiary levels of care. The services are integrative, addressing illness prevention, health promotion, diagnosis and interventions of medical or surgical nature.

2.4.2.1. Dental/Oral Health Services

Table 2.9 Utilization of Dental/Oral Health Services: WRHA 2001-2002

| VARIABLES | 2001 | 2002 |
|--|-------------|-------------|
| Primary Care – Visits (Total) | 28,105 | 22,425 |
| ▪ Preventive Procedures (Total) | 27,179 | 24,604 |
| Restoration | | |
| (i) Posterior Filling | 9,339 | 8,268 |
| (ii) Anterior Filling | 1,516 | 1,080 |
| Cleaning | 13,551 | 11,444 |
| Orthodontic | 5 | 219 |
| Other | | |
| - Clinic | 2,037 | 2,412 |
| - School | 731 | 1,181 |
| ▪ Extractions | 13,403 | 9,320 |
| ▪ Dentures | 15 | 3 |
| ▪ Other Procedures | 17,936 | 17,706 |
| Hospital Care – Surgery (Total) | 171 | 28 |
| - Emergency | 33 | 3 |
| - Elective | 118 | 11 |
| - Day | 20 | 14 |
| Outpatient Clinic | | |
| - Total Cases | 2,809 | 2,516 |
| - New Cases | 0 | 0 |

Source: MOH: MCSR, HMSR 2002

Dental health visits to WRHA facilities declined by 20.2% in 2002. While some preventive procedures increased, extractions continued to decline, registering 30.5% during that year. There was an 80% decline in the number of dentures issued (Table 2.10). There was an overall decline in the number of surgical cases as well as the number of cases attending patient clinic (Table 2.9).

Table 2.10 Utilization of Dental/Oral Health Services: Jamaica, WRHA and Parishes 2002

| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|--------------------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total PHC Visits | 181,896 | 22,425 | 5,220 | 6,699 | 3,613 | 6,893 |
| Preventive Procedures (Total) | 145,914 | 24,604 | 7,221 | 7,046 | 5,171 | 5,166 |
| Restoration | | | | | | |
| - (Anterior Filling) | 6,167 | 1,080 | 265 | 356 | 241 | 218 |
| - Posterior Filling | 38,503 | 8,268 | 1,994 | 3,066 | 2,077 | 1,131 |
| Cleaning | 73,932 | 11,444 | 3,215 | 3,145 | 2,142 | 2,942 |
| Orthodontic | 781 | 219 | 2 | 159 | 58 | - |
| Other Preventive | | | | | | |
| - Clinic | 21,541 | 2,412 | 748 | 165 | 624 | 875 |
| - School | 4,992 | 1,181 | 997 | 155 | 29 | - |
| Extraction | 79,947 | 9,320 | 2,030 | 3,210 | 1,087 | 2,993 |
| Dentures | 104 | 3 | 1 | 2 | - | 1 |
| Other Procedures | 152,342 | 17,706 | 3,459 | 1,493 | 2,363 | 10,391 |
| Hospital Care - Surgery | 171 | 28 | - | 28 | - | - |
| - Emergency | 21 | 3 | - | 3 | - | - |
| - Elective | 171 | 11 | - | 11 | - | - |
| - Day | 162 | 14 | - | 14 | - | - |
| Outpatient Clinic | | | | | | |
| - Total Cases | 5,421 | 2,516 | - | 2,516 | - | - |
| - New Cases | 794 | - | - | - | - | - |

Source: MOH MCSR > HMSR 2002

Just about 17% (24,604) of all preventive procedures done in public dental facilities were in the WRHA. The region, however registered 11.7% (9,320) of all extractions (Table 2.11). While the region performed 23.6% of all preventive procedures done in schools, Hanover achieved a total of 2.5% (29) of the WRHA's total (Table 2.10).

2.4.2.2. Primary Health Care (PHC) Services

Table 2.11 Primary Health Care Visits by Year: Jamaica, WRHA and Parishes 2000-2002

| YEAR | JAMAICA | WRHA | PARISHES | | | |
|-----------------------|-----------|---------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Base Year 2000 | 1,684,222 | 337,446 | * | * | * | * |
| 2001 | 1,610,959 | 309,753 | 63,567 | 112,786 | 62,559 | 70,841 |
| 2002 | 1,543,905 | 289,655 | 60,795 | 103,724 | 54,399 | 70,735 |

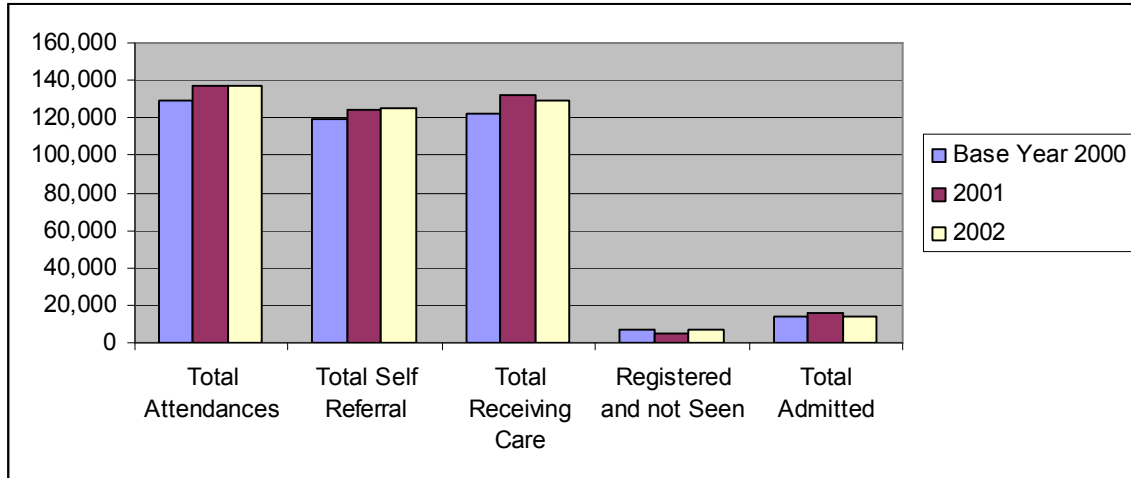
Source: MOH: MCSR 2000-2002, MOH – Jamaica Annual Report 2002

*DNA

When year 2002 was compared to year 2001, there were 67,054 less primary health care visits nationally and the WRHA also experienced a 6.5% (20,098) decline. In 2002, except for Westmoreland which registered a 3.5% (2,491) increase; Trelawny (4,599); St. James (3,735) and Hanover (3,909) reflected declines in keeping with the regional declines (Table 2.11).

2.4.2.3. Hospital Accident and Emergency (A&E) Services

Figure 2.1 Utilization of Accident and Emergency (A&E) Services: WRHA 2000-2002



Source: MOH HMSR 2000-2002

While total attendance at public A&E services in WRHA declined by 514 in 2002, the total self referral increased by 905. Patients who were registered and not seen increased by 2,670 (36%) when compared to year 2001 (Figure 2.1) (TABLE A1).

Table 2.12 Utilization of Accident and Emergency (A&E) Services: Jamaica, WRHA and Parishes 2002

| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|-----------------------|---------|---------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total Attendance | 695,229 | 136,649 | 17,603 | 64,042 | 15,665 | 39,339 |
| Total Self-Referral | 553,030 | 125,527 | 15,908 | 58,700 | 14,709 | 36,210 |
| Total Receiving Care | 680,784 | 129,242 | 16,727 | 61,247 | 15,138 | 36,130 |
| Registered & Not Seen | 14,455 | 7,407 | 876 | 2,795 | 527 | 3,209 |
| Total Admitted | 94,074 | 13,948 | 1,525 | 7,999 | 386 | 4,036 |

Source: MOH: HMSR 2002

Nineteen point seven percent (19.7%) of all visits to public A&E were made in the WRHA. While 129,242 persons received care, 7,407 were registered and not seen (Table 2.12).

2.4.2.3 Hospital Services – Inpatient

Table 2.13 Provision and Utilization of Inpatient Services: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|-----------------------------|----------------|----------|----------|
| Bed Complement | 596 | 553 | 595 |
| Bed Occupancy Rate | 78.0 | 86.1 | 73.4 |
| Discharges Including Deaths | 29,775 | 31,395 | 29,952 |
| Average Length of Stay | 5 days | 5.5 days | 5.5 days |
| Turnover Rate | 48.7 | 56.0 | 49.8 |

Source: MOH: HMSR 2000-2002

In year 2002, the WRHA had an additional 42 beds to deliver inpatient services. While bed occupancy declined by 12.7%, the average length of stay remained at 5.5 days (Table 2.13).

Table 2.14 Provision and Utilization of Inpatient Services: Jamaica, WRHA and Parishes 2002

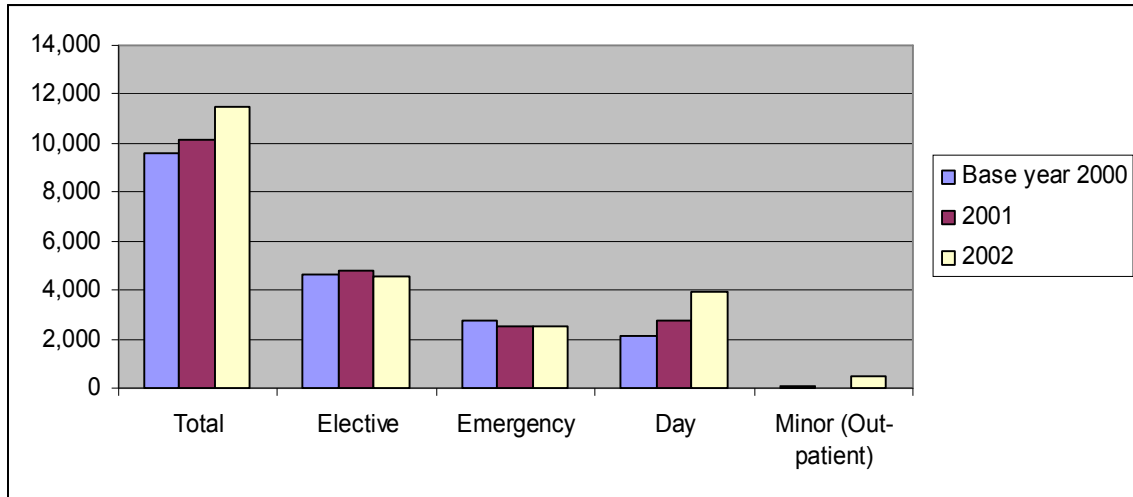
| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|-----------------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Bed Complement | 3,846 | 595 | 63 | 355 | 38 | 139 |
| Bed Occupancy Rate | 80.2 | 73.4 | 81.0 | 68.9 | 59.9 | 85.1 |
| Discharges Including Deaths | 173,614 | 29,952 | 3,706 | 16,864 | 1,238 | 8,144 |
| Average Length of Stay | 6.9 | 5.5 | 4.5 | 5.8 | 6.7 | 5.2 |
| Turnover Rate | 44.8 | 49.8 | 58.5 | 46.8 | 32.4 | 58.2 |

Source: MOH: HMSR 2002

The WRHA had 15.5% (595) of all public hospital beds on the island. Hanover had 38 beds with bed occupancy of approximately 59.9% and an average length of stay of 6.7 days – 1.2 days above that of the region (Table 2.14).

2.4.2.3 Hospital Services – Surgery

Figure 2.2 Utilization of Surgical Services: WRHA 2000-2002



Source: MOH HMSR 2000-2002

The total number of surgical interventions made by the WRHA increased by 1,344 (13.3%). Although elective interventions declined by 212, day surgery increased by 1,129 (40.6%) (Figure 2.2) (TABLE A2).

Table 2.15 Utilization of Surgical Services: Jamaica, WRHA and Parishes 2002

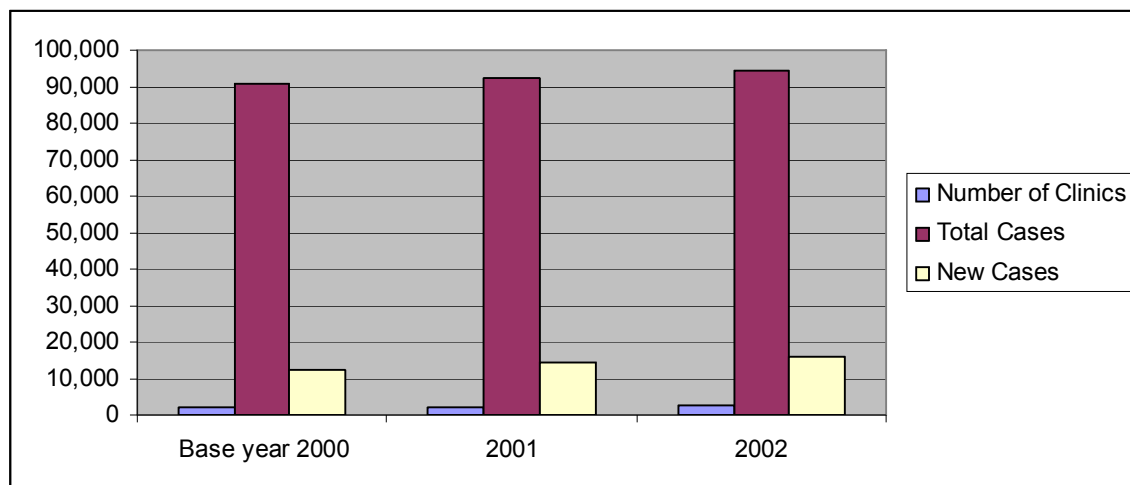
| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|------------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total | 53,658 | 11,452 | 820 | 8,048 | 67 | 2,517 |
| Type - Elective | 21,926 | 4,555 | 301 | 2,918 | 67 | 1,269 |
| - Emergency | 14,082 | 2,533 | 150 | 1,943 | - | 440 |
| - Day | 11,795 | 3,910 | 369 | 2,733 | - | 808 |
| - Minor (Out-patient) | 5,855 | 454 | - | 454 | - | - |

Source: MOH: HMSR 2002

The WRHA implemented 21.4% (11,452) of all the surgical interventions in public facilities in 2001, and 21% (4,555) of all elective interventions. The region performed just about 33% of all the day surgery intervention in public facilities (Table 2.15).

2.4.2.3 Hospital Services – Outpatient Specialist Clinics

Figure 2.3 Utilization of Outpatient Specialist Clinics: WRHA 2000-2002



Source MOH HMSR 2000-2002

There was an increase (460) in the number of public outpatient clinics held in WRHA in 2002 and simultaneously the total number of cases also increased by 2,320. New cases represented an 11.2% increase (Figure 2.3) (TABLE A3).

Table 2.16 Utilization of Outpatient Specialist Clinics: Jamaica, WRHA and Parishes 2002

| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|-------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Number of Clinics | 14,925 | 2,428 | 134 | 1,765 | 19 | 510 |
| Number of Cases | | | | | | |
| - Total | 487,692 | 94,492 | 2,361 | 74,699 | 217 | 17,215 |
| - New | 88,133 | 15,753 | 643 | 13,032 | 116 | 1,962 |

Source: MOH HMSR 2002

While the WRHA held 16.3% (2,428) of all public outpatient specialist clinics, it had a total case load of 94,492 (19.4%) of the national figure. There were 15,753 new cases managed in the region with St. James managing 82.7% (13,032) of that figure (Table 2.16).

2.4.2.4 Diagnostic Services – Laboratory

2.17 Utilization of Laboratory Services: WRHA 2000-2002

| Variables | Base Year 2000 | 2001 | 2002 |
|-------------------------------|----------------|---------|---------|
| Total No. of Clients | 106,521 | 515,460 | 545,414 |
| Examination/Test Total | 386,753 | 515,354 | 550,866 |
| - Cytology | 2,899 | 229 | 333 |
| - Haematology | 140,710 | 162,579 | 192,505 |
| - Chemistry | 202,075 | 301,151 | 307,795 |
| - Urinalysis | 2,621 | 3,596 | 4,286 |
| - Histology | 2,269 | 1,989 | 1,913 |
| Microbiology | | | |
| - Serology | 7,095 | 7,241 | 4,883 |
| - Tuberculosis (TB) | - | 752 | 943 |
| - Others | 418 | 11,223 | 12,129 |
| Immunology | 11,357 | 4,787 | 4,236 |
| Blood Bank | 15,578 | 20,852 | 21,798 |
| Others | 1,731 | 1,011 | 46 |

Source: MOH, HMSR 2000-2002

Twenty nine thousand, nine hundred and fifty-four (29,954) additional clients utilized public laboratory services in 2002 and the number of tests increased by 6.4% (35,512) (Table 2.17).

Haematology examination increased by 29,926 while serological examination declined by 2,358 and immunology by 551 (Table 2.17).

