



# BELIZE



## Prioritizing Mental Health Services in the Community

### KEY ACHIEVEMENTS

1. Introduction of an outreach program, the Psychiatric Nurse Practitioner (PNP) Community Mental Health Program, resulting in a reduction of psychiatric hospital admissions, and an increase in the number of outpatient cases (sustained over the last 15 years).
2. Close down of Rockview Psychiatric Hospital and discharge of 22 patients into family care.
3. Establishment of new community services: An acute psychiatric unit within the Western Regional hospital, two acute inpatient beds within the national referral hospital, and a Day Hospital (Port Loyola Mental Health Acute Day Hospital).
4. Establishment of a Mental Health Officer position within the structure of the Ministry of Health.
5. Establishment of Mental Health Consumer groups in all districts.
6. Development of a Mental Health procedure manual and treatment protocols for schizophrenia and depression, and development of a Mental Health Training Manual for police officers.
7. Integration of Mental Health as part of the Belize Health Information System.

Potential partners and donors interested in supporting the **WHO Project 'Reforming Mental Health Systems, Improving Peoples' Mental Health'** or any aspects of the implementation of the mental health policy and plan in Belize should contact WHO:

- Dr Claudina Cayetano ■ Dr Beverly Barnett ■ Ms Sandra Jones
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## **NEXT STEPS**

- 1. Development of a five-year national Mental Health Plan to outline the strategy for improving access and quality of services at every level of care.**
- 2. Development of legislation to protect the rights of people with mental disabilities.**
- 3. Development of a Mental Health Disaster Plan to respond to the psychosocial needs of people affected by natural disasters.**
- 4. Strengthening of community mental health services through systematic mental health training for General Practitioners and Community Nurses Aides.**
- 5. Establishment of twenty-four-hour, seven-day emergency psychiatric services in all district hospitals.**
- 6. Development of income-generation activities and other social initiatives for patients with chronic mental disorders that remain in long-term care.**





# THE PROJECT





## OVERVIEW

Belize is facing a number of important challenges that affect the health and well-being of its population, including high poverty levels, susceptibility to natural disasters, and a human resources crisis in the health sector. These challenges add to the public health concern of treating and preventing non-communicable diseases, such as mental disorders. It is estimated that **at least 25,000 adults** in Belize are likely to be affected by mental disorders, including psychotic disorders, depression, anxiety disorders, and substance abuse (World Mental Health Survey, 2004). However, only 49% of adults who suffer from mental disorders receive any form of treatment, reflecting a substantial treatment gap in the population.

In the past, mental health services in Belize have focused primarily on institutional psychiatric care and care for the severely mentally disabled. Now, mental health services are steadily shifting to include treatment in the community in an effort to reduce the current treatment gap *by improving mental health services' accessibility and acceptability*. In the early 1990s, an essential step was taken by the Ministry of Health to begin a program with a new category of health workers, the Psychiatric Nurse Practitioners. Through this program the National Mental Health Program provides outreach mental health services to people in the community, and at the primary care level. Now, mental health outpatient clinics are located in each district in the country and are fully operated by a psychiatric nurse practitioner, under the supervision of a consultant psychiatrist. Because psychiatric nurses have been successfully integrated into the health care service network over the last decade, outpatient care has increased, while inpatient psychiatric care has decreased.

To continue to strengthen mental health services, the Ministry of Health plans to improve the delivery of mental health services at every level of care, strengthen the mental health unit in the Ministry, develop comprehensive mental health services in each of the districts, update legislation to protect the rights of people with mental disorders, and secure a higher budget for mental health.



## MAJOR MILESTONES

- ❖ In 1992, the Ministry of Health began the **Psychiatric Nurse Practitioners' training program**, an outreach program to improve mental health care in the community. Sixteen nurses completed a ten-month psychiatric nurses practitioner training program at the Belize School of Nursing to provide mental health services in outpatient clinics, conduct home visits, and provide mental health education in schools and in the community (Government of Belize - GOB, 2007).<sup>1</sup>
- ❖ In 1995, an **evaluation of the services** provided by the psychiatric nurse practitioners was conducted, and revealed that community-based patients felt confident and satisfied with the psychiatric nurse's knowledge and expertise, and would recommend their service to other individuals with similar problems. In turn, the psychiatric nurses felt that their training program prepared them well (GOB, 2007).
- ❖ In 2000, the **Nations for Mental Health Program** was implemented through the Pan American Health Organization (PAHO). As part of this program, workshops were conducted for general practitioners, public health nurses, midwives, and community nurse aides. Materials were produced to help introduce and strengthen community mental health services (GOB, 2007).
- ❖ In 2001, the **first Community Mental Health Project**, funded by PAHO/WHO, was established. This project was part of the demonstration project for vulnerable populations. Some of the key outcomes of the project were the establishment of a **mental health advisory board**, a **community education committee for mental health**, and **mobile psychiatric units** in villages with the greatest need. Also, community mental health **training workshops** were conducted and a media strategy for mental health was implemented. Moreover, the **referral system** for mental health problems was reorganized, and forms for reporting mental health problems and for the admission and discharge of patients were updated. Lastly, a **plan for the reorganization of psychiatric and mental health services** with emphasis on de-institutionalization was developed.
- ❖ In 2001, as part of the effort to integrate mental health services within the general health system, the **first integrated acute psychiatric unit**, within a general hospital, was opened at the Western Regional Hospital (previously named Belmopan Hospital).

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<sup>1</sup> For an article and profiles of current Psychiatric Nurse Practitioners (PNP) working in Belize view: *PAHO and the Reformulation of Mental Health in the Americas* via [http://www.paho.org/English/DD/PIN/mentalhealth\\_010.htm](http://www.paho.org/English/DD/PIN/mentalhealth_010.htm) (last accessed 14/01/2009).





- ❖ In 2004, the Ministry of Health and University of Belize conducted a **second round of trainings** to integrate a greater number of psychiatric nurses into the health care system. Thirteen new psychiatric nurses graduated from the program (GOB, 2007).
- ❖ In 2004, a **national training workshop on mental health and human rights** was conducted **for mental health consumers** representing the six geographical districts of Belize. The conclusion from the workshop was for mental health consumer groups to function as advocates for the improvement of mental health services in the country, and function as representatives in the formulation of mental health laws (Cayetano, 2004a: Training workshop report).
- ❖ In 2004, a **two-day training workshop on human rights of persons with mental disorders** was conducted by the Ministry of Health in collaboration with PAHO. Participants represented the Government, the Mental Health Program, the Mental Health Association, University of Belize, Ombudsman, Representatives of the Human Rights Commission, Department of Human Development, the Supreme Court, the office of the Attorney's General Office, Family Consumers group and the Nursing Association. The recommendations from this workshop were to review and update the current mental health legislation; support the development of nongovernmental organizations and consumer groups as advocates for mental health and in the fight against discrimination; and develop basic human rights training for mental health workers (Cayetano, 2004b: Training workshop report).
- ❖ In 2005, a **training workshop on mental health legislation and human rights** was conducted for a variety of stakeholders, including Psychiatric Nurse Practitioners, members of the Mental Health Association, and representatives of the acute unit in Belmopan Hospital, of the University of Belize, of the Human Rights Commission, of the National Ageing Council, of the Judiciary, of the Department of Human Development, of the Police Department and consumer and family representatives. The objectives of the workshop were to outline a framework for developing and implementing mental health legislation, to disseminate and discuss the international standards and human rights norms that protect persons with mental disorders, and to devise a plan for updating the existing mental health legislation (Cayetano, 2005).
- ❖ In 2005, more than 2,000 adults in Belize participated in the **National Household survey on gender, alcohol, and culture**. The survey revealed that a quarter of Belizean men and almost half of women abstain from drinking alcohol. However, close to a quarter of the people in Belize engage in heavy episodic drinking (i.e. 5 drinks in one sitting), which is characterized as being the most harmful to individuals' health. Belize is among the top five Latin American countries with the highest prevalence of heavy episodic drinking and overall average consumption of alcohol (PAHO, 2007b).



