# **Pharmaceutical Situation in Barbados: WHO Level II** Health Facilities Survey, 2010

Hinds, Maryam (1); Yearwood, Cheryl Ann (1); Vialle-Valentin, Catherine (2); Ross-Degnan, Dennis (2); Ivama, Adriana Mitsue (3); Nunes, Jenifer (4); Vivas, Gabriel (5); <a href="mailto:ivamaadr@cpc.paho.org">ivamaadr@cpc.paho.org</a>;

1: Barbados Drug Service, Ministry of Health of Barbados; 2: Department of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, USA.; 3: Pan-American Health Organization (PAHO) /World Health Organization (WHO), Office of Caribbean Programme Coordination (OCPC); 4: University of West Indies (UWI); 5: PAHO/WHO Office of Eastern Caribbean Countries (ECC)

# **Problem Statement**

 $\checkmark$  The key contributors of morbidity and mortality are heart disease,

# Objective

Assess the pharmaceutical situation in Barbados related to access, quality and rational use of medicines.

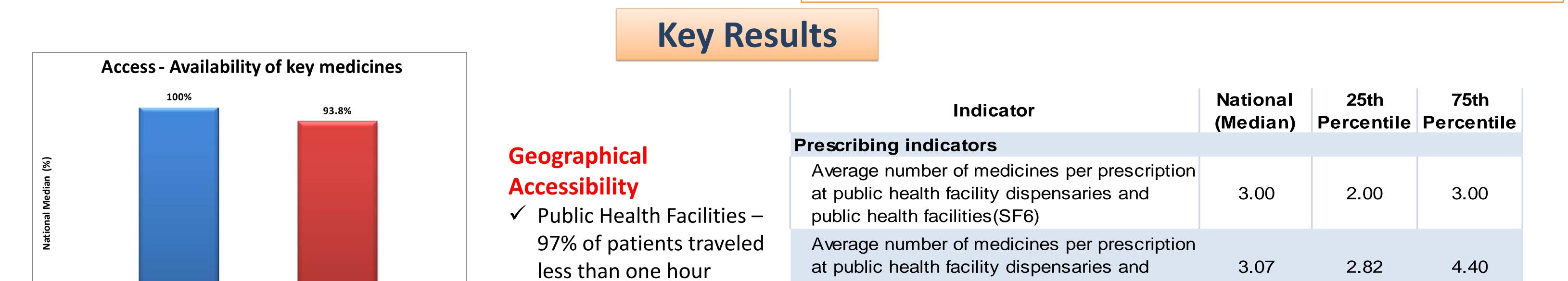
- cerebrovascular disease, diabetes mellitus, cancer, hypertension, and HIV/AIDS among adults.
- Life expectancy at birth is 75.8 years; 15.75% of the population over 60 years.  $\checkmark$
- Medicines from the Barbados National Drug Formulary (BNDF) are provided free at pharmacies of the Public Health Facilities (PHF) and with payment of a dispensing fee at private pharmacies (PF) to patients 65 years old (yo) and over, Children under 16 yo and persons prescribed for hypertension, diabetes, cancer, asthma and epilepsy.
- Patients from 16 to 64 yo can receive the same medicines at subsidized prices.  $\checkmark$

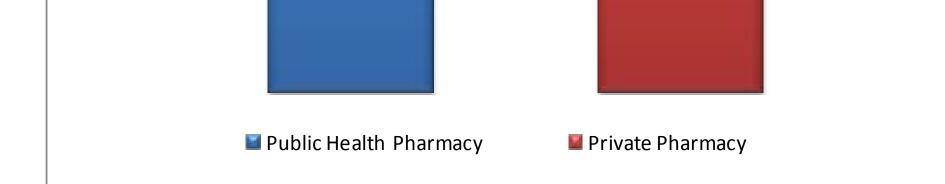
# **Design, Settings and Study Population**

**Design:** A cross sectional study was undertaken from October, 2009 to July, 2010 using WHO Level II Health Facilities survey. Analysis was done with Epidata and Excel.

**Setting:** Barbados is a middle income country with a population of 275,700 (2009).

**Study population:** All 18 PHF which dispense medicines to outpatients and 30 PF randomly selected were surveyed and 1026 outpatients interviewed.





### No expired medicines found in public or private sector.

# Adequacy of storage conditions in the storerooms and dispensing areas:

- ✓ public health facilities 85%
- ✓ private pharmacies 90%

**Affordability:** To treat common conditions with standard regimens

- ✓ Lowest priced generic medicines 2-5% of day's wages\*
- ✓ Originator brands 9-97% of day's wages

\*Using lowest monthly paid Government worker's salary (BBD 63.68).

### **Compliance with legal requirements** in private and public sector

- ✓ Presence or support of the pharmacist: 100% PFH, 96% private pharmacies
- ✓ No untrained staff dispensing.
- ✓ Doctors most frequent prescribers (78% of them recently trained in rational use of medicines)

public health facilities(SF7)			
% patients prescribed antibiotics in public health facilities	23%	13%	33%
% patients prescribed injections in public health facilities	7%	0%	13%
% prescribed medicines on the formulary at public health facilities	99%	97%	100%
% medicines prescribed by generic name (INN) at public health facilities	36%	25%	48%
Patient care indicators			
% medicines adequately labeled at			
public health facility dispensaries	100%	100%	100%
private dispensaries	100%	96%	100%
% patients know how to take medicines at			
public health facility dispensaries	100%	100%	100%
private dispensaries	100%	100%	100%
% of prescription medicines bought without prescription in private pharmacy	0%	0%	7%
Facility specific factors for the rational use of medicines	National percentage		
Availability of standard treatment guidelines at public health facilities	55%		
Availability of formulary at public health facilities	92%		

#### Selling of prescription medicines without prescription

- ✓ 10 of 26 private pharmacies (38.5%)
- ✓ One pharmacy: 46% of prescription medicines sold without prescription

# Conclusions

Even though the availability of medicines in public pharmacies was excellent at the time of the survey, only the data from current stock was available. The software used needs to be improved for retrieving historical data. It is also necessary to expand availability of STG. Use of INN for prescribing should be encouraged, as part of the promotion strategy of generics. Dispensing of prescription medicines without a prescription should be discouraged and addressed regarding legal and ethical aspects. Managerial policies related to pharmaceuticals need to be improved. The development of Good Practices through the distribution chain is recommended. These findings were used as evidence for updating the National Pharmaceutical Policy, discussed with stakeholders in early 2011 and submitted to Cabinet for approval.

# Acknowledgements

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## **Participating Institutions:**

- Queen Elizabeth Hospital (QEH)
- Psychiatric Hospital  $\checkmark$
- Medical Officers of Health and Sisters in charge of the Polyclinics  $\checkmark$
- Heads of all health facilities visited, and Householders that cooperated  $\checkmark$ with the study.

### **Collaboration from**

- Barbados Statistical Services (BSS)
  - Government Information Service (GIS)

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