Table 2.18 Utilization of Laboratory Services: Jamaica, WRHA and Parishes 2002

| VARIABLES | Jamaica | WRHA | Parishes | | | |
|-------------------------------|-----------|---------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total No. of Clients | 1,195,765 | 545,414 | 8,181 | 483,937 | - | 53,296 |
| Examination/Test Total | 1,619,562 | 550,863 | 10,304 | 483,200 | - | 57,362 |
| - Cytology | 25,458 | 333 | 236 | 97 | - | - |
| - Haematology | 754,753 | 192,505 | 7,667 | 147,923 | - | 36,915 |
| - Chemistry | 734,009 | 307,795 | 536 | 289,048 | - | 18,211 |
| - Urinalysis | 14,029 | 4,286 | 73 | 3,640 | - | 573 |
| - Histology | 4,666 | 1,913 | 4 | 1,909 | - | - |
| Microbiology | | | | | | |
| - Serology | 11,959 | 4,883 | 1,608 | 3,274 | - | - |
| - Tuberculosis (TB) | 1,144 | 943 | - | 943 | - | - |
| - Others | 16,448 | 12,129 | 54 | 11,963 | - | 112 |
| Immunology | 10,012 | 4,213 | 69 | 4,167 | - | - |
| Blood Bank | 44,046 | 21,798 | 42 | 20,205 | - | 1,551 |
| Others | 16,488 | 46 | 15 | 31 | - | - |

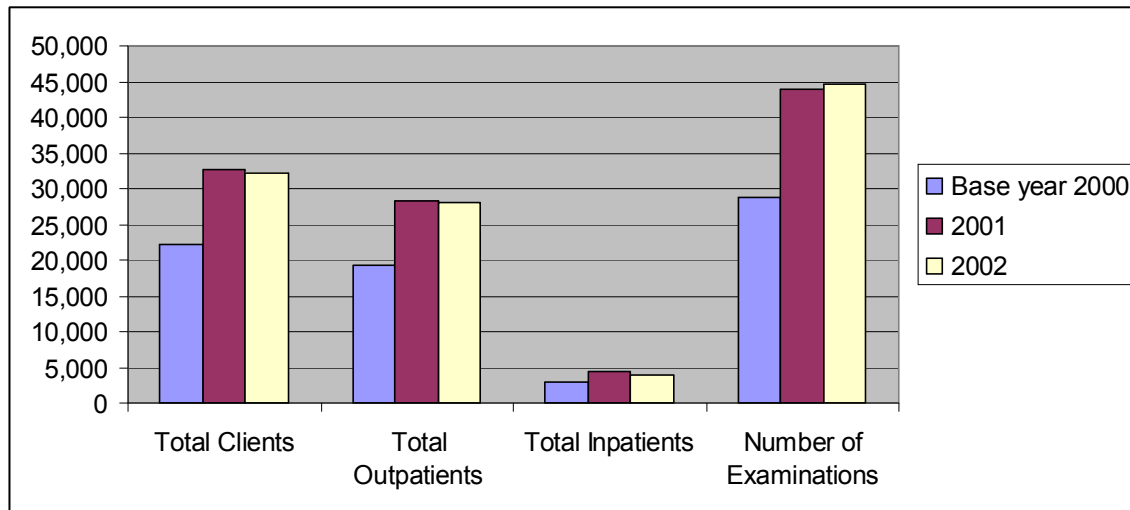
Source: MOH: HMSR 2002

The Western Regional Authority provided public laboratory services for 545,414 clients during 2002. Chemistry (307,795) represented 42% and Haematology 25.5% of national examinations respectively (Table 2.18).

The parish of St. James conducted 94% of the region's chemistry examinations, while Westmoreland conducted 19.2% of the haematology examinations done in the region (Table 2.18).

2.4.2.4 Diagnostic Services – Radiography

Figure 2.4 Utilization of Radiography Services: WRHA 2000-2002



Source: MOH HMSR 2000-2002

There was a decline (698) in the number of clients using WRHA radiography services in 2002. The decline was reflected in the number of both outpatient (401) and inpatient (297) clients (Figure 2.4) (TABLE A4).

Table 2.19 Utilization of Radiography Services: Jamaica, WRHA and Parishes 2002

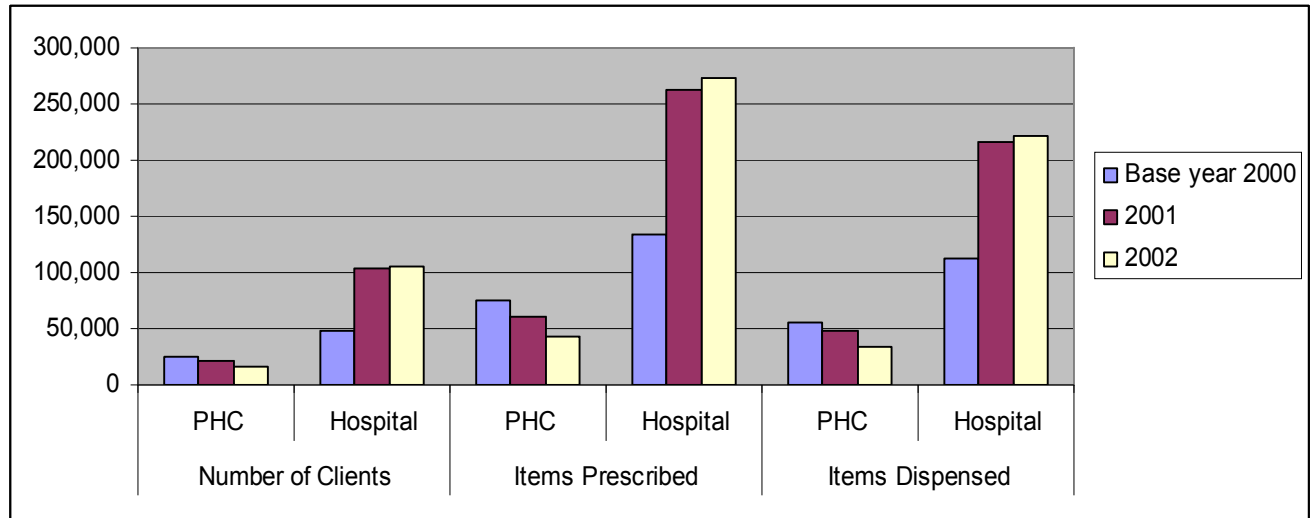
| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|----------------------------|---------|--------|-------------------|-----------|-------------------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| No. of Clients | | | | | | |
| - Total | 197,137 | 32,079 | NO SERVICE | 23,786 | NO SERVICE | 8,293 |
| - Outpatients | 152,981 | 27,980 | | 20,988 | | 6,992 |
| - Inpatients | 44,156 | 4,099 | | 2,798 | | 1,301 |
| No. of examinations | 208,694 | 44,619 | | 33,596 | | 11,023 |

Source: MOH: HMSR 2002

The WRHA while offering just about 16.3% of all public radiography services on the island, delivered services from the parishes of St. James and Westmoreland. The bulk of users were outpatients, 75% (27,980) (Table 2.19).

2.4.2.5 Therapeutic Services – Pharmaceutical

Figure 2.5 Utilization of Pharmacy Services: WRHA 2000-2002



Source: MOH, MCSR & HMSR 2000-2002

In 2002, at WRHA, while the total number of clients using public pharmacies declined by 6,316 at the primary health care level there was a small increase of 769 at the hospital level. There were increases in items prescribed (11,513) and items dispensed (6,436) at the hospital level (Figure 2.5) (TABLE A5).

Table 2.20 Utilization of Pharmacy Services: Jamaica, WRHA and Parishes 2002

| VARIABLES | LOCATION | JAMAICA | WRHA | PARISHES | | | |
|----------------------|----------|-----------|---------|----------|-----------|---------|--------------|
| | | | | Trelawny | St. James | Hanover | Westmoreland |
| Total No. of clients | PHC | 154,231 | 15,287 | 8,419 | 6,827 | - | 41 |
| | Hospital | 534,570 | 104,744 | 8,688 | 57,670 | 6,672 | 31,714 |
| Items prescribed | PHC | 444,506 | 43,632 | 25,782 | 17,832 | - | 12 |
| | Hospital | 1,451,101 | 273,347 | 21,146 | 138,964 | 24,403 | 88,834 |
| Items dispensed | PHC | 324,789 | 34,510 | 22,292 | 12,202 | - | 16 |
| | Hospital | 1,244,341 | 221,878 | 16,564 | 114,204 | 16,951 | 74,159 |

Source: MOH, MCSR & HMSR 2002

- No. data received

While the WRHA provided 19.6% (104,744) of all public hospital pharmacy services on the island in 2002, it dispensed 87% of the 273,347 items prescribed in its hospitals (Table 2.20).

Among the four parishes that formed the WRHA, Trelawny had the largest primary health care clientele for the services (8,419) as well as the largest number of items prescribed (25,782) and the largest number of items dispensed (22,292) in that setting (Table 2.20).

2.4.2.5 Therapeutic Services – Physiotherapy

Table 2.21 Utilization of Physiotherapy Services: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|--------------------------|-------------------|--------------|--------------|
| Total Patients | 4,047 | 4,601 | 4,759 |
| - Inpatients | 1,390 | 1,614 | 1,612 |
| - Outpatients | 2,657 | 2,987 | 3,147 |
| No. of Treatments | | | |
| - Cardio-thoracic | 250 | 20 | 19 |
| - Orthopaedic | 27,199 | 27,961 | 31,772 |
| - Neurology | 13,465 | 12,026 | 10,941 |
| - Neurosurgery | 189 | 266 | 89 |
| - Medicine | 5,912 | 7,247 | 4,954 |
| - General Surgery | 3,876 | 4,903 | 4,561 |
| - Other | 3,281 | 4,354 | 4,122 |

Source: MOH: HMSR 2000-2002

Approximately 158 additional patients utilised the physiotherapy services offered by the WRHA in 2002. The additional 160 outpatients who utilised the services, continued the trend in utilization. Orthopaedic treatment, though increasing by 3,811 continued to be the largest number of treatments delivered (Table 2.21).

Table 2.22 Utilization of Physiotherapy Services: Jamaica, WRHA and Parishes 2002

| VARIABLES | JAMAICA | WRHA | PARISHES | | | |
|--------------------------|---------|--------|----------|-----------|--|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total Patients | 28,124 | 4,759 | 99 | 3,724 | N O | 936 |
| - Inpatients | 11,021 | 1,612 | 72 | 1,361 | | 179 |
| - Outpatients | 17,103 | 3,147 | 27 | 2,363 | | 757 |
| No. of Treatments | | | | | S E R V I C E | |
| - Cardio-thoracic | 3,283 | 19 | 41 | 19 | | - |
| - Orthopaedic | 107,179 | 31,772 | 170 | 26,673 | | 4,929 |
| - Neurology | 36,985 | 10941 | 393 | 7,897 | | 2,651 |
| - Neurosurgery | 4,465 | 89 | 41 | 43 | | 5 |
| - Medicine | 17,872 | 4,954 | 160 | 4,392 | | 402 |
| - General Surgery | 14,802 | 4,561 | 67 | 2,978 | | 1,516 |
| - Other | 18,413 | 4,122 | 16 | 4,020 | | 46 |

Source: MOH: HMSR 2000

Physiotherapy services emanated from three parishes in the WRHA, Trelawny, St. James and Westmoreland. Except in Trelawny, the clientele were mainly inpatients (Table 2.22).

2.4.2.5 Therapeutic Services – Radiation/Oncology

**Table 2.23 Utilization of Radiation/Oncology Services: Jamaica and WRHA
2000-2002**

| Year | Location | Treatment | | | | | |
|------|----------|-----------|--------|--------------|-------------|--------|-------|
| | | Total | Cobalt | Chemotherapy | Superficial | Radium | Other |
| 2000 | Jamaica | 39,315 | 35,788 | 621 | 2,472 | 93 | 34 |
| | WRHA | 3,398 | 2,905 | 201 | 49 | 9 | 234 |
| 2001 | Jamaica | 38,811 | 33,418 | 621 | 2,199 | 112 | 2,461 |
| | WRHA | 6,798 | 4,273 | 170 | 105 | 11 | 2,239 |
| 2002 | Jamaica | 39,927 | 37,671 | 634 | 1,385 | 115 | 122 |
| | WRHA | 9,396 | 9,158 | 100 | 103 | 10 | 27 |

Source: MOH: HMSR 2000-2002

The WRHA delivers radiation and oncology services at Cornwall Regional Hospital and 23.5% (9396) of the patients receiving the service in the public sector were served from this location. There was also an increase of 2,598 in the total treatments at this site. While cobalt treatments increased by 4,885, all the other forms of treatment declined (Table 2.23).

3.0 TECHNICAL AFFAIRS

3.1 Health Status

3.2 Mortality

3.1 HEALTH STATUS

3.1.1 HEALTH INDICATORS

Table 3.1 Health Indicators: Jamaica 2000-2002

| INDICATORS | 2000 | 2001 | 2002 |
|---|-------|-------|-------|
| Life Expectancy | 72 | 74 | 73 |
| Contraceptive Prevalence | n/a | 66 | 66 |
| Total Fertility Rate (per 1,000 women 15-49) | n/a | 2.8 | 2.8 |
| Crude Birth Rate (per 1,000 mean population) | 20.0 | 21.2 | 19.9 |
| Crude Death Rate (per 1,000 mean population) | 5.1 | 6.6 | 6.4 |
| Infant Mortality Rate (per 1,000 live births) | 24.5 | 24.5 | 19.9 |
| Maternal Mortality Rate (per 100,000 live births) | 111.0 | 106.2 | 106.2 |

Source MOH Annual Reports 2000-2002

In 2002, some of the island's health indicators remained relatively constant (contraceptive prevalence rate (66.0)) and total fertile rate (2.8), while crude birth rate was (19.9). Crude death rate (6.4) and infant mortality rate (19.9) demonstrated a decline (Table 3.1).

3.1.2 MORBIDITY PROFILE

The morbidity profile presents a synopsis of the illnesses and diseases that have motivated health-seeking behaviour at the public offerings of primary health care and or inpatient hospital services.

3.1.2.1 PRIMARY HEALTH CARE

Table 3.2 Health Centre Visits by Diagnosis: WRHA 2001-2002

| DIAGNOSES | 2001 | 2002 |
|--|-------------|-------------|
| Diseases of the Circulatory System | 28,361 | 26,432 |
| - Hypertension | 25,591 | 23,436 |
| - Other Cardiovascular Disease | 2,770 | 3,006 |
| Diseases of the Respiratory System | 13,495 | 10,808 |
| - Upper Respiratory Tract Infection | 9,931 | 9,172 |
| - Lower Respiratory Tract Infection | 2,021 | 1,636 |
| - Asthma | 1,543 | 1,289 |
| Diseases of the Genito-Urinary System and Gynaecological Conditions | 18,245 | 16,141 |
| - Urinary | 1,998 | 1,704 |
| - STI (Except PID) | 11,982 | 10,706 |
| - PID | 1,042 | 854 |
| - Other Gynaecological Conditions | 3,223 | 2,877 |
| Diseases of the Skin | 17,293 | 15,919 |
| Diabetes & Hypertension | 12,607 | 11,977 |
| Diseases of the Musculoskeletal | 9,219 | 7,995 |
| Diabetes | 6,902 | 5,876 |
| - Leg Ulcers due to Diabetes | 326 | 84 |
| Diseases of the Digestive System | 4,552 | 3,839 |
| - Gastroenteritis | 1,040 | 1,051 |
| - Other Gastro-intestinal Disorders | 3,512 | 2,788 |
| Psychiatry | 6,176 | 6,483 |
| Accidents & Injuries | 6,898 | 6,268 |
| - Intentional | 862 | 668 |
| - Unintentional | 6,037 | 5,600 |
| Eye Disorders | 2,115 | 1,977 |
| Other Diagnoses | 29,406 | 30,953 |

Source: MOH, MCSR 2002

In the year 2002, there was a decline in visits for all conditions except psychiatry which registered an increase of 207 (Table 3.2).

The three (3) main causes of health centre visits in the WRHA facilities were Diseases of the Circulatory System (26,432), Diseases of the Genito-Urinary System and Gynaecological Conditions (16,141) and Diseases of the Skin (15,919) (Table 3.2).