- ❖ **In 2005**, with the technical support from PAHO/WHO country and regional offices, Dr. Cayetano, director of Belize's Mental Health Program, convened a national committee comprised of psychiatric nurses, members of the Mental Health Association, and key stakeholders to draft a national mental health policy.
- ❖ **In 2007**, a position for a Mental Health officer was created within the Ministry of Health. This officer's primary duties include monitoring and evaluating mental health program performance, developing guidelines for quality assurance in mental health care, and coordinating the development and implementation of mental health policy and plans.
- ❖ **In November 2006**, elements of a mental health plan, with specified indicators, activities, and outcomes, for improving mental health services were integrated in the country's National Health Plan for 2007 through 2011 (GOB, 2006).
- ❖ **In 2007**, the ***Mental Health Training Manual: Belize police officer's guide*** was **created**. The manual, part of a larger strategy of intersectoral collaboration, is intended a) to raise awareness and understanding of people with mental disorders among officers, b) to help police officers recognize mental illnesses when performing their line of work, b) to provide them with the tools necessary to intervene appropriately when they come in contact with people suspected of having a mental disorder, and c) to inform them of the procedures for referring apprehended persons with mental disorders to the proper type of care.
- ❖ **In 2007**, **mental health indicators were integrated in the national Belize Health Information System (BHIS)** in order to evaluate and monitor the provision of mental health services in the country. These indicators include psychiatric admissions/discharges, demographics, and diagnostic classifications (based on ICD-10) of mental health users at tertiary, secondary, and primary care levels.
- ❖ **In 2007**, the World Health Organization-Assessment Instrument for Mental Health Systems (WHO-AIMS) was used to assess the mental health services provided in Belize. A **WHO-AIMS report** of the findings is currently being produced.
- ❖ **In 2008**, **Port Loyola Mental Health Day Hospital** was **established** to provide follow-up care to patients with acute mental disorders. This hospital was constructed within the premises of the Port Loyola health centre and is staffed by a psychiatric nurse practitioner, an occupational therapist, and a social worker.
- ❖ **In 2008**, short-term psychiatric inpatient care was initiated at Karl Heusner Memorial hospital with the **creation of a psychiatric unit** with 2 beds. This is consistent with the government's effort to integrate mental health services within general hospitals and provide acute care in the community.





- ❖ **In 2008, Belize's Mental Health Policy was finalised and approved** by the Ministry of Health and submitted to Cabinet for official endorsement by the government.
  
- ❖ **In 2008, Rockview Psychiatric hospital was closed down.** Heavy floods damaged the already dilapidated structure, which accelerated government plans to shut down the hospital. Approximately 22 institutionalized patients were discharged to their families after a psychiatric evaluation was conducted. The remaining 38 patients that were still in need of long-term care were transferred to new shelter housing at Palma Center in Belmopan. This center was built in 2008 with the aim of housing patients with chronic mental disorders.
  
- ❖ **2008: Creation of the "Community Treatment Program" (CTP).** As a result of the closing down of Rockview Hospital, a new treatment program had to be created to address the need of the chronic mentally disabled people now living in the community, the "Community Treatment Program" (CTP). Bicycles have been bought for the staff previously working in Rockview Hospital, but now employed in the new CTP programme, to enable them to move around more easily and visit patients in their community. So far 47 patients and 6 staff are part of the project. Patients are visited a minimum of 2 times per week. The program is only implemented in Belize city because that is where the majority of the population live. The program has one office and the staff meet every morning to discuss cases before they leave to visit patients.





## **MAIN PARTNERS**

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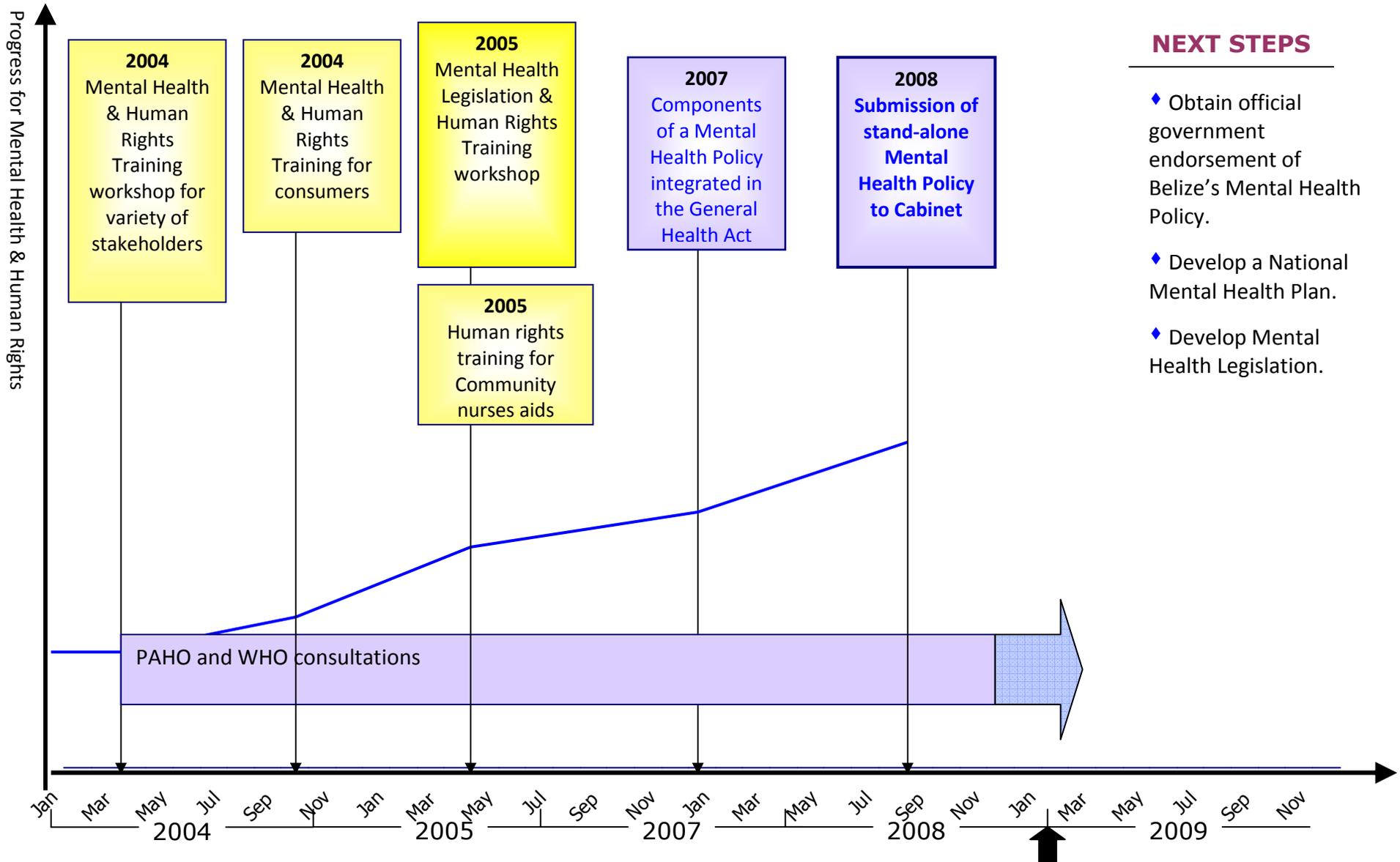
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## **LINKS TO OFFICIAL DOCUMENTS**

- Government of Belize (2004). *Belize: 2002 Poverty Assessment Report*, National Human Development Committee, Belmopan.
- Government of Belize (2005). *First Millennium Development Goals Report*. National Human Development Committee, Ministry of National Development, Belmopan.
- Government of Belize (2006). *Health Agenda 2007- 2011*. Ministry of Health, Belize.
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# THE CONTEXT





## ① COUNTRY DEMOGRAPHIC AND SOCIOECONOMIC PROFILE

Belize is a country in Central America with 8,867 square miles of territory and a relatively small population of 297,651. Compared to the population growth in the region, Belize had a moderate population growth of 2.4 for the 1994-2004 period (WHO, 2006b).

Its capital is Belmopan, and it is the only English-speaking country in Central America. While English is the official language of Belize, Creole and Spanish are widely spoken. The population of Belize is of multiple ethnicities and cultures.

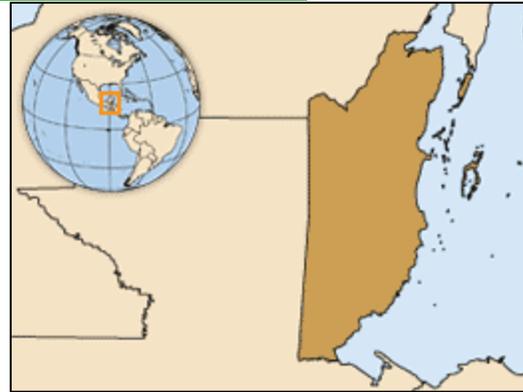


Figure 1. **Geographical location of Belize**<sup>2</sup>  
This map is an approximation of actual country borders.