Table 3.3 Health Centre Visits by Diagnosis, Jamaica, WRHA and Parishes 2002

| DIAGNOSES | Jamaica | WRHA | PARISHES | | | |
|--|----------------|---------------|--------------|---------------|--------------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Diseases of the Circulatory System | 114,965 | 26,432 | 5,569 | 8,855 | 6,606 | 5,412 |
| - Hypertension | 103,913 | 23,436 | 5,165 | 7,938 | 5,380 | 4,943 |
| - Other Cardiovascular Diseases | 11,052 | 3,006 | 404 | 917 | 1,226 | 459 |
| Diseases of the Respiratory System | 108,342 | 10,808 | 3,426 | 3,291 | 2,026 | 2,674 |
| - Upper Respiratory Tract Infection | 82,411 | 9,172 | 2,293 | 2,935 | 1,926 | 2,018 |
| - Lower Respiratory Tract Infection | 17,351 | 1,636 | 782 | 190 | 324 | 340 |
| - Asthma | 8,580 | 1,289 | 351 | 346 | 276 | 316 |
| Diseases of the Genito-Urinary System and Gynaecological Conditions | 103,901 | 16,141 | 3,070 | 9,392 | 1,502 | 2,176 |
| - Urinary | 13,996 | 1,704 | 483 | 652 | 268 | 301 |
| - STI (Except PID) | 64,054 | 10,706 | 1,800 | 7,637 | 176 | 1,002 |
| - PID | 7,042 | 854 | 204 | 243 | 215 | 192 |
| - Other Gynaecological Conditions | 18,809 | 2,877 | 583 | 860 | 843 | 591 |
| Diseases of the Skin | 101,834 | 15,919 | 4,704 | 4,779 | 3,200 | 3,036 |
| Diabetes and Hypertension | 59,100 | 11,977 | 2,378 | 3,759 | 3,421 | 2,419 |
| Diseases of the Musculoskeletal System | 44,100 | 7,995 | 2,494 | 2,018 | 2,026 | 1,456 |
| Diabetes | 31,225 | 5,876 | 1,188 | 1,742 | 1,190 | 1,756 |
| - Leg Ulcers due to Diabetes | 633 | 84 | 12 | 40 | 7 | 26 |
| Diseases of the Digestive System | 29,843 | 3,839 | 1,500 | 920 | 777 | 641 |
| - Gastro-enteritis | 9,494 | 1,051 | 343 | 214 | 227 | 266 |
| - Other Gastro-intestinal Disorders | 20,349 | 2,788 | 1,157 | 706 | 550 | 375 |
| Psychiatry | 29,006 | 6,483 | 1,206 | 2,053 | 1,759 | 1,485 |
| Accidents and Injuries | 27,190 | 6,268 | 1,437 | 2,457 | 1,114 | 1,170 |
| - Intentional | 3,426 | 668 | 287 | 185 | 77 | 119 |
| - Unintentional | 23,764 | 5,600 | 1,150 | 2,272 | 1,037 | 1,051 |
| Eye Disorders | 10,675 | 1,977 | 470 | 536 | 726 | 245 |
| Other Diagnoses | 134,77 | 30,953 | 5,890 | 15,203 | 4,480 | 5,380 |

Source: MOH MCSR, 2002

In 2002, the data revealed that the major cause of visits to primary health care facilities were similar for Jamaica and WRHA as it related to Diseases of the Circulatory System (1); Diseases of the Genito-Urinary System and Gynaecological Conditions (2); Diseases of the Skin (3). Diabetes and Hypertension ranked 4th for WHRA while Diseases of the Respiratory System, ranked 5th (Table 3.3).

When the data was examined against the rank order of all diseases seen at the WRHA primary health care level, St. James (33.5%) and Hanover (25%) had the largest number of visits for Diseases of the Circulatory System. The largest number of visits for Diseases of the Respiratory System were in the parish of Trelawny (3,426) (Table 3.3).

3.1.2.2 HOSPITAL INPATIENT SERVICES

**Table 3.4 Ten Leading Causes of Discharge from Public Hospitals by Diagnoses
WRHA 2000-2002**

| DIAGNOSIS | Base Year 2000 | 2001 | 2002 |
|---|-------------------|--------|--------|
| Obstetric | 11,656 | 10,682 | 11,656 |
| Accident and Injuries | 2,329 | 2,413 | 2,329 |
| Diseases of the Respiratory System | 1,466 | 1,481 | 1,466 |
| Disease of the Circulatory System | 1,634 | 1,811 | 1,634 |
| Diseases of the Digestive System | 1,463 | 1,568 | 1,463 |
| Perinatal Conditions | 1,025 | 1,015 | 1,025 |
| Infectious and Parasitic Diseases | 948 | 8,632 | 947 |
| Diseases of Genito-Urinary System | 1,017 | 1,132 | 1,017 |
| Neoplasm | 1,037 | 1,107 | 946 |
| Endocrine, Nutritional and Metabolic Diseases | 934 | 983 | 934 |
| Neuropsychiatric | 506 | 419 | 814 |
| Total Discharge | 25,827 | 25,611 | 25,846 |

Source: MOH Jamaica, Annual Report 2000-2002

In 2002, WRHA data for the leading causes of discharge (except Obstetrics) from public hospital by diagnosis, included Accidents and Injuries (1), Diseases of the Circulatory System (2). There were changes in the rank order for Diseases of the Respiratory System (4) and Diseases of the Digestive System (5) when compared to years 2000 and 2001 (Table 3.4).

Table 3.5 Ten Leading Causes of Discharges from Public Hospitals by Diagnosis: Jamaica, WRHA and Parishes 2002

| DIAGNOSIS | Jamaica | WRHA | PARISHES | | | |
|---|----------------|---------------|--------------|---------------|--------------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Obstetric | 79,611 | 11,656 | 967 | 6,339 | 861 | 3,489 |
| Accident and Injuries | 17,659 | 2,329 | 93 | 1,457 | 43 | 736 |
| Diseases of the Respiratory System | 13,121 | 1,466 | 236 | 729 | 71 | 430 |
| Disease of the Circulatory System | 11,547 | 1,634 | 210 | 785 | 151 | 488 |
| Diseases of the Digestive System | * | 1,463 | 186 | 801 | 49 | 427 |
| Perinatal Conditions | 7,538 | 1,025 | 9 | 800 | 6 | 210 |
| Infectious and Parasitic Diseases | 7,118 | 947 | 198 | 499 | 26 | 224 |
| Diseases of Genito-Urinary System | 7,171 | 1,017 | 96 | 965 | 23 | 203 |
| Neoplasm | 6,691 | 946 | 45 | 764 | 25 | 203 |
| Endocrine, Nutritional and Metabolic Diseases | 6,186 | 934 | 398 | 112 | 95 | 329 |
| Neuropsychiatric | 4,880 | 814 | 133 | 506 | 26 | 149 |
| Total Discharge | 174,017 | 25,846 | 2,427 | 14,808 | 1,418 | 7,193 |

Source: MOH

*DNA

Year 2002 discharge data identified the major causes of discharge from public national and WRHA hospitals as being similar for the first two of the top five ranked disorders – Obstetric Conditions (1) and Accident and Injuries (2). However, the third and fourth leading causes of hospital discharge in WRHA were diseases of the Circulatory System (3) and Diseases of the Respiratory System (4) respectively (Table 3.5).

Note must be taken of the parishes of Trelawny and Westmoreland with regard to the highest number of the discharges for Endocrine, Nutritional and Metabolic Diseases at 398 and 329 patients respectively (Table 3.5).

3.1.3 NATIONAL HEALTH PRIORITIES

The National Health Priorities address those factors/diagnoses that could impinge on and or have a negative impact on population health and national development. Several variables were used to arrive at the listing, and they include demographic, environmental, epidemiologic and sociological concerns.

Among the health priorities are:

- Environmental Health
- Communicable Disease Control
- Chronic Non-Communicable Diseases
- Child and Adolescent Health
- Reproductive Health
- Mental Health and Substance Abuse
- Emergency Health Services

3.1.3.1 ENVIRONMENTAL HEALTH

Environmental Health focuses on the monitoring of those activities that could have a deleterious effect on health status.

Table 3.6 Food Safety: WRHA, Parishes 2002

| VARIABLES | WRHA PARISHES | | | |
|---------------------------------------|---------------|-----------|---------|--------------|
| | Trelawny | St. James | Hanover | Westmoreland |
| Food Handlers Attending Clinics | 2,421 | 5,568 | 2,618 | 3,224 |
| New Cards/Permits Issued | 880 | * | 523 | 1,601 |
| Food Handling Establishments (Number) | 792 | 755 | 847 | 1,700 |
| Percentage Health Certified (%) | 63.1 | 75.0 | 54 | 81.9 |
| Meat Inspection – Total | 30,572 | * | 7,432 | 2,893 |
| Meat and Poultry (Kgms) | 313,138 | * | 519,698 | 1,581,969 |
| Percentage Meeting National Standard | * | * | 99.0 | 99.0 |
| Milk Sampling (# of dairies) | * | * | 8 | * |
| % Milk Meeting National Standard | * | * | * | * |
| No. of Inspections | | | | |
| - Hotel | 7 | 50 | 112 | 145 |
| - Villa | 116 | 125 | * | * |
| No. Certified Satisfactory | | | | |
| - Hotel | 7 | 28 | 78 | 104 |
| - Villa | 10 | 20 | * | * |

Source: WRHA Parish Reports 2002

Although representation has been made to the Parish Councils, all the markets (31) in Trelawny remained in an unsatisfactory condition.

All legally slaughtered animals are inspected at slaughter houses and or meat shops.

Table 3.7 Water Quality: WRHA Parishes 2002

| VARIABLES | WRHA PARISHES | | | |
|--|---------------|-----------|---------|--------------|
| | Trelawny | St. James | Hanover | Westmoreland |
| Drinking Water | | | | |
| - No. of Visits | * | * | * | 136 |
| - No. of Samples | 910 | 1,267 | 3,613 | 3,283 |
| % of Population Access to Treated Supplies | 77.0 | 88.1 | 75.0 | 74.1 |
| Waste Water | | | | |
| - No. of Plants Inspected | 6 | * | 4 | * |
| - % Satisfactory | 88.3 | * | 75 | * |
| Other Water | | | | |
| - No. of Swimming Pools Inspected | 13 | * | 143 | * |
| - % Satisfactory | 54.0 | * | 100.0 | * |

Source: WRHA Parish Reports 2002

*DNA

The monitoring of water quality in the WRHA continued and identified a minimum of 74% of the population with access to treated water supplies.

Table 3.8 Sanitation: WRHA Parishes 2002

| VARIABLES | WRHA PARISHES | | | |
|--|---------------|-----------|---------|--------------|
| | Trelawny | St. James | Hanover | Westmoreland |
| Household Sanitation | | | | |
| - Household Inspection (No.) | 3,970 | * | 3,899 | 21,127 |
| - % Household Satisfactory | 73.0 | 80.0 | 72.7 | 73.2 |
| - Complaints Received | 250 | 770 | 169 | 914 |
| - % Complaints Investigated | 84.8 | 95 | 93.0 | 84 |
| - Notices – Served | 157 | * | * | 195 |
| - % Notices – Obeyed | 81.0 | * | 50.0 | 74.0 |
| - Prosecutions Secured | 2 | * | * | * |
| Institutions | | | | |
| - Schools Inspected (No. of Visits) | 45 | 293 | 93 | 144 |
| - % Schools Satisfactory | 51.0 | 70 | 89.4 | 73.6 |
| - Children’s Homes Inspections | * | * | 8 | * |
| - % Children’s Satisfactory | * | * | 75.0 | * |
| - Places of Safety Inspections | * | * | * | * |
| - % Places of Safety Satisfactory | * | * | * | * |
| - Lock-up Inspections | * | * | 8 | * |
| - % Lock-up Satisfactory | * | * | 50.0 | * |
| - Hospitals Inspections | 1 | 1 | 1 | * |
| - % Hospitals Satisfactory | 0 | 100.0 | 0 | * |
| - Nursing Homes/Infirmaries Inspections | * | * | * | * |
| - Nursing Homes/Infirmaries Satisfactory | * | * | * | * |
| Excreta Disposal | | | * | * |
| - Inspections | 3,995 | * | * | * |
| - % Satisfactory | 71.0 | 80.0 | 72.7 | * |
| Latrines – Built | 80 | * | 35 | 490 |
| - Repaired | 26 | * | 35 | 119 |
| Solid Waste | | | | |
| - No. of Disposal Sites Inspected | * | * | 4 | * |
| - % Satisfactory | * | * | 3.0 | * |

Source: WRHA Parish Reports 2002

Good sanitation is extremely important in the prevention of illness and the maintenance of health. The WRHA environmental health services engaged in inspection activities to ensure that there were no sanitation-related outbreaks of illness (Table 3.8).

Twenty of the 80 latrines built in Trelawny were supported through a CIDA community project.

Table 3.9 Vector Control WRHA Parishes 2002

| VARIABLES | WRHA PARISHES | | | |
|--------------------------------|---------------|-----------|---------|--------------|
| | Trelawny | St. James | Hanover | Westmoreland |
| Vector Control – Aedes Indices | * | - | 6.7 | 16.9 |
| Barrier Zone (%) | * | 1.8 | * | * |

Source: WRHA Parish 2002

*DNA

In order to ensure that there were no indigenous cases of vector-borne illness in the region, the vector indices are constantly monitored (Table 3.9).

The Fogging/Larvicidal work and rat baiting were the major interventions to alleviate any reported problem.

**Table 3.10 Approval for Development/Commercial Activities:
WRHA Parishes: 2002**

| VARIABLES | WRHA PARISHES | | | |
|---|---------------|-----------|---------|--------------|
| | Trelawny | St. James | Hanover | Westmoreland |
| No. of Applications Building | 100 | * | 79 | 238 |
| No. of Approvals Building | 85 | * | 62 | 218 |
| No. of Applications Quarry | * | * | 6 | * |
| No. of Approvals Quarry License | * | * | 6 | * |
| No. of Applications – Dairies | * | * | 4 | 2 |
| No. of Approvals Dairies | * | * | 4 | 2 |
| No. of Applications Butchers | 36 | * | 34 | 65 |
| No. of Approvals Butchers | 31 | * | 24 | 24 |
| No. of Applications Spirit License | 178 | * | 138 | 419 |
| No. of Approvals Spirit License | 155 | * | 130 | 241 |
| No. of Applications Barber/Hairdressers | 10 | * | 12 | 23 |
| No. of Approvals Barbers/Hairdressers | 4 | * | 6 | 20 |

Source: WRHA Parish Reports 2002

Environmental Health Services contribute to specific national development activities through an approval process which gives cognisance to the impact of these activities on human health (Table 3.10).

Port Health

Eleven thousand and forty three (11,043) aircrafts were checked and 83% sprayed – 72% residually and 11% in flight.

Pratique was granted to vessels arriving at the deep water pier in Lucea (Hanover Health Department Annual Report 2002).

Incoming vessels to Rio Bueno and Glistening Waters continued to be monitored.

Occupational Health/Worker's Health

Visits were made to factories to observe and ensure that the national occupational health standards were maintained (Hanover Health Department Annual Report 2002).

3.1.3.2 CONTROL OF COMMUNICABLE DISEASES

Immunization Coverage

Table 3.11 Trends in Immunization Coverage for Vaccine Preventable Diseases: WRHA 2000-2002

| VACCINES | % COVERAGE | | |
|-------------|----------------|-------|-------|
| | Base Year 2000 | 2001 | 2002 |
| BCG | 94.2 | 98.8 | 100.0 |
| Polio | 92.3 | 100.0 | 93.7 |
| DPT/DT | 92.7 | 98.3 | 95.2 |
| Hepatitis B | 0.7 | 0 | 8.2 |
| MMR | 86.6 | 85.2 | 91.9 |
| Hib | 0.5 | 0.1 | 0 |

Source: Ministry of Health EPI Report 2000-2002

The WRHA continued to achieve high levels of immunization coverage for all vaccine preventable diseases except Hepatitis B and Hib in 2002 (Table 3.11).

Table 3.12 Trends in Immunization Coverage for Vaccine Preventable Diseases: Jamaica, WRHA and Parishes 2002

| VACCINES | JA | WRHA | % COVERAGE | | | |
|-------------|------|-------|------------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| BCG | 90.7 | 100.0 | 93.9 | 100.0 | 90.8 | 98.9 |
| Polio | 88.9 | 93.7 | 90.9 | 89.5 | 95.1 | 98.5 |
| DPT/DT | 89.7 | 95.2 | 95.2 | 92.7 | 92.2 | 98.8 |
| Hepatitis B | 6.1 | 8.2 | 9.5 | 21.1 | - | - |
| MMR | 85.7 | 91.9 | 91.9 | 92.8 | 86.0 | 91.9 |
| Hib | 9.0 | 0 | 0 | 0 | 0 | 0 |

Source: EPI Report 2002

In 2002, national coverage for all vaccine preventable diseases except Hib were surpassed by the WRHA and each of its four parishes (Table 3.12).

Notifiable Diseases

The WRHA, like other regions continued to implement surveillance activities for selected diseases using sentinel and hospital active sites from which weekly reports were forwarded in order to control Communicable Diseases. Other relevant strategies were also utilized.