The last census indicated that Mestizos constitute 49% of the population, Creoles constitute 25%, and indigenous groups are the minority (Maya, 11%; Garifunas, 6%; Mennonite, 4%; and East Indians, 3%). The remainder of the population (3%) is made up of Chinese, Arabs, Africans, and white Caucasians (GOB, 2000 census). The main religions in Belize are Christianity, Roman Catholicism, and Protestantism.

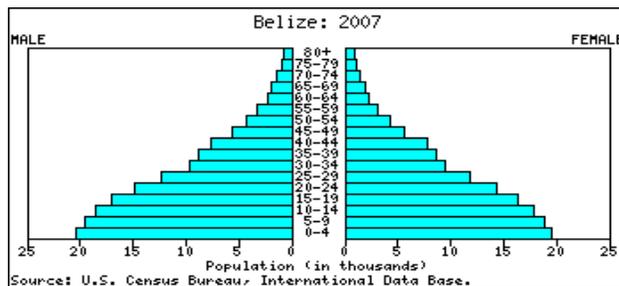


Figure 2: Age pyramid (Belize, 2007)

Belize has a young **population**, with 35% being under the age of 15 years and only 6% being over the age of 60 (UNESCO, 2006; WHO, 2006b).

The **life expectancy at birth** is 67 years for males and 72 years for females (WHO, 2006b), which is a few years lower than the life expectancy for the region (74.9) (PAHO, 2007a).

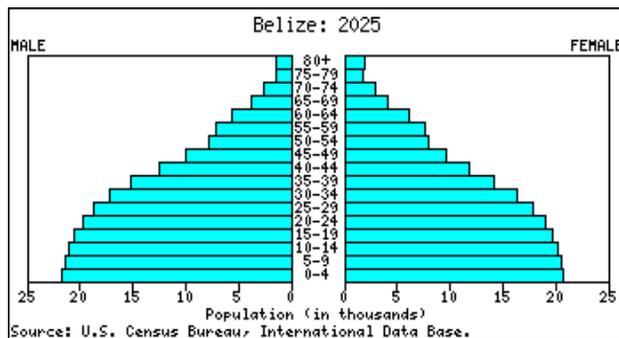


Figure 3: Age pyramid (Belize, Projections for 2025)<sup>3</sup>

The **adult literacy rate** is 75, which is also lower than the regional average of 91% for men and 89% for women (HDI, 2007<sup>1</sup>). Some schools in the rural areas are far away and not readily accessible for children, and this is important given that fifty one percent of Belizeans live in rural areas (ILO, 2003; GOB, 2006).

<sup>2</sup> WHO country page - Belize. url: <http://www.who.int/countries/blz/en/> (last accessed 14/01/2009).

<sup>3</sup> Source: Official website of Government of Belize.

url: <http://www.census.gov/ipc/www/idb/country/bhportal.html#PYR> (last accessed 14/01/2009).





Belize is an **upper-middle-income group country** (based on World Bank 2008 criteria<sup>4</sup>). The **primary sectors of employment and revenue** are agriculture (sugar, citrus, and bananas), manufacturing, and services (i.e., tourism). The agriculture sector employs 29% of the total labor force and tourism employs 55% of the labor force (Government of Belize, 2006).<sup>5</sup> The overall unemployment was estimated to be at 12% (GOB, 2007b).<sup>6</sup>

The **per capita total expenditure on health** (at international dollar rate) is **\$339**, which represents 5% of the gross domestic product (GDP) or **5% of the national budget** (for years 2003 and 20004: WHO, 2006b; WHOSIS, 2007).<sup>7</sup> The per capita government expenditure on health is \$182 international rate (for 2004: WHOSIS, 2007), which is approximately **54% of the total expenditure on health**. **46%** of the health expenditure comes from **private financing** (WHOSIS, 2007), either out-of pocket or through donor countries.

## **② CONTEXTUAL FACTORS INFLUENCING MENTAL HEALTH NEEDS AND SERVICES**

► **Poverty is a major concern in Belize.** High poverty levels affect every sector of the population, especially for those who pay out-of-pocket for their health and mental health care. Approximately one in three Belizeans lives in poverty. Higher concentrations of poverty exist in rural areas and among the indigenous Maya (GOB, 2005). More specifically, Belizeans in rural areas are almost twice as likely to be poor than those in urban areas (44% compared to 24%) and 77% of indigenous Maya are impoverished (GOB, 2004). When comparing demographic groups, children (under the age of 17 years) are more likely to be poor (39%) than adults (29%) (GOB, 2004). Financial difficulty experienced by households is mainly due to costs associated with provision of basic needs, such as utilities, health, education, and food (GOB, 2004). Purchasing basic needs became increasingly difficult for Belizeans, as prices for food have significantly increased since 2007 (likely a reflection of the global food crisis). From 2007 to 2008, the price of rice and flour increased by 21% and 51%, respectively, in Belize (GOB, 2008).

**The distribution of Belize's national income among its population is more equitable**

<sup>4</sup> Classification available on:

<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20421402~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> : <http://go.worldbank.org/D7SN0B8YU0> (last accessed 14/01/2009).

<sup>5</sup> Official website of the government of Belize. About Belize: Industries and development. url:

[http://www.governmentofbelize.gov.bz/ab\\_industries.html](http://www.governmentofbelize.gov.bz/ab_industries.html) (last accessed 14/01/2009).

<sup>6</sup> UNDP (2008). 2007/2008 Human development report. Data by indicator: 21 - Unemployment and informal sector work in non-OECD countries. url: <http://hdrstats.undp.org/indicators/198.html> (last accessed 14/01/2009).

<sup>7</sup> WHOSIS (2008). WHO Statistical Information System. Url:

[http://www.who.int/whosis/data/Search.jsp?indicators=\[Indicator\].Members](http://www.who.int/whosis/data/Search.jsp?indicators=[Indicator].Members) ; <http://www.who.int/whosis/en/> (last accessed 14/01/2009).





than in other Latin American countries<sup>8</sup>. The mean individual income in Belize is USD\$ 413.88 per month (GOB, 2006; IDB, 2004), and 30% percent of Belizeans live in poverty.

In terms of human development, Belize ranks 80 out of 177 countries (a Human Development Index - HDI<sup>9</sup> - of .778) (data for 2005; UN Development Report, 2007).

The human development index represents how much economic wealth is translated into health and social development/progress for the Belizean population.