Table 3.13 Notifiable and Other Diseases of National Interest: WRHA and Parishes 2002

| NOTIFIABLE DISEASES | WRHA | PARISHES | | | |
|------------------------------|------|----------|-----------|---------|--------------|
| | | Trelawny | St. James | Hanover | Westmoreland |
| Acute Flaccid Paralysis | - | - | - | - | - |
| HIV/AIDS | | 24 | 196 | | 57 |
| HIV Positive | | | | 44 | - |
| Malaria (Imported) | | | 2 | - | - |
| Dengue | | | | - | - |
| Measles Confirmed | | | | - | - |
| Meningitis H - Influenzae | | | 24 | - | 11 |
| - Meningococcal | | | | - | 11 |
| Tetanus (Excluding Neonatal) | | | | - | |
| Typhoid | | | | - | |
| Tuberculosis (Confirmed) | | 0 | 11 | 4 | 4 |
| Hansen's Disease | | 2 | 2 | 0 | 16 |
| Hepatitis - B | | | | 1 | 7 |
| - Viral | | | | - | - |
| - A | | | | - | - |
| Ophthalmia Neonatorum | | | 5 | | 26 |
| Congenital Syphilis | | | | | 3 |
| Syphilis (All Stages) | | | | | - |
| Genital Ulcer Syndrome | | | | | 430 |
| Urethral Discharge Syndrome | | | | | 770 |
| Vaginal Discharge Syndrome | | | | | - |
| OTHER DISEASES | | | | | |
| Accidental Poisoning | | | | | 37 |
| Febrile Illness | | 6 | 8 | 3 | 3 |
| Food Borne Illness | | | | - | 38 |
| Gastroenteritis | | | | - | - |
| Conjunctivitis | | | | - | - |
| Tinea | | | | - | - |
| Scabies | | | | - | 211 |

Source: Parish Surveillance Reports – Trelawny, St. James, Hanover, Westmoreland 2002

3.1.3.3 CHRONIC NON-COMMUNICABLE DISEASES

The chronic non-communicable diseases are influenced by lifestyle practices and tend to manifest with increase in age. The region's monitoring programme seeks to decrease morbidity and mortality.

Asthma

Table 3.14 Morbidity Profile – Asthma: WRHA 2000-2002

| VARIABLES | 2000 | 2001 | 2002 |
|---|--------|--------|--------|
| PHC Visits | * | 1,543 | 1,289 |
| Cases seen at A&E | 6,364 | 6,119 | 6,719 |
| Nebulization in A&E | 35,383 | 34,210 | 36,636 |
| Outpatient Specialists Clinic (Paediatric) | | | |
| - Total cases | 138 | 63 | 51 |
| - New Cases | 26 | - | 6 |

Source MOH: MCSR, HMSR, MOH Jamaica Annual Report 2000-2002

In 2002, there were 254 less visits to WRHA primary care facilities for Asthma and an increase of 600 cases were seen in A&E Departments in the region. Nebulization increased by 2,426 when compared to the previous year (Table 3.14).

Six (6) of fifty-one (51) cases attending outpatient specialist clinic were new (Table 3.14).

Table 3.15 Morbidity Profile – Asthma: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|---|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| PHC Visits | 8,580 | 1,289 | 351 | 346 | 276 | 316 |
| Cases seen at A&E | 38,619 | 6,719 | 796 | 3,843 | 732 | 1,333 |
| Nebulization in A&E | 137,389 | 36,636 | 2,063 | 20,199 | 1,624 | 12,750 |
| Outpatient Specialist Clinic (Paediatric) | | | | | | |
| - Total Cases | 672 | 51 | * | 51 | * | * |
| - New Cases | 79 | 6 | * | 6 | * | * |

Source: MOH MCSR, HMSR 2002

*DNA

Of the 1,289 visits to WRHA primary health care facilities for Asthma, the parish of Trelawny recorded the highest 351 (27.3%) in 2002. The A&E Department in St. James managed 57.2% (3,843) of all cases of Asthma in the region (Table 3.15).

Cancer

Table 3.16 Morbidity Profile – Cancer: WRHA 2000-2002

| VARIABLES | 2000 | 2001 | 2002 |
|--|-------|--------|--------|
| No. screened in PHC: | | | |
| - Breast | * | 10,811 | 12,470 |
| - Cervix | * | 4,353 | 5,188 |
| - Prostate | * | 185 | 116 |
| No. Referred for Abnormal Smears: | | 340 | 518 |
| - <25 years | * | 119 | 193 |
| - 25-54 years | * | 214 | 367 |
| - 55 years and over | * | 7 | 18 |
| Treatments AT CRH | 3,398 | 6,793 | 9,396 |
| - Chemotherapy | 201 | 170 | 100 |
| - Cobalt | 2,905 | 4,273 | 9,156 |
| - Superficial | 49 | 105 | 103 |
| - Radium/Caesium | 9 | 11 | 10 |
| - Other | 234 | 2,239 | 27 |
| Radiotherapy Outpatient Clinic: | | | |
| - Total Cases | 706 | 3,368 | 3,144 |
| - New Cases | | | 641 |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2002

**DNA*

Cancer screening in PHC increased for Breast Cancer (1,659) and the Cervix (835) while screening for prostate cancer declined by 69 (Table 3.16).

Referral for abnormal smears increased among all age groups with 367 referrals being among the 25-54 age group (Table 3.16). Data from the WRHA cancer registry indicate that there were 14 cases of invasive cancer in the region (WRHA Chronic Non-Communicable Disease Report 2002).

Of the 9,396 cancer treatments administered in the region, cobalt (9,156), continued to be the treatment of choice (Table 3.16).

Table 3.17 Morbidity Profile – Cancer: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|-----------------------------------|--------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| No. screened in PHC: - Breast | 76,100 | 12,470 | 3,964 | 3,768 | 1,182 | 3,556 |
| - Cervix | 23,435 | 5,185 | 1,638 | 3,014 | 324 | 212 |
| - Prostate | 981 | 116 | 21 | 4 | 4 | 48 |
| No. Referred for Abnormal Smears: | 2,265 | 518 | 254 | 217 | 6 | 41 |
| - <25 years | 675 | 193 | 103 | 82 | - | 8 |
| - 25-54 years | 1,443 | 307 | 142 | 128 | 5 | 32 |
| - 55 years and over | 148 | 18 | 9 | 7 | 1 | 1 |
| Total Discharges | - | - | - | - | - | - |
| Treatments | 39,927 | 9,396 | - | 9,396 | - | - |
| - Chemotherapy | 634 | 100 | - | 100 | - | - |
| - Cobalt | 37,671 | 9,156 | - | 9,156 | - | - |
| - Superficial | 1,385 | 103 | - | 103 | - | - |
| - Radium/Caesium | 115 | 10 | - | 10 | - | - |
| - Other | 122 | 27 | - | 27 | - | - |
| Radiotherapy Outpatient Clinic: | | | | | - | - |
| - Total Cases | 9,217 | 3,144 | - | 3,144 | - | - |
| - New Cases | 1,340 | 641 | - | 641 | - | - |

Source: MOH MCSR, HMSR 2002

The parish of Trelawny achieved a count of 3,964 persons screened (31.8%) for breast cancer while St. James did 3,014 (58%) cervical smears in 2002 (Table 3.17).

Trelawny made the largest number of referrals (254) for abnormal smears (Table 3.17).

Diseases of the Circulatory System

Table 3.18 Morbidity Profile – Diseases of the Circulatory System: WRHA 2000-2002

| Variables | 2000 | 2001 | 2002 |
|------------------------------|--------|--------|--------|
| PHC Visit | | | |
| - Hypertension | 25,816 | 25,591 | 23,436 |
| - Other C.V. Disease | 2,672 | 2,770 | 3,006 |
| - Chronic Rheumatic Diseases | 1,043 | 1,100 | 984 |

Source: MOH MCSR, 2001; MOH Jamaica Report 2000-2002

There were 2,155 less visits for hypertension and an increase of 236 for other CV diseases to WRHA primary health care facilities in 2002. Visits for Chronic Rheumatic Diseases declined by 116 (Table 3.18).

Table 3.19 Morbidity Profile – Diseases of the Circulatory System: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|--------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| PHC Visit | | | | | | |
| Hypertension | 103,913 | 23,436 | 5,165 | 7,938 | 5,380 | 4,953 |
| Other C.V. Disease | 11,052 | 3,006 | 404 | 917 | 1,226 | 459 |
| Chronic | 4,359 | 984 | 291 | 160 | 477 | 56 |

Source: MOH MCSR 2001, MOH Jamaica Annual Report 2002

In 2002, visits to PHC facilities in WRHA for hypertension represented 22.6% of national visits. While Westmoreland experienced the smallest number of visits for Hypertension (4,953) and Chronic Rheumatic Diseases (56), Hanover had the largest number of visits for the latter (477) (Table 3.19).

Diabetes

Table 3.20 Morbidity Profile – Diabetes: WRHA 2000-2002

| VARIABLES | 2000 | 2001 | 2002 |
|------------------|-------|-------|-------|
| Visits to PHC | 7,163 | 6,902 | 5,876 |
| Leg Ulcer due to | * | 326 | 84 |

Source: MOH MCSR, HMSR MOH Jamaica: Annual Report 2000-2002

*DNA

WRHA 2002 data revealed that visits to PHC facilities in the region for diabetes declined by 1,026 in 2002 (Table 3.20). WRHA programme monitoring data indicate that the average length of stay for hospitalization was 11 days (WRHA Chronic Non-Communicable Disease, Annual Report 2002).

Table 3.21 Morbidity Profile – Diabetes: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|---------------------------|--------|-------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Visits to PHC | 31,225 | 5,876 | 1,188 | 1,742 | 1,190 | 1,756 |
| Leg Ulcer due to diabetes | 633 | 84 | 12 | 40 | 7 | 25 |

Source: MOH MCSR MOH Jamaica Annual Report 2002

Approximately 18.8% of all visits to primary health care facilities for diabetes were made in the WRHA. Hanover managed the smallest number (7) of leg ulcers due to Diabetes (Table 3.21).

Other Monitored Diseases

Table 3.22 Morbidity Profile - Other Monitored Diseases: WRHA 2000-2002

| DISORDERS | VISITS TO PHC | | |
|----------------------------|---------------|--------|--------|
| | 2000 | 2001 | 2002 |
| RTI Excluding Asthma | * | 11,952 | 10,808 |
| Skin Disease | * | 17,293 | 15,919 |
| Musculo-Skeletal Disorders | * | 9,216 | 7,985 |
| Other G.I. Disorders | * | 3,512 | 2,788 |
| Diabetes and Hypertension | 11,432 | 12,607 | 11,977 |

Source: MOH MCSR; HMSR; MOH Jamaica Annual Report 2000-2002

*DNA

The data represents Primary Health Care visits only.

Among the group Other Monitored Diseases, Skin Diseases (15,919), Diabetes and Hypertension (11,977) and RTI excluding Asthma (10,808) were the major illnesses that motivated visits to WRHA primary health care facilities (Table 3.22).

Table 3.23 Morbidity Profile - Other Monitored Diseases: Jamaica, WRHA and Parishes 2002

| DISORDERS | JA | WRHA | PARISHES | | | |
|--|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Respiratory Tract Infections (Except Asthma) | 99,762 | 10,808 | 3,075 | 3,125 | 2,250 | 2,358 |
| Skin Diseases | 101,834 | 15,919 | 4,704 | 4,979 | 3,200 | 3,036 |
| Musculo-Skeletal Diseases | 44,106 | 7,985 | 2,494 | 2,018 | 2,026 | 1,457 |
| Other Gastro-intestinal Disorders | 20,349 | 2,788 | 1,157 | 706 | 550 | 375 |
| Diabetes and Hypertension | 59,100 | 11,977 | 2,378 | 3,759 | 3,421 | 2,419 |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Report 2002

The data represents Primary Health Care visits only.

In 2002, the motivations for national visits for Other Monitored Diseases were somewhat different from what obtained in WRHA and its parishes. Visits to WRHA PHC facilities were mainly for Skin Diseases (15,919) and Diabetes and Hypertension (11,977) and Respiratory Tract Infection (except Asthma)(10,808). All the parishes in the region except Westmoreland registered Skin Diseases as the major cause of visits among the group Other Monitored Diseases (Table 3.23).

3.1.3.4 CHILD AND ADOLESCENT HEALTH

Child Health Profile

Table 3.24 Status of Child Health – Several Variables: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|---|-------------------|--------|--------|
| No. of Live Births – Community | 494 | 378 | 101 |
| - Hospital | 8,874 | 8,593 | 8,103 |
| No. of Still Births – Community | 3 | 2 | 2 |
| - Hospital | 160 | 144 | 153 |
| Low Birth Weight – Community | 43 | 28 | 18 |
| - Hospital | 1,038 | 992 | 822 |
| Exclusive Breastfeeding – 6 weeks | 2,505 | 4,781 | 4,513 |
| - 12 weeks | * | 3,348 | 3,244 |
| % Immunization Coverage (< 1) | | | |
| - BCG | 94.0 | 98.6 | 100.0 |
| - Polio | 90.6 | 98.1 | 90.6 |
| - DPT/DT | 91.1 | 96.0 | 92.0 |
| - HIB | 0.3 | 0.1 | 0 |
| - Hepatitis B | 0.4 | * | 8.1 |
| - MMR (12 – 23 months) | 86.6 | 85.2 | 91.9 |
| Nutrition Status (0-35 months) | | | |
| - Above Normal | 3,953 | 3,836 | 3,780 |
| - Normal | 44,771 | 48,414 | 45,352 |
| - Moderate | 1,616 | 1,485 | 1,201 |
| - Below Normal | 68 | 39 | 41 |
| % Receiving Home Visits | 41.4 | 44.0 | 42.0 |
| Child Health Clinic Visits | * | 68,943 | 63,229 |
| Child Guidance Cases – Total | 309 | 287 | 763 |
| - New | * | 140 | 320 |
| Total Accident & Emergency Cases | 18,988 | 22,775 | 20,783 |

Source: MOH MCSR & HMSR 2000-2002

* DNA

Community births and deaths represent those births and deaths in communities monitored by government health professionals.

When WRHA 2002 data was examined against that of the previous year, there were 767 less live births in WRHA and a total of 155 still births - 2 at the community level (Table 3.24).

The number of low birth weight babies declined at both community (10) and hospital (70) levels and exclusive breastfeeding was less at both 6 and 12 weeks (Table 3.24).

While child guidance cases increased by 566, inclusive of 180 new cases, Accident and Emergency cases fell by approximately 2000 (Table 3.24).

**Table 3.25 Status of Child Health – Several Variables: Jamaica WRHA
And Parishes 2002**

| VARIABLES | JA | WRHA | PARISHES | | | |
|---|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| No. of Live Births – Community | 1,180 | 160 | 57 | 40 | 4 | 59 |
| - Hospital | 41,961 | 8,103 | 657 | 4,499 | 474 | 4,273 |
| No. of Still Births – Community | 11 | 2 | 1 | - | 1 | - |
| - Hospital | 821 | 153 | 14 | 74 | 7 | 58 |
| Low Birth Weight – Community | 90 | 18 | 11 | 3 | 1 | 3 |
| - Hospital | 3,940 | 822 | 75 | 434 | 19 | 294 |
| Exclusive Breastfeeding – 6 weeks | 17,421 | 4,513 | 918 | 1,376 | 378 | 1,541 |
| - 12 weeks | 11,052 | 3,224 | 632 | 929 | 540 | 1,143 |
| % Immunization Coverage (<1) | | | | | | |
| - BCG | 90.3 | 100.0 | 93.8 | 100.0 | 90.7 | 98.8 |
| - Polio | 85.8 | 90.6 | 90.2 | 86.4 | 94.3 | 94.5 |
| - DPT/DT | 89.5 | 92.0 | 90.3 | 89.5 | 94.1 | 95.0 |
| - HIB | 7.4 | 0 | 0 | 0 | 0 | 0 |
| - Hepatitis B | 4.7 | 8.1 | 0 | 21.1 | 0 | 0 |
| - MMR (12 – 23 months) | 85.7 | 91.9 | 95.3 | 92.8 | 86.0 | 91.9 |
| Nutrition Status (0-35 months) | | | | | | |
| - Above Normal | 15,841 | 3,780 | 797 | 1,474 | 547 | 962 |
| - Normal | 202,950 | 45,352 | 8,294 | 1,606 | 8,124 | 12,128 |
| - Moderate | 8,342 | 1,201 | 155 | 375 | 159 | 512 |
| - Below Normal | 221 | 41 | 2 | 22 | 6 | 11 |
| % Receiving Home Visits | 49.0 | 42.0 | 27.3 | 17.2 | 37.9 | 18.7 |
| Child Health Clinic Visits | 280,346 | 63,299 | 11,121 | 23,971 | 10,671 | 17,536 |
| Child Guidance Cases – Total | 2,345 | 763 | - | 763 | - | - |
| - New | 827 | 320 | - | 320 | - | - |
| Total Accident & Emergency Cases | 117,923 | 20,793 | 3,048 | 9,566 | 2,472 | 5,691 |

Source: MOH MCSR, HMSR 2002

Community births and deaths represent those births and deaths in communities monitored by government health professionals.