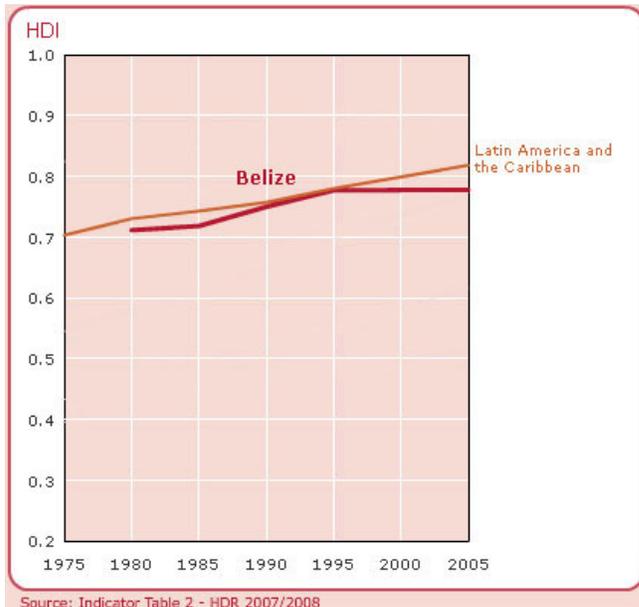


Figure 4: Human Development Trends (1975-2005)<sup>10</sup>

Development diamond\*

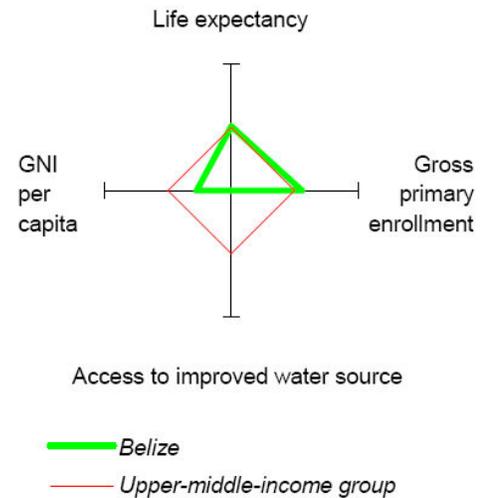


Figure 5: Development diamond (2008)<sup>11</sup>

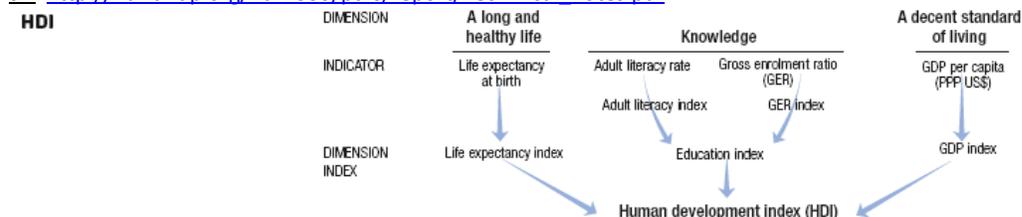
Figure 4 shows HDI trends in Belize over a twenty-five-year period (1980-2005), showing a human development that is consistently lower than the overall development of

<sup>8</sup> With a GINI index of 49.2 (1999), Belize has one of the lowest indices in Latin America. **Gini index** measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual. An index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

<sup>9</sup> The Human Development Index (HDI) is an indicator, developed by UNDP, combining 3 dimensions of development: a long and healthy life, knowledge, and a decent standard of living (see figure below).

Source: Human Development Report 2006 (UNDP), Technical Note 1.

url: [http://hdr.undp.org/hdr2006/pdfs/report/Technical\\_notes.pdf](http://hdr.undp.org/hdr2006/pdfs/report/Technical_notes.pdf)



<sup>10</sup> UNDP, 2007. Human Development Report 2007/2008. url: <http://hdr.undp.org/en/reports/global/hdr2007-2008/> (last accessed 14/01/2009).

<sup>11</sup> World Bank (2008). Belize at a glance. url: [http://devdata.worldbank.org/AAG/blz\\_aag.pdf](http://devdata.worldbank.org/AAG/blz_aag.pdf) (last accessed 14/01/2009).





countries in the region. Figure 5 shows that, while Belize only ranks 81<sup>st</sup> in gross domestic product per capita (US\$ 7,019), much less than most other upper-middle income countries, it performs as well as them in terms of life expectancy (40<sup>th</sup> rank) and in terms of gross primary enrolment (52<sup>nd</sup> rank). However, 18% of school-age children are still not enrolled in primary, secondary, or tertiary education and Belize only rank 95<sup>th</sup> in terms of adult literacy rate. Children who are not enrolled in secondary school often engage in economic activity, e.g. agriculture (ILO, 2003).

► **Leading causes of morbidity and mortality in Belize** include land transport accidents, diabetes mellitus, hypertension, ischemic heart disease, acute respiratory diseases, and HIV/AIDS (PAHO, 2007a). Among adults and adolescents, one of the top leading causes of death are transport accidents. Other top leading causes of mortality among adults include HIV/AIDS and diabetes mellitus. In particular, between 2004 and 2005, HIV/AIDS was the leading cause of death among 40 to 49 year olds (GOB, 2006). HIV prevalence rates are estimated at 216 per 100,000 population, with the highest concentrations of infections occurring in Belize city (GOB, 2006; PAHO, 2007a). HIV/AIDS affects every sector of society and places added demands on the health care sector, on the scarce supply of health and mental health professionals, and on the already impoverished families that may need additional social and economic resources to take care of their HIV-infected relatives.

► **Belize is particularly vulnerable to natural disasters**, as the country's location implies a high incidence of hurricanes, floods, and tropical storms. The impact of natural disasters is especially felt in the agricultural sector, one of Belize's primary sources of employment. During the 1990s, the average cost of natural disasters was approximately 10% of the country's Gross Domestic Product (GDP). Tropical Storm Roxanne (in 1995), Hurricane Keith (in 2000), Tropical Storm Chantal, and Hurricane Iris (both in 2001), resulted in more than US\$ 200 million in losses and damages to the agriculture sector (IDB, 2004). The financial and human loss that results from such disasters give rise to unemployment, mental distress and increased demand for psychosocial care from the mental health system.

► **The shortage of human resources** for health at all levels of the health system, mostly in the rural areas, remains the main obstacle to providing quality health services in Belize. The shortage of human resources has led to the recruitment of health professionals from within and outside of the Caribbean. This shortage is exacerbated by the recruitment of Belize's national health professionals, particularly nurses, by developed countries (PAHO, 2007a). To date, there is no plan on human resources for health to guide the production and recruitment of health professionals in the country. No policy or strategic plan for human resource for health development, as well as for retention, exists in the country so far (WHO, 2004).



### ③ BURDEN OF MENTAL DISORDERS AND TREATMENT GAP

The most common mental health conditions seen at the mental health clinics in Belize are depression, psychotic disorders, anxiety disorders, substance abuse, and stress-related disorders (WHO-AIMS, 2008). In 2006, a total of 13,740 patients were seen at the psychiatric units in Belize (GOB, 2007; WHO-AIMS, 2008). Psychotic disorders accounted for the highest number of cases seen, affecting 1,904 men and 1,257 females (i.e. 23% of cases seen). In 2005, there were 303 cases of child mental disorders (2.2% of all cases seen) and 141 cases of child abuse (1% of all cases seen) (PAHO, 2007a).

Based on prevalence rates from the World Mental Health Survey (2004) it is estimated that **at least 25,000 people** in Belize (or **13%** of the adult population) are likely to be affected by mental disorders, which require varying degrees of treatment and care. Approximately 5,800 people (3% of the adult population) are suffering from a severe mental disorder and a further 19,000 (10% of the adult population) from a moderate to mild mental disorder.

There is a gap between the numbers of people affected by a mental disorder and those receiving treatment: the maximum number of people receiving treatment in 2004 in Belize was estimated to be 12,000 (i.e. 49% of all persons with mental disorders). This means that about half of the adult population with a mental disorder does not receive treatment for their illness.

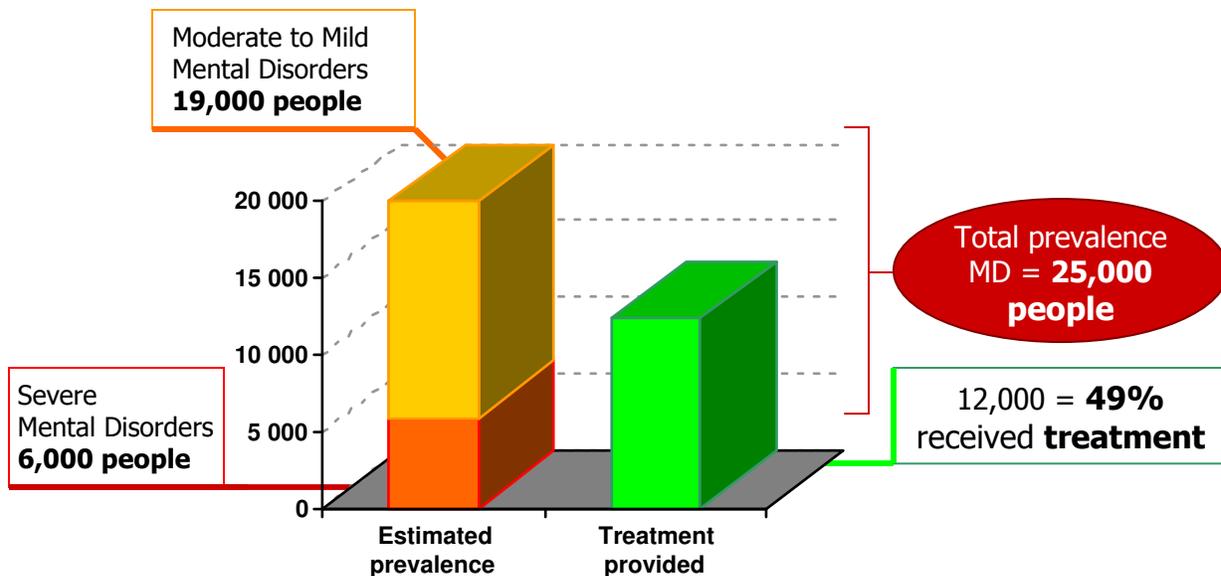
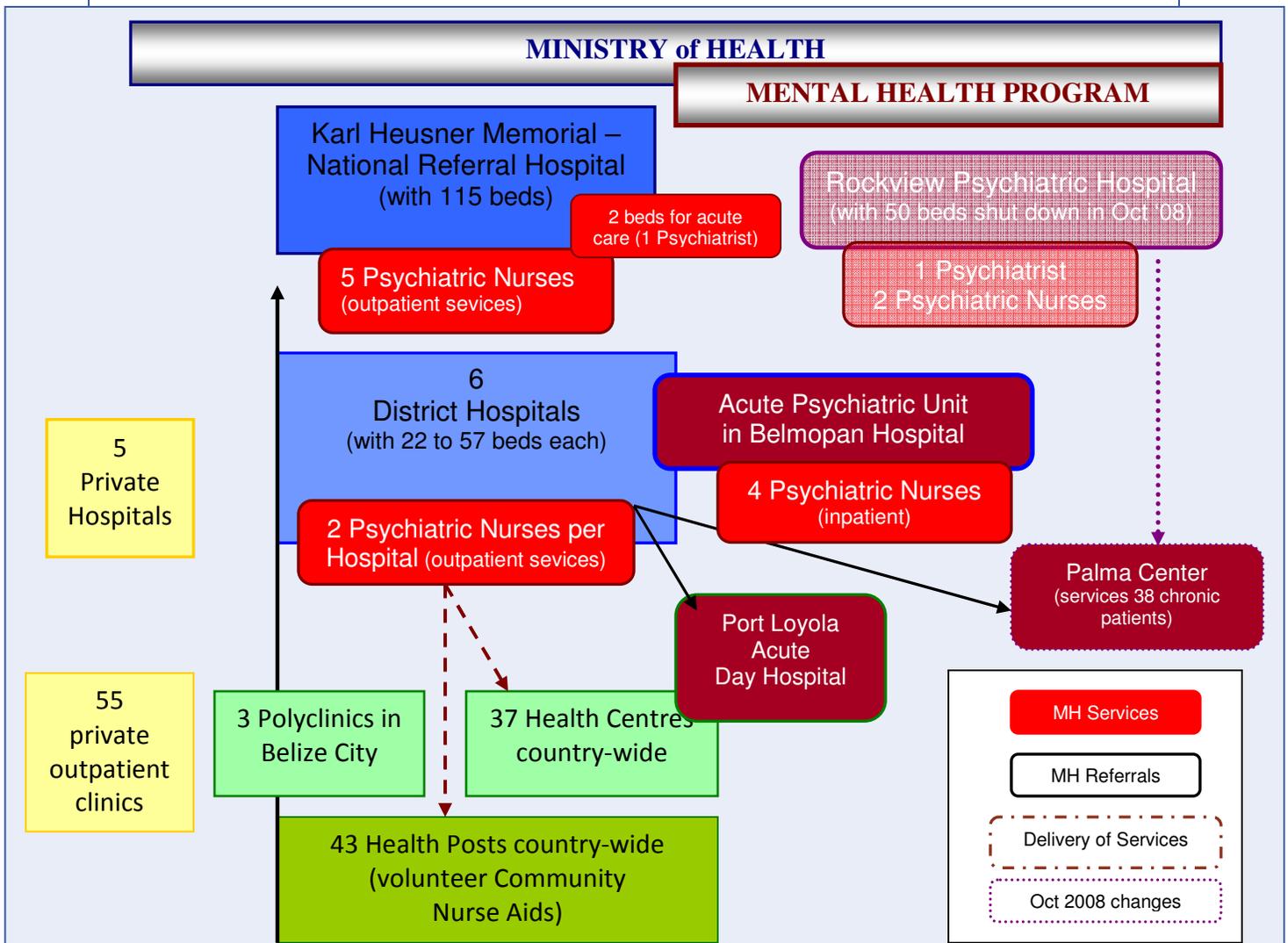


Figure 5: **Treatment gap** for adults with mental disorders in Belize (2005 lowest estimates).



#### ④ THE MENTAL HEALTH SYSTEM

Health care is provided through a network of seven government hospitals (including a national referral hospital) and five private hospitals. Until October of 2008, most inpatient psychiatric services were provided at Rockview Hospital, the national mental hospital. Intense floods caused structural damage to the already dilapidated hospital, forcing the government to accelerate its plan to close it down, and relocate the most chronic and destitute patients to Palma Center, while discharging others to family care. The Karl Heusner Memorial hospital (KHMH) serves as the national referral hospital and the general hospital for the Central Region. Inpatient psychiatric services are provided at KHMH, and in the acute psychiatric ward in Western Regional Hospital (previously Belmopan Hospital). In each of the district hospitals, one psychiatric nurse provides mental health services, while another psychiatric nurse provides services in the health centers and health posts throughout the country (PAHO, 2007a; GOB, 2006).



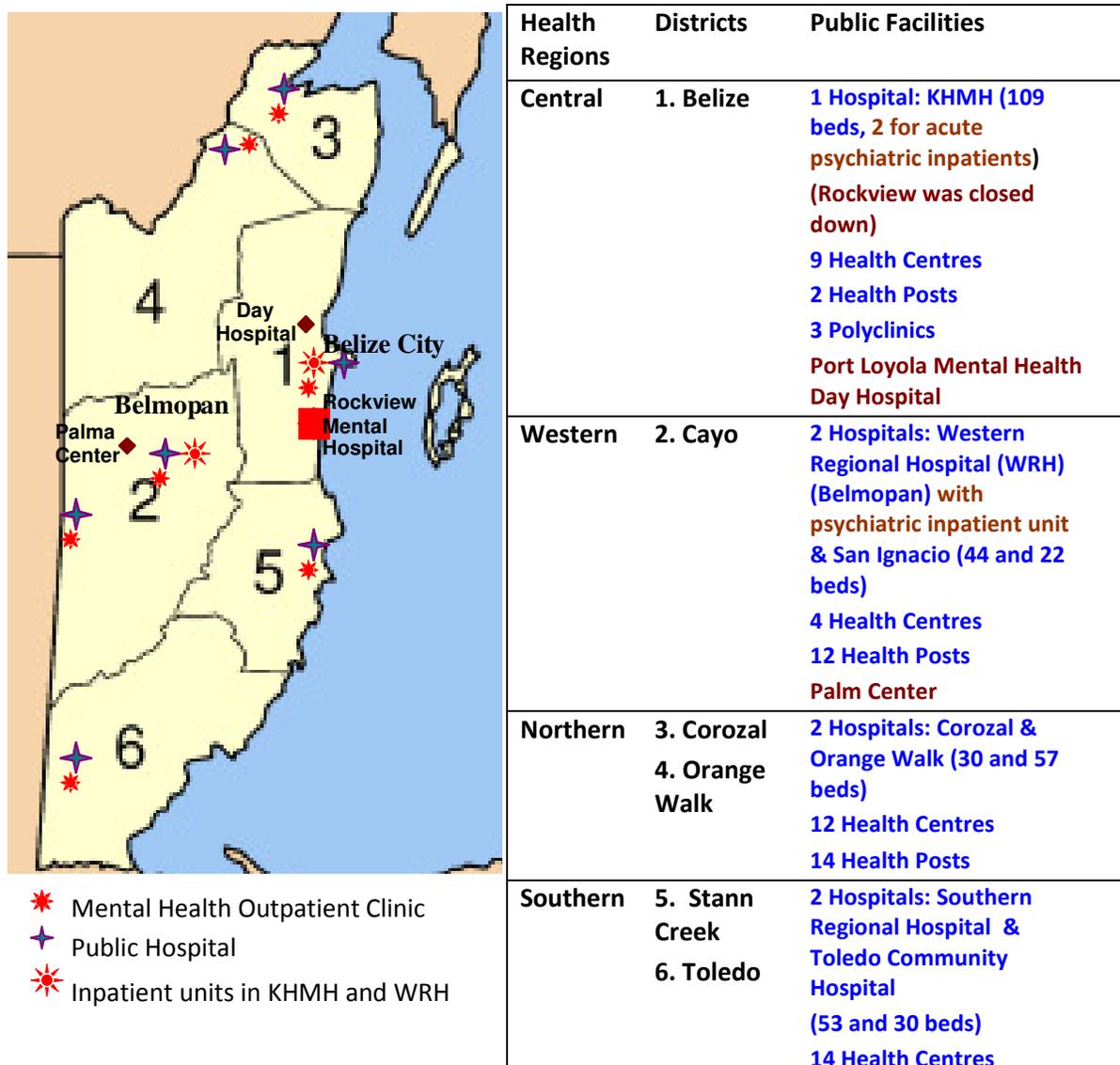
**Figure 6:** Organizational structure of the current Mental Health System in the general health system in Belize (2007)



No inpatients beds are available at the district hospitals. Private hospitals and outpatients clinics do not provide mental health services.