In year 2002, the WRHA and each of its parishes achieved above the national levels of immunization coverage (Table 3.25).

Just about 18.0% (41) of all cases experiencing below normal nutrition status among 0-35 month olds attending public sector facilities, were in WRHA (Table 3.25).

Child Morbidity Profile

**Table 3.26 Provision and Utilization of Hospital Services (Children):
WRHA 2001-2002**

| VARIABLES | 2001 | 2002 |
|---------------------------------|-------|-------|
| Bed Complement | 86 | 103 |
| Bed Occupancy | 86.3 | 59.6 |
| Average Length of Stay | 6.2 | 6.3 |
| Outpatient Cases - Total | 5,376 | 6,504 |
| - New | 506 | 584 |

Source: MOH HMSR 2001-2002

The bed complement for hospital delivered child health services increased by 17 in 2002 in WRHA and the bed occupancy decreased by 26.7 percent. There were an additional 1,128 cases seen in outpatient clinics (Table 3.26).

**Table 3.27 Provision and Utilization of Hospital Services (Children): Jamaica,
WRHA and Parishes 2002**

| VARIABLES | JA | WRHA | PARISHES | | | |
|-------------------------------|--------|-------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Bed Complement | 731 | 103 | 11 | 62 | 6 | 54 |
| Bed Occupancy Rate | 59.4 | 59.6 | 60.0 | 55.7 | 16.2 | 80.5 |
| Average Length of Stay | 5.1 | 6.3 | 3.4 | 7.4 | 14.8 | 6.1 |
| Outpatient Cases | 58,744 | 6,504 | - | 4,549 | - | 1,955 |
| | 10,379 | 584 | 503 | - | - | 81 |

Source: MOH HMSR 2002

The 2002 data revealed that WRHA had 14% of all public paediatric beds on the island. The parish of Westmoreland had the highest bed occupancy levels (80.5%) among all the parishes. The bed occupancy level for Hanover was 16.2%, and the average length of stay was 14.8 days (Table 3.27).

Child Morbidity

The child morbidity data reflects the national picture.

The under one population comprised 51, 509 persons, 9,046 of whom were discharged from public hospitals. Perinatal conditions (48.7%), Diseases of the Respiratory System (18.4%) and Infectious and Parasitic Diseases (10.6%) continued to be the dominant causes of discharge among this age group. (MOH Jamaica, Annual Report, 2005).

The one to four age group represented 213,585 individuals in the population. Among this age group there were 8,761 discharges from public hospitals for disorders such as Diseases of the Respiratory System (34.8%); Accident and Injuries (16.6%) as well as Infectious and Parasitic Diseases (16.7%)(MOH Jamaica, Annual Report 2002).

When the discharges from among the 293,075 persons in the five to nine age group were examined, the dominant health problems among the 4,911 discharges included Diseases of the Respiratory System (27.6%) and Accident and Injuries (24.7%) (MOH Jamaica, Annual Report, 2002).

CHILD MORTALITY

Table 3.28 Under One Child Mortality: WRHA 2000-2002

| Mortality | 2000 | 2001 | 2002 |
|---|------|------|------|
| Perinatal Mortality Rate/1000 live births | 25.8 | 27.9 | 25.7 |
| Early Neonatal Mortality Rate/1000 live births | 8.2 | 11.6 | 7.3 |
| Foetal Death Rate/1000 live births | 17.7 | 16.5 | 18.5 |

Source: MOH HMSR 2000-2002

Community births and deaths represent those births and deaths in communities monitored by government health professionals.

WRHA data indicated that in 2002, Foetal Death rate per 1,000 increased by 2.0 while Perinatal Mortality rate per 1,000 (25.7) and Early Neonatal Mortality per 1,000 (7.3) registered declines (Table 3.28).

Table 3.29 Under One Child Mortality: Jamaica, WRHA and Parishes 2002

| Mortality | JA | WRHA | PARISHES | | | |
|---|------|------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Perinatal Mortality Rate/1000 live births | 31.1 | 25.7 | 20.9 | 28.4 | 14.6 | 24.1 |
| Early Neonatal Mortality Rate/1000 live births | 12.5 | 7.3 | - | 12.5 | - | 1.2 |
| Foetal Death Rate/1000 live births | 18.9 | 18.5 | 20.9 | 16.2 | 14.6 | 22.9 |

Source: MOH HMSR 2002

Community births and deaths represent those births and deaths in communities monitored by government health professionals.

Child Mortality data for 2002 revealed Perinatal Mortality rates/1,000 live births in excess of 20.0 for all parishes except Hanover (14.6). Westmoreland recorded the highest foetal death rate (22.9) among all the parishes and the figure also exceeded the national level (Table 3.29).

Adolescent Health

Table 3.30 Status of adolescent Health – Several Variables: WRHA 2001-2002

| VARIABLES | 2001 | 2002 |
|---|-------|-------|
| Rheumatic Fever | | |
| - No. with Rheumatic Heart Disease | 1,100 | 984 |
| - No. receiving Prophylaxis | 2,513 | 2,290 |
| Reproductive Health | | |
| - Total Antenatal Visits | 7,391 | 6,813 |
| - 0 – 15 weeks | 502 | 542 |
| - 16 – 28 weeks | 1,093 | 958 |
| - 29 weeks and over | 175 | 146 |
| No. with Hb<10gms/dcl | 201 | 198 |
| - No. Treated | 145 | 131 |
| - No. SS/SC | 17 | 16 |
| No. Syphilis Positive | 24 | 18 |
| - No. Treated | 7 | 8 |
| No. with Pre-eclampsia (PHC) | 33 | 14 |
| % Postnatal Coverage | 21.9 | 21.2 |
| Post Natal Family Planning Acceptors | 1,303 | 1,180 |
| Contraceptive Accepted | | |
| - Pill | 590 | 518 |
| - Injection | 441 | 394 |
| - IUD | 3 | 6 |
| - Condom | 269 | 262 |
| - Dual Method | 428 | 433 |

Source: MOH MCS 2001-2002

WRHA 2002 data revealed that there were 116 less cases of Rheumatic Heart Disease seen at the primary health care level (Table 3.30).

The WRHA was able to treat 131 of the 198 cases of anaemia among pregnant adolescents in 2002 (Table 3.30).

Except for IUD (6) and dual method (433) all other methods of contraception (accepted) fell during 2002 (Table 3.30).

Table 3.31 Status of Adolescent Health – Several Variables: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|---|--------|-------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Rheumatic Fever | | | | | | |
| - No. with Rheumatic Heart Disease | 4,359 | 984 | 291 | 160 | 477 | 56 |
| - No. receiving Prophylaxis | 10,024 | 2,290 | 403 | 102 | 457 | 428 |
| Reproductive Health | | | | | | |
| - Total Antenatal Visits | 34,914 | 6,813 | 1,734 | 1,548 | 1,089 | 2,442 |
| - 0 – 15 weeks | 2,221 | 542 | 121 | 172 | 71 | 178 |
| - 16 – 28 weeks | 5,237 | 958 | 197 | 290 | 131 | 340 |
| - 29 weeks and over | 929 | 146 | 36 | 44 | 25 | 41 |
| No. with Hb<10gms/dcl | 1,027 | 198 | 49 | 43 | 24 | 82 |
| - No. Treated | 583 | 131 | 16 | 17 | 11 | 87 |
| - No. SS/SC | 106 | 16 | 2 | 1 | 4 | 9 |
| No. Syphilis Positive | 59 | 18 | 2 | 9 | 2 | 5 |
| - No. Treated | 26 | 8 | 1 | 4 | 0 | 3 |
| No. with Pre-eclampsia (PHC) | 183 | 14 | 3 | 2 | 5 | 4 |
| % Postnatal Coverage | 21.5 | 21.2 | 23.2 | 19.5 | 19.3 | 23.4 |
| Post Natal Family Planning Acceptors | 5,501 | 1,180 | 258 | 446 | 173 | 303 |
| Contraceptive Accepted | | | | | | |
| - Pill | 2,123 | 518 | 86 | 184 | 97 | 151 |
| - Injection | 2,279 | 394 | 129 | 109 | 37 | 119 |
| - IUD | 17 | 6 | 5 | 1 | - | - |
| - Condom | 1,081 | 262 | 38 | 152 | 39 | 33 |
| - Dual Method | 2,528 | 433 | 135 | 120 | 86 | 98 |

Source: MOH MCSR 2002

In 2002, the largest number of cases of Rheumatic Heart Disease and those receiving prophylaxis were seen in the parish of Hanover. One hundred and ninety eight (198) of the pregnant adolescents with Hb < 10 gms/dl were in the WRHA. The parish of Westmoreland had the largest number (82) (Table 3.31).

The pill (518), injection (394) and dual method (433) were the major contraceptive methods of choice in the region. Users in the parish of Trelawny favoured the injection (129) and dual method (135) (Table 3.31).

Adolescent Morbidity

The data used relate to the national level.

From among the 265,979 males and 263,501 females aged 10 – 19 years in the 2002 Jamaican population, the major causes of discharges per 10,000 population from public hospitals included Obstetric Conditions (176.9) and Accidents and Injuries (42.8) (MOH Jamaica Annual Report 2002).

3.1.3.5 REPRODUCTIVE HEALTH

Table 3.32 Status of Reproductive Health – Several Variables: WRHA 2000-2002

| VARIABLES | 2000 | 2001 | 2002 |
|--|--------|--------|--------|
| Total Antenatal (ANC) Visits | 33,973 | 30,080 | 27,492 |
| Total Anaemia (Hb<10gms/dcl) | * | 16.1 | 17.6 |
| % Treated | * | 72.6 | 60.5 |
| No. S.C/SS | * | 60 | 48 |
| % Syphilis Positive | * | 3.2 | 2.5 |
| % Treated | * | 45.9 | 44.4 |
| No. HIV Positive | * | * | * |
| Eclampsia (Hospital & PHC) | * | 167 | 126 |
| Antepartum Haemorrhage | 23 | 33 | 41 |
| Postpartum Haemorrhage | 287 | 298 | 392 |
| Mothers' Delivered - Hospital | 8,921 | 8,643 | 8,092 |
| - PHC | * | 378 | 162 |
| Deliveries by Trained Persons - Hospital | 8,921 | 8,643 | 8,092 |
| - PHC | * | 354 | 151 |
| C. Section | 986 | 929 | 1,072 |
| Home Visits | * | 5,622 | 4,927 |
| Postnatal Visits (Mothers) | * | 8,505 | 7,973 |
| Postnatal Family Planning Acceptors | 5,546 | 5,499 | 5,065 |
| Contraceptive Acceptors (Selected) | | | |
| - Pill | * | 2,765 | 2,286 |
| - Injection | * | 3,132 | 2,923 |
| - IUD | * | 163 | 156 |
| - Condom | 1,545 | 1,855 | 1,657 |
| - Dual Method | 1,584 | 2,078 | 2,108 |
| Tubal Ligation (Hospital) | 672 | 583 | 695 |

Source: MOH MCSR, HMSR. MOH Jamaica Annual Report 2000-2002

*DNA

Year 2002 data revealed that antenatal visits fell by 2,588 as did the number of SC/SS anaemia (12) (Table 3.32). The number of Postpartum Haemorrhage demonstrated an increasing trend over the 2000-2002 period.

Table 3.33 Status of Reproductive Health – Several Variables: Jamaica WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|--|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total Antenatal (ANC) Visits | 138,828 | 27,492 | 6,364 | 7,056 | 4,959 | 9,113 |
| Total Anaemia (Hb<10gms/dcl) | 13.9 | 17.6 | 14.4 | 17.7 | 17.6 | 19.9 |
| % Treated | 53.2 | 60.5 | 37.5 | 29.6 | 60 | 64.5 |
| No. S.C/SS | 391 | 48 | 3 | 12 | 12 | 21 |
| % Syphilis Positive | 1.4 | 2.5 | 0.8 | 3.8 | 3.2 | 2.2 |
| % Treated | 44 | 44.4 | 37.5 | 29.6 | 60.0 | 64.5 |
| No. HIV Positive | | | | | | |
| Eclampsia (Hospital & PHC) | 106 | 126 | 24 | 39 | 31 | 42 |
| Antepartum Haemorrhage | 217 | 41 | - | 31 | 9 | 1 |
| Postpartum Haemorrhage | 2,427 | 392 | 6 | 227 | - | 154 |
| Mothers' Delivered - Hospital | 42,275 | 8,092 | 58 | 40 | 5 | 59 |
| - PHC | 1,191 | 162 | * | * | * | * |
| Deliveries by Trained Persons - Hospital | 42,275 | 8,092 | 50 | 40 | 4 | 57 |
| - PHC | 1,115 | 151 | * | * | * | * |
| C. Section | 5,382 | 1,072 | 87 | 764 | 0 | 221 |
| Home Visits (Mothers) | 31,987 | 4,927 | 1,189 | 851 | 1,223 | 1,664 |
| Postnatal Visits (Mothers) | 36,018 | 7,973 | 1,276 | 3,114 | 1,228 | 2,355 |
| Postnatal Family Planning Acceptors | 23,762 | 5,065 | * | * | * | * |
| Contraceptive Acceptors (Selected) | | | | | | |
| - Pill | 10,878 | 2,286 | 312 | 928 | 374 | 672 |
| - Injection | 17,349 | 2,923 | 713 | 1,012 | 357 | 841 |
| - IUD | 522 | 156 | 32 | 78 | 10 | 36 |
| - Condom | 7,470 | 1,657 | 220 | 897 | 297 | 243 |
| - Dual Method | 34,134 | 2,108 | 530 | 746 | 370 | 462 |
| Tubal Ligation (Hospital) | 3,024 | 695 | 117 | 382 | - | 196 |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Report -2002

*DNA

The region's percentage of antenatal women with anaemia was 17.6 and 60.5% of these women were treated (Table 3.33).

The parish of Westmoreland had the largest percentage of antenatal women with anaemia (19.9) in the region and it treated 64.5% of these women (Table 3.33).

**Table 3.34 Provision and Utilisation of Hospital Services – Reproductive Health:
WRHA 2000-2002**

| VARIABLES | 2000 | 2001 | 2002 |
|------------------------------------|-------------|-------------|-------------|
| Bed Complement (Obstetric) | 83 | 86 | 85 |
| Bed Occupancy (%) (Obstetric) | 131.6 | 123.1 | 99.8 |
| Average Length of Stay (Obstetric) | 2.6 | 2.7 | 2.7 |
| Hospital Discharges | | | |
| - Obstetric | 11,656 | 10,682 | 11,656 |
| - Genitourinary System | 1,017 | 1,132 | 1,017 |
| Outpatient Clinic Cases | | | |
| - Obstetric - Total | 12,413 | 13,395 | 13,656 |
| - New | 1,788 | 2,160 | 2,147 |
| - Gynaecology - Total | 4,893 | 5,077 | 6,439 |
| - New | 707 | 805 | 1,050 |
| - Urology - Total | 2,719 | 3,114 | 3,179 |
| - New | 491 | 699 | 481 |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2002

In 2002, WRHA obstetric services had a bed occupancy rate of 99.8, discharged 11,656 patients and registered an attendance of 13,656 cases at outpatient clinic (2,147 new) (Table 3.34).

An additional 65 patients attended Outpatient Urology Clinic in 2002, however, there were 218 less new cases (Table 3.34).

**Table 3.35 Provision and Utilization of Hospital Services – Reproductive Health:
Jamaica, WRHA and Parishes 2002**

| VARIABLES | JA | WHRA | PARISHES | | | |
|------------------------------------|--------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Bed Complement (Obstetric) | 657 | 85 | 10 | 44 | 12 | 19 |
| Bed Occupancy (%) (Obstetric) | 67.9 | 99.8 | 38.9 | 117.1 | 35.6 | 134.5 |
| Average Length of Stay (Obstetric) | 2.6 | 2.7 | 1.9 | 2.9 | 2.1 | 2.9 |
| Hospital Discharges | | | | | | |
| - Obstetric | 67,955 | 11,656 | 967 | 6,339 | 861 | 3,489 |
| - Genitourinary System | 6,154 | 1,017 | 96 | 695 | 23 | 203 |
| Outpatient Clinic Cases | | | | | | |
| - Obstetric - Total | 64,548 | 13,656 | - | 11,686 | - | 1,961 |
| - New | 13,266 | 2,147 | - | 2,038 | 3 | 106 |
| - Gynaecology - Total | 28,957 | 6,439 | 25 | 4,767 | - | 1,647 |
| - New | 5,564 | 1,050 | - | 782 | - | 268 |
| - Urology - Total | 16,510 | 3,179 | 150 | 3,029 | - | - |
| - New | 2,437 | 481 | - | 481 | - | - |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2002

The 2002 WRHA data revealed that in relation to obstetrics the parish of Westmoreland had a bed occupancy rate of 134.5% and discharged 3,489 patients, just about 30% of the region's discharges (Table 3.35).