### ➡ **Coordination of Health and Mental Health Services**

The country is organized into six administrative health **districts** and four health **regions**: Northern, Central, Western and Southern. Each health region has a network of 2 public hospitals and a number of public health centres and public health posts. The Director of Health Services of the Ministry of Health coordinates health services at the national level, and sets guidelines and standards of care, while each regional health manager and management team coordinate the delivery of health services at the regional level. For mental health services, Dr Claudina Cayetano is the Chief Psychiatrist and Director of the Mental Health Program in Belize (PAHO, 2007a). Dr Cayetano started this position in 1995 and has coordinated the country’s mental health services since then.



**Figure 7:** Map of health care facilities in the six administrative health districts and four health regions (GOB, 2006: Health Plan 2007-2010).



### ➡ Legal framework, policies and programmes

The Ministry of Health developed a “Health Agenda 2007 – 2011” that includes a plan for improving mental health services. The goal within this integrated plan is to set out concrete objectives for developing a public awareness and education plan; developing and implementing a training plan for health personnel on the management of psychiatric disorders; developing a program for psychosocial rehabilitation through sheltered and independent living houses; and updating the list of psychotropic drugs. An important goal in the agenda is to review and update the Mental Health Act of 1975 (GOB, 2006). This brief national plan complements the recently finalised national Mental Health Policy that has been approved by the Ministry of Health, and is currently waiting official endorsement by the Cabinet. The Mental Health Policy outlines the vision, mission, values, and principles that will continue to shape national plans for improving mental health services at every level of care, and protect the rights of people with mental disorders.

➡ **Financing:** Health care is financed by the government, private health insurance, and the private sector. The primary sources of mental health financing are tax based, out of pocket expenditure and private insurance. The latest available figures (2004) indicate that Belize’s government expenditure on health is 53.8 percent of the national health budget and private expenditure on health is 46.2 percent of the total health budget (WHO, 2007).<sup>12</sup> Public expenditure on mental health care is proportionally less than public spending on general health care.

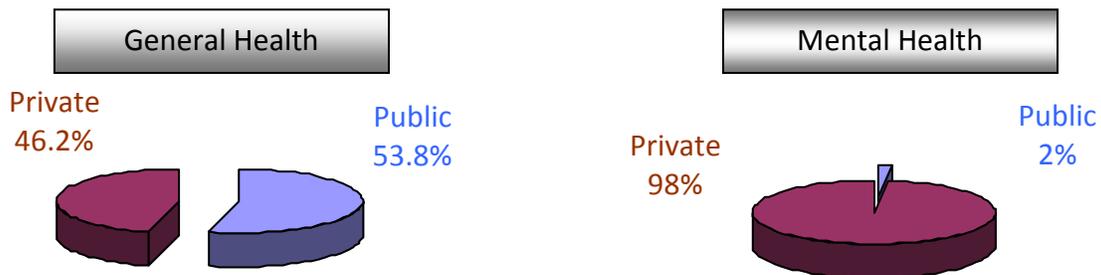


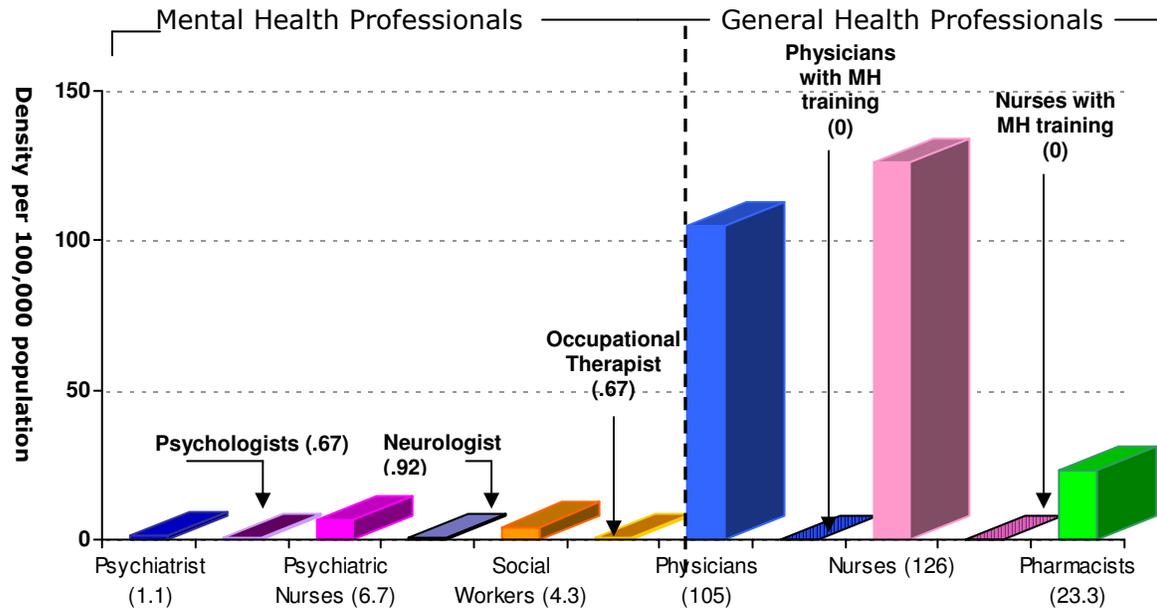
Figure 8: Share of public and private health care expenditures for general health and for mental health in Belize (WHOSIS, 2007; WHO-AIMS, 2008).

<sup>12</sup> WHO Statistical Information System (WHOSIS), 2008 - Core Health indicators.  
 Url: [http://www.who.int/whosis/database/core/core\\_select\\_process.cfm](http://www.who.int/whosis/database/core/core_select_process.cfm) (last accessed 14/01/2009).



### ➔ Human Resources for Mental and General Health<sup>13</sup>

Among general health professionals, the density of physicians and nurses is lower than the ideal standard of 250 per 100,000 population needed for optimal care.<sup>14</sup> None of the physicians or general nurses received mental health training in/as part of their initial educational formation. Among mental health professionals, the number of psychiatrists and psychiatric nurses is lower than that of general health professionals.



**Figure 9:** Human Resources for Mental Health and General Health in Belize (2005 & 2003).

(Source: World Mental Health Atlas 2005 & WHO Global Atlas of the Work Health Force.

url: [http://www.who.int/mental\\_health/evidence/atlas/en/index.html](http://www.who.int/mental_health/evidence/atlas/en/index.html) , <http://www.who.int/globalatlas/default.asp> (last accessed 14/01/2009) &

[http://www3.who.int/whosis/core/core\\_select\\_process.cfm?country=gmb&indicators=healthpersonnel&intYear\\_select=all&language=en](http://www3.who.int/whosis/core/core_select_process.cfm?country=gmb&indicators=healthpersonnel&intYear_select=all&language=en) (last accessed 14/01/2009).

<sup>13</sup> WHO Mental Health Atlas, 2005; url:[http://www.who.int/mental\\_health/evidence/atlas/en/index.html](http://www.who.int/mental_health/evidence/atlas/en/index.html) (last accessed 14/01/2009). WHO Global Atlas of the Health Workforce, 2006; url: <http://www.who.int/globalatlas/> (last accessed 14/01/2009)

<sup>14</sup> The optimal density is 250 per 100,000 population (PAHO, 2007)




**Table 1:** Training and work for mental health professionals in Belize

Human Resources	Training available in Belize		Currently working in Belize <sup>15</sup>	
	Degree courses	CPD <sup>16</sup> (number/training years)	Density (per 100,000 population)	Number currently working in mental health
<b>Mental Health workers</b>				
■ Psychiatrists	No	No	1.01	3
■ Neurosurgeons	No	No	.91	--
■ Neurologists	No	No	.92	--
■ Psychiatric nurses	Yes	No	6.67	20
■ Psychologists	No	No	.67	2
■ Occupational therapists	No	No	.67	2
■ Social workers	Yes	No	4.3	--
■ Traditional healers	No	No	--	--
<b>General Health Workers</b>				
▶ Physicians	No	No	105	--
▶ Nurses	Yes	No	126 <sup>17</sup>	--
▶ Pharmacists	Yes	No	23.33	--

In addition to the human resources mentioned above, Belize has 148 specialists that include surgeons, paediatricians, gynaecologists, internal medicine, anaesthesiologists, orthopaedics, dermatologist, ophthalmologists, urologist, gastroenterologist, which work primarily in private specialist care. There are also 31 public health inspectors, 27 medical technologists, 21 radiographers, and 248 community nurses aides. Finally, there are 70 to 75 licensed pharmacists, of whom only 22 work in the public health sector (GOB, 2006; PAHO, 2007a), and which is insufficient to meet the needs of the public health care system.

### Training of Health Professionals

Belize does not have a national school of medicine, and this exacerbates the lack of available health professionals in the country. The physicians in Belize are trained either

<sup>15</sup> Source: WHO Mental Health Atlas, 2005 (for mental health workers) - url: [http://www.who.int/mental\\_health/evidence/atlas/en/index.html](http://www.who.int/mental_health/evidence/atlas/en/index.html) , <http://www.who.int/globalatlas/default.asp> (last accessed 14/01/2009); WHO Global Atlas of the Health Workforce (for general health workers)- url: [http://www3.who.int/whosis/core/core\\_select\\_process.cfm?country=gmb&indicators=healthpersonnel&intYear\\_select=all&language=en](http://www3.who.int/whosis/core/core_select_process.cfm?country=gmb&indicators=healthpersonnel&intYear_select=all&language=en) (last accessed 14/01/2009)

<sup>16</sup> Continuing Professional Development.

<sup>17</sup> These nurses are categorized as public health nurses, registered nurses, and rural health nurses.



at the University of the West Indies or at one of the Latin American Universities (Guatemala, Costa Rica, Cuba, and Mexico) (GOB, 2008<sup>18</sup>).

The University of Belize (Faculty of Nursing and Allied Health Sciences) provides training programs in pharmacy, medical technology, and nursing. Specifically, it offers a bachelor's degree in nursing and social work (PAHO, 2007a). From 2003 to 2005, 40 to 90 nurses and social workers graduated per year. In 2005, 16 students graduated from the psychiatric nursing program (PAHO, 2007a). Unfortunately, of the 29 nurses who have been trained as psychiatric nurse practitioners since 1992, 9 are no longer working with the mental health program. Some have retired, others have migrated, one is in nursing administration, and 2 are doing full time counseling with the HIV/AIDS program (GOB, 2007). Retaining psychiatric nurses in mental health is a constant challenge for the Ministry of Health's National Mental Health Program because much-needed nurses are transferring to other programs (e.g. HIV/AIDS) that provide higher economic incentives.

Community nurse aides and traditional birth attendants are volunteer health workers that participate in provision of care at the primary care level. While there is no formal training available, they receive basic training by the Ministry of Health (PAHO, 2007a) and by the Psychiatric Nurse Practitioners (GOB, 2007). Trainings are provided on protection of human rights of people with mental disabilities/disorders. The first training of this kind was done in 2005 and the latest was conducted in 2008 with 28 community nurse aides in the capital city of Belmopan (PAHO, 2007a; Cayetano, personal communication, 2008<sup>19</sup>).

In terms of continuation training for Psychiatric Nurse Practitioners, the Ministry of Health holds an annual two-day training/meeting for Psychiatric Nurse Practitioners to discuss the mental health plan and related issues. In addition, through the partnership with a private psychiatric hospital in Canada, Homewood Health Centre, Psychiatric Nurse Practitioners have the opportunity to participate in an 8 weeks training at the Homewood facilities. As of April 2008, 12 Psychiatric Nurse Practitioners, 1 medical practitioner and 1 psychiatrist have participated in this training.

### **Insufficient and unequal distribution of health resources**

The ratio of human resources for health, particularly of doctors and nurses, is insufficient to meet the health needs of Belizeans (GOB, 2007). In addition, the distribution of health professionals favors urban areas and the private sector. More than half of the health staff is employed (54% physicians, 52% practical nurses, and 57% professional nurses) in the metropolitan district of Belize, where only 30% of Belizeans live (GOB, 2006). Currently, Belize has a technical cooperation agreement with Cuba and

<sup>18</sup> Government of Belize website. About Belize: Social services.

url: [http://www.governmentofbelize.gov.bz/ab\\_social\\_serv.html](http://www.governmentofbelize.gov.bz/ab_social_serv.html) (last accessed 14/01/2009)

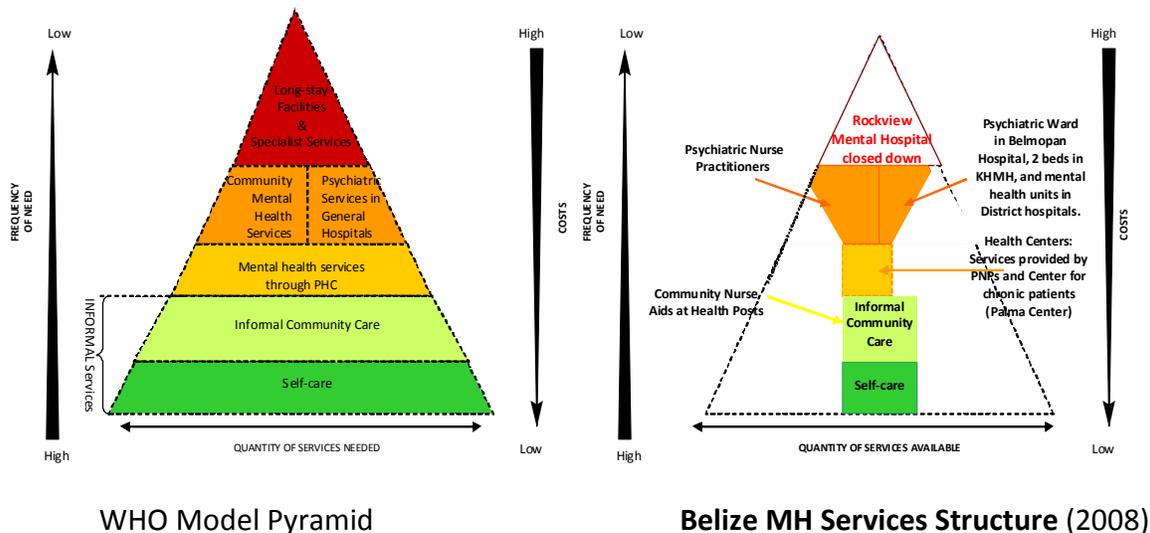
<sup>19</sup> 23 April 2008, personal communication with Dr. Claudina Cayetano, Director of the Mental Health Programme, Ministry of Health.



Nigeria, which has added 110 Cuban and Nigerian health professionals to the health care delivery system (GOB, 2006), including one Cuban psychiatrist (in 2008), and the majority has been deployed to rural areas (GOB, 2007). In terms of the private and public distribution, over fifty percent of physicians, and professionals in specialist care work in the private sector (GOB, 2006; PAHO, 2007a).

### ➔ Mental Health Facilities and Services

Comparisons between the WHO model and Belize's structure of services reveal a need to increase mental health services **at the primary care level, in general hospitals, and in the community**. Informal services for mental health, including self help groups, NGOs and faith-based organizations need to be strengthened. There is also an important need for the general population to have enhanced knowledge regarding their own mental health care ('self care').



**Figure 10:** The global shape of mental health services: WHO Model versus Belize

### Description of services at each level of care

#### Long Stay Facilities & Specialist Services

➤ Rockview Psychiatric Hospital, the national mental hospital based in the District of Belize (in the Central Region), was closed down on October 18<sup>th</sup>, 2008 due to damaging floods. Rockview provided the majority of long-stay inpatient services in the country, with the average length of stay being 129 days (WHO-AIMS, 2008). The hospital had 50 beds, and on average 60 long-stay patients divided into two wards: a ward for males and one for females. Upon closing, some of the institutionalized patients were discharged to their families. Thirty eight patients continued to receive long-stay inpatient care at a new center, Palma Center in Belmopan, due to lack of available family care and government-funded social services. Rockview had a total of 32 staff, including 2



psychiatric nurses, 4 general nurses, 10 psychiatric nurse aides, 2 occupational therapists, and 12 auxiliary staff (GOB, 2007; WHO-AIMS, 2008). After closing, 20 of these 32 staff were relocated to Palma Center to care for the remaining chronic patients.