Table 3.36 Morbidity Profile – Reproductive Health: WRHA 2000-2002

| VARIABLES | 2000 | 2001 | 2002 |
|---|-------|--------|--------|
| PHC Visits for: | | | |
| - Diseases of the Genitourinary System & Gynaecological Conditions: | * | | |
| - Total | * | 18,245 | 16,141 |
| - Urinary | * | 1,988 | 1,704 |
| - STI (Except PID) | * | 11,982 | 10,706 |
| - PID | * | 1,042 | 854 |
| - Other Gynaecological Conditions | * | 3,223 | 2,877 |
| Accident & Emergency Cases: | | | |
| - Obstetric/Gynaecology | 7,468 | 9,011 | 8,764 |
| - Genito-Urinary | 2,683 | 3,000 | 2,881 |
| Surgical Interventions: | | | |
| - Obstetric: - Total | 2,404 | 2,091 | 2,677 |
| - Emergency | 1,350 | 1,092 | 1,290 |
| - Elective | 1,054 | 999 | 1,387 |
| - Other Gynaecological: | | | |
| - Total | 589 | 717 | 692 |
| - Emergency | 136 | 164 | 98 |
| - Elective | 453 | 553 | 594 |
| - Urology - Total | 176 | 191 | 150 |
| - Emergency | 15 | 9 | 12 |
| - Elective | 161 | 182 | 138 |

Source: MOH Jamaica Annual Report 2000-2002

*DNA

Of the 16,141 visits to WRHA primary health care facilities for reproductive health care in 2002, 10,706 visits were for STI (except PID) (Table 3.36). Cases seen in Accident and Emergency for Ob/Gyn conditions numbered 8,764 – 247 less than in 2001 (Table 3.36).

Table 3.37 Morbidity Profile – Reproductive Health: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|---|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| PHC Visits for: | | | | | | |
| - Diseases of the Genitourinary System & Gynaecological Conditions: | | | | | | |
| - Total | 103,901 | 16,141 | 3,070 | 9,392 | 1,502 | 2,176 |
| - Urinary | 13,996 | 1,704 | 483 | 652 | 268 | 301 |
| - STI (Except PID) | 64,054 | 10,706 | 1,800 | 7,637 | 176 | 1,092 |
| - PID | 7,042 | 854 | 204 | 243 | 215 | 192 |
| - Other Gynaecological Conditions | 8,809 | 2,877 | 583 | 860 | 843 | 591 |
| Accident & Emergency Cases: | | | | | | |
| - Obstetric/Gynaecology | 27,900 | 8,764 | 4,880 | 4,948 | 627 | 2,309 |
| - Genito-Urinary | 18,743 | 2,881 | 211 | 1,680 | 369 | 621 |
| Surgical Interventions: | | | | | | |
| - Obstetric: | | | | | | |
| - Total | 8,466 | 2,671 | 22 | 978 | 67 | 716 |
| - Emergency | 4,426 | 1,290 | 18 | 978 | 0 | 294 |
| - Elective | 3,901 | 1,387 | 4 | - | 67 | 690 |
| - Other Gynaecological: | | | | | | |
| - Total | 6,669 | 692 | 96 | 543 | - | 223 |
| - Emergency | 1,591 | 98 | 26 | 56 | - | 16 |
| - Elective | 3,954 | 594 | 70 | 364 | - | 160 |
| - Urology: | | | | | | |
| - Total | 2,625 | 150 | - | 166 | - | 160 |
| - Emergency | - | 12 | 3 | 9 | - | - |
| - Elective | - | 138 | 3 | 135 | - | - |

Source: MOH Jamaica Annual Report 2002

The 2002, WRHA data demonstrated that the parish of St. James remained dominant in all of the identified morbidity variables for reproductive health (Table 3.37).

3.1.3.6 MENTAL HEALTH

Table 3.38 Status of Mental Health – Several Variables: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|--|-------------------|-------|-------|
| Total Visits to PHC | * | 6,176 | 6,483 |
| Total cases seen in A&E | 1,535 | 1,671 | 1,544 |
| Total Hospital Discharges | 506 | 419 | 814 |
| Average Length of Stay | 9.5 | 16.7 | 19.0 |
| Total CMH Clinic Cases | 2,863 | 4,125 | * |
| CMH Admissions to Hospital | * | 46 | 33 |
| Home Visits | | | |
| - Total Cases | * | 1,745 | 1,297 |
| - Emergency | * | 141 | 102 |
| Outpatient Clinic | | | |
| - Total | 5,310 | 6,756 | 6,794 |
| - New Cases | 297 | 232 | 386 |
| Child Guidance Clinic - Total Cases | 309 | 375 | 673 |
| OPD Clinic Cases - New | 0 | 140 | 320 |
| Attempted Suicide Seen in A&E: | 32 | 23 | 14 |
| 10 – 19 age group[| 5 | 16 | 10 |
| 20 – 29 -do- | 5 | 4 | 2 |
| 30 – 44 -do- | 15 | 1 | 2 |
| 45 – 64 -do- | 4 | 1 | - |
| 65 & over -do- | 3 | 0 | - |
| Age Unknown | 0 | 1 | - |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2002, WRHA CMH Reports 2002

*DNA

WRHA data revealed that in 2002, there were 307 more visits to PHC for mental health problems than in 2001. However, 127 less cases were seen in A&E. Hospital discharges increased by 395 (Table 3.38)

There were 14 cases of attempted suicide, 9 less than in 2001. The 10-19 age group had 10 cases (Table 3.38).

Outpatient care was delivered from hospitals, 37 clinic locations, infirmaries and non-government organizations and a total of 6,794 cases were managed in hospitals (Table 3.38).

Table 3.39 Status of Mental Health – Several Variables: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|---|--------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total Visits to PHC | 29,006 | 6,483 | 1,206 | 2,053 | 1,759 | 1,485 |
| Total cases seen in A&E | 3,211 | 1,544 | 67 | 1,068 | 86 | 323 |
| Total Hospital Discharges | 4,066 | 814 | 133 | 506 | 21 | 149 |
| Average Length of Stay | * | 19.0 | 7.1 | 22.9 | 5.4 | 7.5 |
| Total CMH Clinic Cases | * | * | * | * | * | 4,437 |
| CMH Admissions to Hospital | * | * | * | * | * | * |
| Home Visits | - | * | 1,297 | * | * | 369 |
| Total Cases | - | * | 102 | * | 58 | 11 |
| Emergency | - | * | 102 | * | 58 | 11 |
| Outpatient Clinic | - | 27,169 | 6,794 | 165 | 4,548 | - |
| Total | - | 27,169 | 6,794 | 165 | 4,548 | 2,081 |
| New Cases | - | 2,590 | 386 | 7 | 331 | - |
| Child Guidance Clinic | - | 2,345 | 673 | - | 763 | - |
| Total Cases | - | 2,345 | 673 | - | 763 | - |
| OPD Clinic Cases | - | 827 | 320 | - | 320 | - |
| New | - | 827 | 320 | - | 320 | - |
| Attempted Suicide Seen in A&E: | 170 | 14 | - | 6 | 1 | 7 |
| 10 – 19 | 59 | 10 | - | 5 | 1 | 4 |
| 20 – 29 | 64 | 2 | - | 1 | - | 1 |
| 30 – 44 | 33 | 2 | - | - | - | 2 |
| 45 – 64 | 5 | - | - | - | - | - |
| 65 & over | 5 | - | - | - | - | - |
| Age Unknown | 4 | - | - | - | - | - |

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2002, WRHA CMH Reports

Year 2002 data revealed that there were 6,483 visits to WRHA PHC facilities for psychiatric care, approximately 22.3% of national visits.

The parish of St. James maintained dominance in terms of cases seen in both outpatient and child guidance clinics. With regard to attempted suicides, Westmoreland registered 50% of all cases in the region (Table 3.39).

Table 3.40 Morbidity Profile – Community Mental Health: WRHA 2000-2002

| CONDITIONS | 2000 | 2001 | 2002 |
|---|-------------|-------------|-------------|
| Psychotic Disorders | 1,500 | 2,000 | * |
| - On Register | * | 1,679 | 1,913 |
| - % Receiving Consistent | * | 73.3 | 84.0 |
| Mood Disorders | 500 | 525 | 74 |
| Organic Mental Disorder/Anxiety | * | * | * |
| Disorders of Childhood & Adolescence | 147 | 866 | * |
| Post Traumatic Disorders | * | * | * |
| Other Disorders | * | * | * |
| Substance Abuse Cases | 150 | 150 | 44 |
| - Rehabilitation | | | |
| - No. Screened | * | 44 | * |
| - No. Admitted | * | 30 | * |
| - No. Drop Out | * | 21 | * |
| - No. Graduating | * | 3 | * |
| - Recidivism | * | * | * |

Source: WRHA CMH Report; MOH Jamaica, Annual Report 2000-2002

*DNA

There were an additional 234 clients with psychiatric disorders on register in 2002 and 84% of the total figure received consistent care (Table 3.40).

3.1.3.7 EMERGENCY HEALTH SERVICES

Table 3.41 Status of Emergency Health Services – Several Variables: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|--|----------------|---------|---------|
| Primary Health Care Visits for Injuries | 9,529 | 6,898 | 6,268 |
| Casualty/A&E Attendance Total | 129,289 | 137,163 | 136,649 |
| - % Receiving Care | 94.7 | 96.5 | 94.6 |
| - Admitted | 14,213 | 15,805 | 13,948 |
| Treatments Given in Casualty | | | |
| - Total | 193,957 | 212,469 | 220,598 |
| - Sutures | 6,726 | 7,524 | 6,550 |
| - Dressing | 11,393 | 13,799 | 11,239 |
| - Injection | 59,447 | 66,566 | 62,403 |
| - Nebulization | 35,383 | 34,210 | 36,636 |
| - Other | 76,116 | 84,984 | 98,784 |
| Leading Emergency Surgeries | | | |
| - Total Cases | 2,761 | 2,542 | 2,533 |
| - General Surgery | 907 | 819 | 761 |
| - Specialist: | | | |
| - Obstetric | 1,350 | 1,092 | 1,290 |
| - Emergency Tubal Ligation | 58 | 79 | 3 |
| - Other Gynaecological | 136 | 164 | 98 |
| - Urology | 15 | 9 | 12 |
| - Orthopaedic | 137 | 198 | 193 |
| - Dental | 16 | 33 | 3 |
| - ENT | 99 | 98 | 109 |
| - Eye | 36 | 45 | 51 |
| - Plastic | 7 | 3 | 2 |
| - Other | - | 2 | 10 |
| Minor Operations (Casualty) | 4,892 | 5,422 | 4,886 |

Source: MOH MCSR, HMSR 2002-2002, WRHA CMH Report

The 2004 WRHA data indicated that visits to its primary health care facilities declined by 630 and total A&E attendance by 514. Despite the decline in A&E attendance, treatments given increased by 8,129 with increases in nebulisation and other treatments (Table 3.41).

Chief among the 2,533 cases of emergency surgery were obstetric cases (1,290) and general surgery (761) (Table 3.41).

Table 3.42 Status of Emergency Health Services –Several Variables Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|--|---------|---------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Primary Health Care Visits for Injuries | 27,190 | 6,268 | 1,487 | 2,497 | 1,114 | 1,170 |
| Casualty/A&E Attendance Total | 695,239 | 136,649 | 17,603 | 6,402 | 15,665 | 39,339 |
| - % Receiving Care | 97.9 | 94.6 | 95.0 | 95.6 | 96.4 | 92.0 |
| - Admitted | 94,074 | 13,948 | 1,525 | 7,999 | 386 | 4,038 |
| Treatments Given in Casualty | | | | | | |
| - Total | 678,790 | 220,598 | 9,804 | 143,392 | 11,329 | 56,073 |
| - Sutures | 25,851 | 6,550 | 466 | 3,032 | 1,016 | 2,036 |
| - Dressing | 78,042 | 11,239 | 1,664 | 2,341 | 4,339 | 2,895 |
| - Injection | 225,812 | 62,403 | 3,244 | 38,889 | 3,788 | 18,482 |
| - Nebulization | 137,389 | 36,636 | 2,053 | 20,199 | 1,624 | 12,750 |
| - Other | 196,496 | 98,784 | 2,229 | 78,195 | - | 18,360 |
| Leading Emergency Surgeries | | | | | | |
| - Total Cases | 14,082 | 2,533 | 150 | 1,943 | - | 440 |
| - General Surgery | 5,102 | 761 | 84 | 548 | - | 129 |
| - Specialist: | | | | | | |
| - Obstetric | 4,426 | 1,290 | 18 | 978 | - | 294 |
| - Emergency Tubal Ligation | 349 | 3 | 3 | - | - | - |
| - Other Gynaecological | 1,591 | 98 | 26 | 56 | - | 16 |
| - Urology | 94 | 12 | 3 | 9 | - | - |
| - Orthopaedic | 1,130 | 193 | 13 | 179 | - | 1 |
| - Dental | 21 | 3 | - | 3 | - | - |
| - ENT | 566 | 109 | - | 109 | - | - |
| - Eye | 930 | 51 | - | 51 | - | - |
| - Plastic | 62 | 2 | - | 2 | - | - |
| - Other | 302 | 10 | 3 | 7 | - | - |
| Minor Operations (Casualty) | 15,200 | 4,886 | 138 | 2,736 | 462 | 1,550 |

Source: MOH MCSR, HMSR 2002, WRHA CMH Report

The data revealed that while 136,649 persons sought care in WRHA Casualty facilities, 94.6% received care – 3.3% below national level figures (Table 3.42).

The parish of St. James managed 1,943 emergency surgical interventions, 978 of which were for obstetrics (Table 3.42).

**Table 3.43 Morbidity Profile in Public Hospital A&E Departments:
WRHA 2000-2002**

| CONDITION TREATED | Base Year 2000 | 2001 | 2002 |
|---------------------------------|-------------------|--------|--------|
| Gastroenteritis | * | 3,137 | 4,360 |
| URTI | 5,887 | 6,919 | 5,579 |
| LRTI | 1,606 | 1,676 | 1,667 |
| Asthma | 6,364 | 6,119 | 6,719 |
| Medical Conditions | 37,489 | 42,689 | 39,850 |
| Surgical Conditions | 15,433 | 16,691 | 14,762 |
| Ob/Gyn. Conditions | 7,468 | 9,011 | 8,764 |
| GU Conditions | 2,468 | 3,000 | 2,881 |
| Paediatric | 2,683 | 22,775 | 20,783 |
| Psychiatric Conditions | 1,535 | 1,671 | 1,544 |
| Psychiatric Crisis Intervention | * | 141 | * |
| Intentional – PHC | 1,299 | 862 | 668 |
| Total – Casualty | 6,372 | 6,720 | 6,808 |
| Unintentional – PHC | 8,230 | 6,036 | 5,600 |
| Total Casualty | 10,275 | 12,148 | 10,505 |

Source: MOH: MCSR, HMSR 2000-2002

*DNA

Data relating to the conditions seen in public A&E departments in WRHA in 2002 revealed that medical conditions (39,850 cases) though declining by 2,839 continued to be the major condition treated at WRHA. Twenty thousand seven hundred and eighty three (20,783) paediatric cases were treated (Table 3.43).

Surgical conditions decreased by 1,929 cases (Table 3.43).

Cases of intentional injuries seen in A&E demonstrated continuing increases over the year 2000, (348 in 2001) and 88 in 2002 (Table 3.43).

Table 3.44 Morbidity Profile in Public Hospital A&E Departments: Jamaica, WRHA and Parishes 2002

| CONDITION TREATED | JA | WRHA | PARISHES | | | |
|---------------------------------|---------|--------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Gastroenteritis | 23,825 | 4,360 | 509 | 2,349 | 410 | 1,092 |
| URTI | 30,055 | 5,579 | 784 | 2,857 | 365 | 1,573 |
| LRTI | 8,207 | 1,667 | 559 | 494 | 47 | 567 |
| Asthma | 38,964 | 6,719 | 796 | 3,843 | 747 | 1,333 |
| Medical Conditions | 229,300 | 39,850 | 4,534 | 15,870 | 7,234 | 12,212 |
| Surgical Conditions | 42,027 | 14,762 | 3,122 | 11,050 | 105 | 5,485 |
| Ob/Gyn. Conditions | 28,053 | 8,764 | 880 | 4,948 | 627 | 2,309 |
| GU Conditions | 18,743 | 2,881 | 211 | 1,680 | 369 | 621 |
| Paediatric | 117,923 | 20,783 | 3,048 | 9,566 | 2,478 | 5,591 |
| Psychiatric Conditions | 3,211 | 1,544 | 67 | 1,068 | 86 | 323 |
| Psychiatric Crisis Intervention | * | * | * | * | * | * |
| Injuries: | | | | | | |
| - Intentional - PHC | 3,426 | 668 | 287 | 165 | 77 | 119 |
| - Total - Casualty | 34,935 | 6,808 | 835 | 3,061 | 994 | 1,910 |
| - Unintentional - PHC | 23,764 | 5,600 | 1,200 | 2,312 | 1,037 | 1,051 |
| - Total Casualty | 44,998 | 10,505 | 1,381 | 4,423 | 1,676 | 3,025 |

Source: MOH: MCSR, HMSR 2002

*DNA

In 2002, of the 1,667 cases of LRTI managed in WRHA A&E, 567 and 559 were in the parishes of Westmoreland and Trelawny respectively (Table 3.44).

Of the 34,935 cases of intentional injuries managed in national A&E departments, 19.5% were in the WRHA (Table 3.44).

**Table 3.45 Profile of Injuries Treated in Public A&E Departments:
WRHA 2000-2002**

| Injuries by Type | Base Year 2000 | 2001 | 2002 |
|----------------------|-------------------|-------|-------|
| Intentional | | | |
| - Stab Wound | 480 | 610 | 513 |
| - Gunshot | 117 | 135 | 171 |
| - Blunt Injury | 2,639 | 2,716 | 2,844 |
| - Sexual Assault | 252 | 283 | 250 |
| - Laceration | * | 2,262 | 2,044 |
| - Bite (Human) | 122 | 99 | 93 |
| - Burns | 13 | 14 | 4 |
| - Attempted Suicide | 34 | 23 | 17 |
| - Other | 369 | 608 | 864 |
| Unintentional | | | |
| - MVA | 2,547 | 3,002 | 2,702 |
| - Lacerations | 4,713 | 4,692 | 2,726 |
| - Bites | 680 | 832 | 944 |
| - Burns | 332 | 390 | 298 |
| - Poisoning | 255 | 285 | 271 |
| - Falls | * | 2,940 | 3,562 |
| - Near Drowning | * | 8 | 2 |

Source: MOH: HMSR 2000-2002

*DNA

When compared to the base year (2000) Blunt Injuries and Lacerations continued to be major cases of intentional injuries seen in the WRHA A&E facilities in 2002 (Table 3.45).

Falls (3,562 cases) and Lacerations (2,726 cases) were the leading unintentional injuries managed in the region (Table 3.45).

3.46 Profile of Injuries Treated in Public A&E Departments: Jamaica, WRHA and Parishes 2002

| Injuries by Type | JA | WRHA | PARISHES | | | |
|----------------------|--------|-------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Intentional | | | | | | |
| - Stab Wound | 3,210 | 513 | 48 | 254 | 53 | 158 |
| - Gunshot | 1,190 | 171 | 6 | 117 | 17 | 31 |
| - Blunt Injury | 15,314 | 2,844 | 497 | 2,168 | 229 | 850 |
| - Sexual Assault | 1,487 | 250 | 13 | 112 | 42 | 83 |
| - Laceration | 9,373 | 2,044 | 143 | 886 | 406 | 609 |
| - Bite (Human) | 455 | 93 | 13 | 45 | 13 | 22 |
| - Burns | 54 | 4 | - | - | 1 | 3 |
| - Attempted Suicide | 178 | 17 | - | 9 | 1 | 7 |
| - Other | 3,674 | 864 | 115 | 370 | 1,232 | 147 |
| Unintentional | | | | | | |
| - MVA | 12,484 | 2,702 | 316 | 1,227 | 347 | 812 |
| - Lacerations | 14,000 | 2,726 | 418 | 773 | 654 | 881 |
| - Burns | 1,785 | 298 | 46 | 136 | 48 | 68 |
| - Bites | 4,376 | 944 | 208 | 340 | 127 | 269 |
| - Poisoning | 1,075 | 271 | 25 | 132 | 38 | 76 |
| - Falls | 11,247 | 3,562 | 368 | 1,814 | 462 | 918 |
| - Near Drowning | 31 | 2 | - | 1 | - | 1 |

Source: MOH: HMSR 2002

The WRHA continued to manage intentional and unintentional injuries in its A&E departments. During 2002, the parish of Trelawny recorded the lowest number of cases of intentional injuries except for Blunt Injuries (497) (Table 3.46).

Trelawny also recorded the lowest numbers of cases of unintentional injuries except for bites (208) and Falls (368) (Table 3.46).

3.2 MORTALITY

3.2.1 MORTALITY PROFILE

Table 3.47 Mortality Profile: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|---|-------------------|------|------|
| Inpatient Deaths | 858 | 953 | * |
| Casualty Deaths | 134 | 133 | 164 |
| Anaesthetic Deaths | 0 | 0 | 0 |
| Still Births - Total | 163 | 146 | 155 |
| - Hospital | 160 | 144 | 153 |
| - Community | 3 | 2 | 2 |
| Foetal Death Rate/1,000 live births | 17.7 | 16.5 | 18.5 |
| Early Neonatal Death Rate/1,000 live births | 8.2 | 11.6 | 7.3 |
| Perinatal Death Rate/1,000 live births | 25.8 | 27.9 | 25.7 |
| Infant Death Rate/1,000 live births | * | * | * |
| Maternal Deaths (Total) | 10 | 5 | 8 |
| - in Community | 2 | 0 | 0 |
| - in Hospital | 8 | 5 | 8 |
| Maternal Death Rate/100,000 live births | 90.0 | 57.9 | 98.9 |

Source: MCSR, HMSR 2002-2002

*DNA

Community births and deaths represent those births and deaths in communities monitored by government health professionals.

WRHA 2000 data demonstrated an increase in casualty deaths when compared to the previous years. There were 8 maternal deaths (hospital) in the region (Table 3.47).

Table 3.48 Mortality Profile: Jamaica, WRHA and Parishes 2002

| VARIABLES | JA | WRHA | PARISHES | | | |
|---|-------|------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Inpatient Deaths | 6,738 | * | 106 | 668 | 82 | * |
| Casualty Deaths | 797 | 164 | 8 | 97 | 27 | 32 |
| Anaesthetic Deaths | - | - | - | - | - | - |
| Still Births - Total | 832 | 155 | 15 | 74 | 8 | 58 |
| - Hospital | 821 | 153 | 14 | 74 | 7 | 58 |
| - Community | 11 | 2 | 1 | - | 1 | - |
| Foetal Death Rate/1,000 live births | 19.2 | 18.5 | 20.9 | 16.2 | 14.6 | 22.9 |
| Early Neonatal Death Rate/1,000 live births | 12.5 | 7.3 | - | 12.5 | - | 1.2 |
| Perinatal Death Rate/1,000 live births | 31.4 | 25.7 | 20.9 | 28.4 | 14.6 | 24.1 |
| Infant Death Rate/1,000 live births | 19.9 | - | - | - | - | - |
| Maternal Deaths (Total) | 33 | 8 | - | 7 | - | 1 |
| - in Community | 2 | - | - | - | - | - |
| - in Hospital | 31 | 8 | - | 7 | - | 1 |
| Maternal Death Rate/100,000 live births | 73.3 | 98.9 | - | 155.3 | - | 40.0 |

Source: MOH: MCSR, HMSR 2002

*DNA

Community births and deaths represent those events monitored by public sector health professionals.

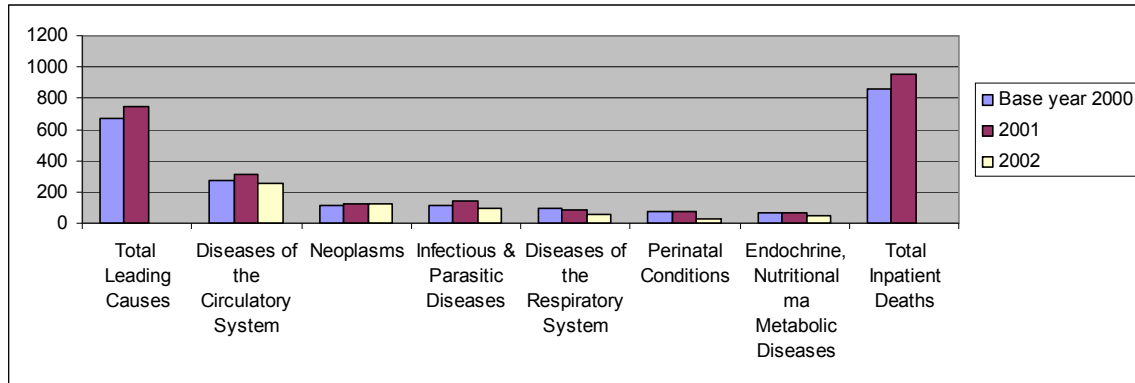
There were discrepancies in the number of inpatient deaths in the parish of Westmoreland in 2002. The total WRHA inpatient deaths have therefore been omitted.

Approximately 20.5% (164) of all casualty deaths occurred in WRHA in 2002 (Table 3.48).

In 2002, eight (8) maternal deaths were in WRHA with the majority (7) being in St. James (Table 3.48).

3.2.2 INPATIENT MORTALITY

Figure 3.1 Inpatient Deaths in Public Hospitals by Five Leading Diagnoses – WRHA 2000-2002



Source: MOH – HIS 2000-2002

There were gaps in the 2002 WRHA inpatient mortality data. The available data reflect questionable changes in the rank order of the leading causes of death when compared to the previous years. While Diseases of the Circulatory System continued to be the leading cause (257), Neoplasm occupied the second place (123), replacing Infectious and Parasitic Diseases (93)(Figure 3.1) (TABLE B1),

Table 3.49 Inpatient Deaths in Public Hospital by Five Leading Diagnoses, Jamaica, WRHA and Parishes 2002

| DIAGNOSES | JA | WRHA | PARISHES | | | |
|---|-------|------|----------|-----------|---------|--------------|
| | | | Trelawny | St. James | Hanover | Westmoreland |
| Total Inpatient Deaths | 8,428 | * | 101 | 618 | 74 | D |
| Total Inpatient Deaths based on 5 Leading Diagnoses | 5,793 | * | 94 | 416 | 68 | A |
| Diseases Circulatory System | 2,010 | 257 | 47 | 169 | 41 | T |
| Neoplasms | 921 | 123 | 22 | 93 | 8 | A |
| Infectious and Parasitic | 801 | 93 | 12 | 76 | 5 | |
| Diseases of the Respiratory | 943 | 60 | 12 | 43 | 5 | G |
| Perinatal Conditions | 542 | 28 | 0 | 28 | 0 | A |
| Endocrine, Nutritional and Metabolic Diseases | 576 | 45 | 1 | 35 | 9 | P |
| | | | | | | S |

Source: MOH, HMSR 2002

*DNA

There were gaps in WRHA's mortality data and thus the total inpatient deaths and the specific parish data has been omitted from the data set (Table 3.49).

4.0 PERFORMANCE

4.0 PERFORMANCE/ACHIEVEMENT BASED ON SERVICE LEVEL AGREEMENT (SLA)

The WRHA signed a Service Level Agreement with the Ministry of Health to achieve the objectives outlined below:

OBJECTIVES

1. Provide quality preventive, curative, rehabilitative care that is accessible, reliable and affordable through:-
 - Improvements in:-
 - Environmental health
 - Dental health
 - The control of communicable disease
 - The control of sexually transmitted infections
 - The control of chronic non-communicable diseases
 - Reproductive health including family planning
 - Mental health care.
 - Decrease in morbidity and mortality among children, adolescents and women.

The accompanying tables represent the performance matrix which is a mix of the specific SLA's and other achievements.

Table 4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2002

4.1A MANAGEMENT

| INDICATORS | Base Year 2000 | Target 2005 | ACHIEVEMENTS | |
|--|-------------------|----------------|--------------|--------|
| | | | 2001 | 2002 |
| No. of Internal Audits | * | * | * | * |
| Finance (FAA Act) | | | | |
| - No. of Audit Queries | * | * | * | 12 |
| - No. of Audit Queries satisfactorily resolved | * | * | * | 9 |
| - No. of Audit Queries pending/outstanding | * | * | * | 7 |
| Cost Containment | * | * | * | * |
| - Administrative cost as a % of budget | * | 6.0 | 5.0 | 4.0 |
| - Staff cost as a % of total service delivery cost | * | 73.0 | 85.0 | 86.0 |
| - Annual costs \$'000 (Actual) | * | * | * | |
| - Rental | * | * | 1,683 | 2,247 |
| - Utilities | * | * | 46,156 | 65,415 |
| - Petrol | * | * | * | 2,312 |
| - Fee collection as a % of billing (excluding indigent) | * | <55.0 | 72.0 | 65.0 |
| - Billing as a % of services rendered | * | <95.0 | 97.0 | 94.0 |
| - X-Ray films | * | * | 8,802 | 8,395 |
| Human Resource (Percentage) | | | | |
| - Human Resource Planning Career Path | * | 50.0 | 25.0 | * |
| - Succession Planning | * | * | * | * |
| - Training Plan | * | * | * | * |
| - Maintain/improve recruitment, Selection, Promotion, Transfer Standards | 100.0 | * | 100.0 | * |
| - Personnel files to be current on appropriate database | 80.0 | * | 60.0 | * |
| - Health and Safety | 80.0 Compliance | | 50.0 | * |
| - Performance Incentive Scheme | 50.0 Compliance | | - | * |
| - Consistent Attendance | 100.0 | * | 60.0 | * |
| - Absenteeism excluding approved leave | 3.0 | * | * | * |
| - Ensure compliance for professional registration/re-certification | 100.0 | * | 100.0 | * |
| - Annual performance appraisal | 75.0 | * | - | 81.8 |
| Industrial Relations (Percentage) | | | | |
| - Management and Supervisory personnel on point with grievance procedures and its implementation | * | 100.0 | 100.0 | * |
| - Maintain harmonious employee relations to minimise disruption of services | * | * | * | * |
| - Compensation and benefits implemented in accordance with government standards and statutory bodies | * | 100.0 | 100.0 | * |

Source: MOH, SLA Data – 2001, 2002; WRHA Reports 2000-2002

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4.1A MANAGEMENT (Cont'd)

| INDICATORS | Base Year 2000 | Target 2005 | ACHIEVEMENTS | |
|--|----------------|-------------|--------------|-------|
| | | | 2001 | 2002 |
| The Infrastructure | | | | |
| Maintenance - Plan | * | * | * | * |
| - All activities | * | * | 2,486 | 2,989 |
| PPM Programme - % Vehicles | * | * | 100.0 | 32.1 |
| - % Critical equipment | * | * | 40.0 | * |
| PPM Activities - Critical equipment | * | * | 487 | * |
| % Downtime (Annual) | * | * | | |
| - Standby Generators | * | * | 4.0 | 10.0 |
| - Elevators | * | * | 15.0 | 17.5 |
| - Boilers | * | * | 3.0 | 6.5 |
| - Laboratory Equipment | * | * | 8.0 | 7.5 |
| - X-ray Equipment | * | * | 4.0 | 5.0 |
| - Anaesthetic Equipment | * | * | 5.0 | 5.0 |
| - Autoclave/Sterilizer | * | * | 14.0 | 18.7 |
| - Operating Table | * | * | 9.0 | 6.6 |
| - Operating Theatre Lights | * | * | 9.0 | 8.3 |
| - Operating Theatre Lights | * | * | 5.0 | * |
| - Laundry Equipment | * | * | 23.0 | 30 |
| - Central Air Conditioning | * | * | 21.0 | 28.3 |
| - Incinerator | * | * | 14.0 | 12.5 |
| Average annual downtime – vehicles (days) | * | * | 22.0 | 32.1 |
| Quality Assurance | | | | |
| - Clients Charter | * | * | * | |
| - Developed | * | * | * | |
| - Operational | * | * | * | * |
| - Development of Benchmarks | * | * | * | * |
| Average waiting time - Health Centre | * | * | * | * |
| - Hospital A&E | * | * | * | * |
| - OPD | * | * | * | * |
| - For specialist care: | * | * | * | * |
| - Consultation | * | * | * | * |
| - Surgery | * | * | * | * |
| - % satisfied patients | * | * | * | * |
| Risk Management | | | | |
| - Total no. of complaints | * | * | 98 | * |
| - No. of complaints acknowledged within 7 working days | * | * | | * |
| - No. of complaints satisfactorily resolved | * | * | 75 | * |
| - No. of complaints pending | * | * | 23 | * |
| - No. of complaints resulting in litigation | * | * | * | * |
| No. of: | | | | |
| - Falls | * | * | * | * |
| - Wound Infection (Post operative) | 15 | * | 22 | 17 |
| - Prescription errors | * | * | * | * |
| - Dispensing errors | * | * | * | * |
| - Medication (Administration) errors | * | * | * | * |
| - Bedsores | * | * | * | * |
| - Medical record without summaries | * | * | 7,341 | 9,199 |