#### Hospital admissions:

In 1990, the average number of hospitalized patients in Rockview hospital ranged between 150 and 180 patients. However, since the integration of psychiatric nurses in health care in 1992, psychiatric hospitalizations were reduced to an average of 47 to 50 patients. Most of these admitted patients suffered from chronic psychiatric conditions and had no family support. Due to the increased awareness of mental health conditions in the population and to an increase in psychiatric nurses, psychiatric consultations on an outpatient basis have increased from 929 cases in 1993 to over 14,000 cases in 2006 (GOB, 2007).

#### **Psychiatric Services in General Hospitals**

➤ Inpatient services are provided within the general health care system at Western Regional hospital (previously named Belmopan Hospital). In 2001, an acute psychiatric unit was integrated into this general hospital. The hospital itself has 5 general practitioners and the psychiatric unit has 4 psychiatric nurses. The psychiatric unit has an average of 5 admissions per month and patients' average length of stay is 12 days (with a maximum of 21 days). After discharge, patients continue to attend the outpatient clinic, and if the patient cannot visit the clinic for their follow up, the treatment is sent to the public health nurse at the nearest health centre.

In a continued effort to integrate mental health services within general hospitals and to treat mentally ill patients near their community, Karl Heusner Memorial Hospital now has two beds reserved for patients with acute psychiatric conditions. These beds have a short admission stay of 4 to 5 days. A medical practitioner, a psychiatrist, and a psychiatric nurse are available on a daily basis to assess and treat patients that are hospitalized there.

Six of the seven public hospitals have a minimum of two psychiatric nurse practitioners providing mental health services on site. The exception is San Ignacio Hospital, which has only one psychiatric nurse. This is the smallest hospital in the country with 22 beds. In the other seven hospitals, one psychiatric nurse provides services in the community, while the other psychiatric nurse is available to attend patients at the outpatient clinic (GOB, 2007). When needed the psychiatric nurse conducts rounds in the general ward. Patients are either self-referred or referred by the physicians or other health care providers to the psychiatric nurses. The psychiatric nurses will conduct a complete psychiatric evaluation and order blood tests or other testing if needed. Treatment and follow-up is provided if necessary. In addition to mental health services, psychiatric nurses dispense antiretroviral medications at HIV/AIDS counselling and testing clinics in public hospitals (PAHO, 2007a). The national referral hospital has a visiting psychiatrist



and a psychiatric nurse practitioner who are called to provide emergency psychiatry services, consultation liaison, and operate a weekly counseling clinic (GOB, 2007; GOB, 2006). There is a total of six psychiatric nurses in Belize City who provide outpatient and community services.

As of November 2008, Belize has a new consultant psychiatrist, who visits the district hospitals in the various regions every Thursday of the week, on a rotational basis. This psychiatrist provides supervision, evaluates difficult cases and delivers lectures on mental health and psychiatric issues to different medical personnel at the public hospitals.

### **Community Mental Health Services**

Community services are provided through outreach and ancillary services at each of the six geographical districts. Psychiatric nurse practitioners provide mental health services every Tuesday and Wednesdays in the community through (1) mobile clinics, and (2) street and home visits to patients who are unable to attend the clinic at the district hospital due to financial reasons (GOB, 2007).

During mobile clinic visits, psychiatric nurses provide follow-up treatment to patients who cannot visit a clinic or a health centre. They also provide ongoing counseling for substance abuse, and HIV/AIDS. Since the mobile clinics are run jointly with other community care programs, the nurses give lectures on mental health issues to patients who attend the clinic for other reasons (e.g. pre and postnatal care) (GOB, 2007).

The services provided by the psychiatric nurses, including prevention programs, are part of an ongoing network with relevant sectors in the community, such as teachers. Psychiatric nurses often give lectures to school teachers and provide on-site counseling to children with behavior problems.

In addition, psychiatric nurses work with the police officers to sensitize and educate them about people with mental illness, especially because police are often called to assist in situations that involve people with such disorders. For this reason, a manual has been developed jointly with the police department to enhance their skills in properly identifying, referring, and, when necessary, apprehending people with mental disorders that might be implicated in violent or criminal behaviors (GOB, 2007).

➤ Other community services: The role of the psychiatric nurse practitioner is expanding to provide counseling to patients with psychological problems, survivors of domestic violence, sexual abuse, substance abuse, as well as responding to national situations, such as natural disasters, that have the potential to cause mental distress (GOB, 2007).



## Mental Health Services through Primary Health Care

➤ At the primary level, the general health care network includes 37 public health centres and 43 public health posts. The health posts are primarily manned by volunteer community nurse aids, while the health centres have permanent staff and are supplemented by mobile health services, voluntary collaborators, and traditional birth attendants. District health teams provide services at the health centres. This team includes a psychiatric nurse, general practitioner, public health nurse and community nurse aids, (GOB, 2007; PAHO, 2008<sup>20</sup>) and they provide ambulatory services, pre and post-natal care, immunization services and general health education. Additional care includes mental health, hypertension, diabetes, tuberculosis, screening for sexually transmitted diseases and HIV/AIDS. Most centers also provide outreach services through mobile clinics, visiting smaller and more remote villages every four to six weeks. These mobile clinics account for about 40 per cent of the centers' service delivery (GOB, 2007).

Some health posts in rural areas, such as Bullet Tree / Santa Familia, Santa Martha, San Antonio and Succotz, in the Western region, are manned by volunteer Cuban practitioners. Health posts provide general health education, treatment for diarrhea, minor ailments and referrals to health centers or hospitals.<sup>21</sup>

There are 3 polyclinics in the district of Belize. A public health nurse and a medical practitioner provide outpatient maternal and child health services, as well as dental services at each of these clinics. Since 2005, after the second round of trainings for new psychiatric nurse practitioners, psychiatric nurses begin to provide services at these facilities. The mental health services are community oriented and include preventive mental health care, outpatient services, crisis management, consultation to schools and to the judiciary, and outreach services. They also address other public health concerns such as attempted suicide, domestic violence, rape, and pre and post-test counseling for HIV (GOB, 2007).

In 2008, the Port Loyola Mental Health Day Hospital was constructed within the premises of the Port Loyola Health Centre. This facility is manned by a psychiatric nurse practitioner, an occupational therapist, and a social worker. Presently, patients with various acute mental health conditions receive follow-up care, in the form of illness education and management, and skills training (i.e., coping skill and daily living skills).

➤ Within the private sector, there are fifty-five private clinics and four not-for-profit clinics throughout the country. Private facilities at this level of care do not provide

<sup>20</sup> WHO/PAHO website. Belize country office: Mental health in Belize. url: <http://www.blz.paho.org/mental.htm> (last accessed 14/01/2009)

<sup>21</sup> Ministry of Health, Belize website. Health regions. url: [http://health.gov.bz/moh/index.php?option=com\\_content&task=blogcategory&id=22&Itemid=61](http://health.gov.bz/moh/index.php?option=com_content&task=blogcategory&id=22&Itemid=61) (last accessed 14/01/2009).





mental health services. These clinics are located in Belize City and provide ambulatory services only. Financing is mainly by the users, directly or through private health insurance (GOB, 2007).

### Informal Community Care

#### ➤ Mental Health Consumers/Users or Family associations:

- ❖ There is a national **Mental Health Consumer Association** in Belize with branches in the country's six geographical districts. This consumer association was responsible for introducing new psychotropic drugs to the country's essential medicines list. This is the only nongovernmental organization that advocates for mental health (PAHO, 2007a; WHO, Mental Health Atlas, 2005). The following are two of the most active branches:
  - The **Belmopan Consumer Association** creates awareness and provides education to the mentally ill and their families residing in the capital city. One of their current concerns is the loss of employment for people with mental disorders due to lack of education and stigma in the workplace. (<http://www.geocities.com/eliasavella/techie.html>; to read an interview with the president of this association please access the following link: [http://www.paho.org/English/DD/PIN/mentalhealth\\_009.htm](http://www.paho.org/English/DD/PIN/mentalhealth_009.htm))
  - The **Belize Mental Health Association** helps raise awareness around mental health issues and advocates on behalf of people with mental illnesses and their families (WHO, Mental Health Atlas, 2005).





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