Source: MOH, HMSR; WRHA Reports 2000-2002

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4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2002

4.1B SERVICE DELIVERY

| INDICATORS | Base Year 2002 | Target 2005 | YEAR | |
|--|-------------------|----------------|--------|--------|
| | | | 2001 | 2002 |
| Visits | | | | |
| - Health Centre Referrals to A&E | * | * | * | * |
| - % Self Referral to A&E | * | * | * | * |
| - Ratio of PHC to A&E (Referral) | * | * | * | * |
| - Attendance for - Asthma (All) A&E | 6,364 | * | 6,119 | 6,719 |
| - Dressing (All) A&E | 11,393 | * | 13,799 | 11,239 |
| % Availability Critical Drugs – PHC | * | 60.0 | * | * |
| - IV Fluids | * | * | * | * |
| - Antibiotics | * | * | * | * |
| - % VEN List Drugs Available (PHC) | * | * | * | * |
| - Average Stock Out Rte (PHC) | * | * | * | * |
| - For Chronic Diseases | * | * | * | * |
| - Asthma/RTI | * | * | * | * |
| - Cancer | * | * | * | * |
| - Cardiovascular | * | * | * | * |
| - Diabetes | * | * | * | * |
| Surgery | | | | |
| - Total | 9,560 | * | 10,108 | 11,452 |
| - Elective | 4,633 | * | 4,767 | 4,555 |
| - Day | 2,088 | > 5% | 2,781 | 3,910 |
| - No. of eye operations | * | >5% | 514 | 427 |
| - % Abstract completed in x days | * | * | * | * |
| - Discharge | * | * | * | * |
| - Deaths | 100.0 | 100.0 | * | * |

Source: MOH; MCSR; HMSR; MOH Jamaica, Annual Report 2000-2002

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4.1C DENTAL HEALTH

| INDICATORS | Base Year 2000 | Target 2005 | 2001 | 2002 |
|--------------------------|-------------------|----------------|--------|--------|
| DMF Index | * | * | | |
| - Restorative procedures | * | * | 27,179 | 24,604 |
| - Extractions | * | * | 13,403 | 9,320 |

Source: MOH MCSR 2000-2002

*DNA

4.1 PERFORMANCE/ACHIEVEMENTS – WRHA 2000-2002

4.1D ENVIRONMENTAL HEALTH

| INDICATORS | Base Year 2000 | Target 2005 | ACHIEVEMENTS | |
|--|-------------------|----------------|--------------|------|
| | | | 2001 | 2002 |
| % Access to potable water | 79.0 | * | 77.0 | 77.0 |
| % Waste water plants inspected and sampled | * | * | | * |
| % Tourist Establishments Health Certified | * | 70.0 | 31.5 | * |
| % Food Handling Establishments Certified | * | 70.0 | * | 68.5 |
| % New Applicants issued with Food Handlers Permit within 3 weeks | * | * | * | * |
| % Food Borne illnesses investigated within 2 weeks | * | * | * | * |
| % Institution Satisfactory | | | | |
| - School | * | * | 53.8 | 71.0 |
| - Children's Home | * | * | * | 75.0 |
| - Places of Safety | * | * | 1.0 | * |
| - Lock-Ups | * | * | 14.0 | 50.0 |
| - Hospital | * | * | 12.0 | 33.0 |
| - Nursing Home | * | * | 3.0 | |
| % Compliance with Enforcement Actions | * | | 50.0 | 68.0 |
| Vector Indices (Barrier Zoo) | * | 0 | 1.75 | 1.8 |

Source: WRHA Parish Reports 2001-2002

*DNA

4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2002

4.1E COMMUNICABLE DISEASE CONTROL

| INDICATORS | Base Year 2000 | Target 2005 | 2001 | 2002 |
|--|-------------------|----------------|------|-------|
| Acute Flaccid Paralysis | * | * | * | * |
| - % Cases investigated within 48 hours | * | 100.0 | * | 4.0 |
| TUBERCLOSIS | * | * | * | * |
| - Total cases confirmed | * | * | * | 40 |
| - % reported cases investigated within 6 weeks | * | * | * | * |
| - % confirmed cases completing DOTS treatment | * | * | * | 100.0 |
| - Tb Death Rate | * | * | * | * |
| - Number of Cases of Malaria | * | * | * | 2 |
| - Malaria Death Rates | * | * | * | * |
| STI | * | * | * | * |
| - % STI Clients counselled and tested for HIV | | | | |
| - Syphilis (All Stages) | * | * | * | * |
| HIV | * | * | * | * |
| - No. PLWA on ARV | | | | |
| - % PLWA on ARV | | | | |
| No. of cases of Fever & Rash investigated within 48 hrs. | * | * | * | * |

Source: WRHA Parish Reports 2002

*DNA

4.1 PERFORMANCES/ACHIEVEMENT – WRHA 2000-2002

4.1F CHRONIC NON-COMMUNICABLE DISEASES

| INDICATORS | Base Year 2000 | Target 2005 | 2001 | 2002 |
|--------------------------------------|-------------------|----------------|--------|--------|
| ASTHMA | | | | |
| - Visits to PHC | * | * | 1,543 | 1,289 |
| - Cases seen in A&E | 6,363 | * | 6,119 | 6,719 |
| CANCER | | | | |
| No. of Population | | | | |
| - Receiving pap Smears | * | * | 4,653 | 5,188 |
| - With Invasive Ca Cervix | * | * | * | 14 |
| - Receiving Prostate examination | * | * | 185 | 166 |
| - Breast Examination | * | * | 10,811 | 12,470 |
| CARDIOVASCULAR DISEASE | | | | |
| - PHC Visits for Hypertension | 25,816 | * | 25,591 | 23,436 |
| - Other Cardiovascular Diseases | 2,672 | * | 2,770 | 3,006 |
| - Chronic Rheumatic Heart Disease | 1,043 | * | 1,100 | 984 |
| - Cases seen in A&E | * | * | 34,210 | * |
| DIABETES MELLITUS | | | | |
| - Visits to PHC | 7,163 | * | 6,902 | 5,876 |
| - No. of eye operations for cataract | * | * | * | * |
| - No. of leg ulcers | * | * | 326 | 84 |
| DIABETES & HYPERTENSION | | | | |
| - PHC Visits | 11,952 | * | 12,607 | 11,977 |
| OTHER MONITORED DISEASES | | | | |
| - RTI (Excluding Asthma) | * | * | 11,952 | 10,808 |
| - Other Gastro-intestinal Disorders | * | * | 3,512 | 2,788 |

Source: MOH: MCSR, HMSR, WRHA-CNCD Report 2001-2002

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4.1 PERFORMANCES/ACHIEVEMENT – WRHA 2000-2002

4.1G CHILD & ADOLESCENT HEALTH

| INDICATORS | Base Year 2000 | Target 2005 | 2001 | 2002 |
|---|----------------|-------------|-------|-------|
| Cases of Ophthalmia Neonatorum | * | * | * | 31 |
| Cases of Congenital Syphilis | * | <25.0 | * | 3 |
| % HIV Exposed Infants | * | * | * | * |
| % HIV Exposed Infants receiving ARV | * | 78.0 | * | * |
| % Low Birth Weight (community + hospital) | 1,081 | * | 1,020 | 840 |
| Nutritional Status 0 – 35 months (Below Normal) | 68 | * | 39 | 41 |
| % Exclusive Breastfeeding at: | | | | |
| - 6 weeks | 2,505 | 60.0 | 4,781 | 4,513 |
| - 12 weeks | * | * | 3,348 | 3,244 |
| Immunization Coverage % | | | | |
| - BCG | 94.0 | 95.0 | 98.6 | 100.0 |
| - DPT | 91.1 | 95.0 | 98.1 | 92.0 |
| - OPV | 90.6 | 95.0 | 96.0 | 90.6 |
| - MMR | 86.6 | 95.0 | 85.2 | 91.9 |
| - Hepatitis B | 0.4 | 85.2 | 0.1 | 8.1 |
| - Haemophiles Influenzae B | 0.3 | * | * | 0 |
| No. of A&E visits for Asthma in the <5 yr. old | 1,554 | * | 1,203 | 1,421 |
| Hospital Discharge for GE | | | | |
| Still Births - Hospital | 160 | <10.0 | 144 | 153 |
| - Community | 3 | * | 2 | 2 |
| Perinatal Death Rate/1,000 live births | 25.8 | 22 | 27.9 | 25.7 |
| Case fatality rate for GE | * | * | * | * |
| Mortality Rates - Infant Death | * | * | * | * |
| - under 5 years | * | * | * | * |
| No. of Children Orphaned by HIV/AIDS | * | * | * | * |
| No. for Secondary Coverage for Rheumatic Fever | * | * | 2,513 | 2,290 |

Source: MOH MCSR: HMSR 2000-2002

*DNA

4.1 PERFORMANCES/ACHIEVEMENT – WRHA 2000-2002

4.1H Reproductive Health

| INDICATORS | Base Year 2000 | Target 2005 | 2001 | 2002 |
|---|----------------|-------------|---------|-------|
| % Anaemic pregnant women adequately treated | * | * | 72.6 | 60.5 |
| % Syphilis positive pregnant women adequately treated | * | * | 45.9 | 44.4 |
| % Antenatal women tested for HIV | * | <10% | * | * |
| - Total | * | * | * | * |
| - % | * | * | * | * |
| - 15-25 years | * | * | * | * |
| % HIV positive pregnant women receiving ARV for PMTCT | * | 78% | * | * |
| No. of cases of Pre-Eclampsia (Hospital & PHC) | 35 | * | 167 | 126 |
| - Ante partum Haemorrhage (Hospital) | 23 | * | 33 | 41 |
| - Postpartum Haemorrhage (Hospital) | 287 | * | 298 | 392 |
| % Deliveries Attended by Trained Personnel (Hospital & PHC) | * | 99.7% | 99.7 | 99.9 |
| C-Section | 986 | | 929 | 1,072 |
| No. of Postnatal Women Accepting Family Planning Method | 28,136 | 70% | 5,499 | 5,065 |
| % increase in Number of: | | | | |
| - Long Term Method Users - Depo Provera Injection | * | 10% | 3,132 | 2,923 |
| - IUD | * | 15% | 163 | 156 |
| (Hospital) – Tubal Ligation | 672 | * | 583 | 695 |
| Condom Use | 1,545 | * | 1,855 | 1,657 |
| Maternal deaths investigated within x weeks | * | 100% | * | * |
| Maternal Deaths (Hospital (+ Community)) | 8 (+ 2) | <80% | 5 (+ 0) | 8(+0) |

Source: MOH MCSR; HMSR; 2000-2002

*DNA

4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2002

4.1 I MENTAL HEALTH

| INDICATORS | Base Year 2000 | Target 2005 | 2001 | 2002 |
|--|----------------|-------------|------|------|
| % of Schizophrenic patients receiving consistent treatment | * | 75.0 | 73.3 | 84.0 |
| Average length of stay for psychotic patients | 9.5 | 14 days | 16.7 | * |
| No. of patients with chronic illness screened for depression | * | 75.0 | * | * |
| No. of patients diagnosed and treated for depression | * | * | * | * |
| No. of new patients treated for substance abuse | 150 | * | 150 | 44 |

Source: MOH HMSR 2000-2002, WRHA CMH Report 2001

APPENDICES

TABLE A1: Utilization of Accident & Emergency Services: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|-----------------------|-------------------|---------|---------|
| Total Attendance | 129,289 | 137,163 | 136,649 |
| Total Self-Referral | 118,921 | 124,622 | 125,527 |
| Total Receiving Care | 122,388 | 132,426 | 129,242 |
| Registered & Not Seen | 6,900 | 4,737 | 7,407 |
| Total Admitted | 14,213 | 15,805 | 13,948 |

Source: MOH: HMSR

TABLE A2: Utilization of Surgical Services: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|------------------------|-------------------|--------|--------|
| Total | 9,560 | 10,108 | 11,452 |
| Type - Elective | 4,633 | 4,767 | 4,555 |
| - Emergency | 2,761 | 2,542 | 2,533 |
| - Day | 2,088 | 2,781 | 3,910 |
| - Minor (Out-patient) | 78 | 18 | 454 |

Source: MOH: HMSR

TABLE A3: Utilization of Outpatient Specialist Clinics: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|-------------------------|-------------------|--------|--------|
| Number of Clinics | 2,076 | 1,968 | 2,428 |
| Number of Cases - Total | 90,751 | 92,172 | 94,492 |
| - New | 12,435 | 14,167 | 15,753 |

Source: MOH: HMSR

TABLE A4: Utilization of Radiography Services: WRHA 2000-2002

| VARIABLES | Base Year 2000 | 2001 | 2002 |
|-----------------------|-------------------|--------|--------|
| Number of Clients | | | |
| - Total | 22,076 | 32,777 | 32,079 |
| - Outpatients | 19,169 | 28,381 | 27,980 |
| - inpatients | 2,907 | 4,396 | 4,099 |
| Number of examination | 28,837 | 44,021 | 44,619 |

Source: MOH: HMSR

TABLE A5: Utilization of Pharmacy Services: WRHA 2000-2002

| VARIABLES | | Base Year 2000 | 2001 | 2002 |
|--|----------|-------------------|---------|---------|
| Pharmacy - Total number of clients | PHC | 25,036 | 21,603 | 15,287 |
| | Hospital | 48,984 | 103,975 | 104,744 |
| - Items prescribed | PHC | 75,712 | 61,525 | 43,632 |
| | Hospital | 133,061 | 261,834 | 273,347 |
| - Items dispensed | PHC | 56,130 | 48,231 | 34,510 |
| | Hospital | 112,535 | 215,439 | 221,878 |

Source – MOH: MCSR & HMSR

TABLE B1: Inpatient Deaths in Public Hospitals by Five Leading Diagnoses: Jamaica and WRHA 2000-2002

| DIAGNOSES | Base Year 2000 | 2001 | 2002 |
|--|-------------------|------|------|
| Total Inpatient Deaths | 858 | 953 | * |
| Total inpatient Deaths based on 5 Leading Causes | 668 | 743 | * |
| Diseases of the Circulatory System | 278 | 312 | 257 |
| Neoplasm | 110 | 126 | 123 |
| Infectious and Parasitic Diseases | 114 | 146 | 93 |
| Diseases of the Respiratory System | 91 | 83 | 60 |
| Perinatal Conditions | 75 | 76 | 28 |
| Endocrine, Nutritional and Metabolic Diseases | 63 | 69 | 45 |

Source: MOH – HIS

*DNA

GLOSSARY

| | |
|-----------|--|
| A&E | Accident and Emergency |
| AFP | Acute Flaccid Paralysis |
| AIDS | Acquired Immune Deficiency Syndrome |
| ANC | Antenatal Clinic |
| ARV | Anti-Retroviral (Drugs) |
| BCG | Bacille Calmette Guerin |
| CMH | Community Mental Health |
| C-Section | Caesarean Section |
| CVD | Cardiovascular Disease |
| DMF | Decayed, Missing, Filled (Teeth) |
| DNA | Data Not Available |
| DPT/DT | Diphtheria, Pertussis, Tetanus/Diphtheria, Tetanus |
| EPI | Expanded Programme for Immunization |
| GU | Genito-urinary |
| Hib | Haemophilus Influenza Type B |
| HIS | Health Information System |
| HIV | Human Immuno-deficiency Virus |
| HMSR | Hospital Monthly Statistical Report |
| IUD | Inter Uterine Device |
| JA | Jamaica |
| MCSR | Monthly Clinical Statistical Report |
| MMR | Measles, Mumps, Rubella |

| | |
|--------|-----------------------------------|
| MOH | Ministry of Health |
| MO(H) | Medical Officer (Health) |
| MVA | Motor Vehicle Accident |
| NGO | Non Governmental Organization |
| OB/GYN | Obstetrics/Gynaecology |
| PID | Pelvic Inflammatory Disease |
| PTA | Parent Teachers Association |
| RD | Regional Director |
| RTD | Regional Technical Director |
| SLA | Service Level Agreement |
| STI | Sexually Transmitted Infection |
| Tb | Tuberculosis |
| WRHA | Western Regional Health Authority |

BIBLIOGRAPHY

- Ministry of Health: Hospital Monthly Statistical Reports (2000, 2001, 2002)
- Ministry of Health, Jamaica, Annual Reports (2000, 2001, 2002). Planning and Evaluation Branch, Kingston, Jamaica
- Monthly Clinical Statistical Report (2000, 2001, 2002)
- STATIN Demographic Statistics (2002)
- WRHA Reports (2002)
- Heads of Department/Programme/Section
 - Finance and Accounts
 - Human Resource
 - Operations and Maintenance
 - Environmental Health
 - Mental Health
 - Parishes
 - Hanover
 - St. James
 - Trelawny
 - Westmoreland