



Caribbean
Public Health
Agency

CARPHA

Preventing disease
Promoting and protecting health

NCD Care in the Caribbean

Experiences and Best practices

Dr Glennis Andall-Brereton
Acting Head, NCDs and Life Course



CARPHA

Preventing disease, promoting and protecting health

Presentation Outline

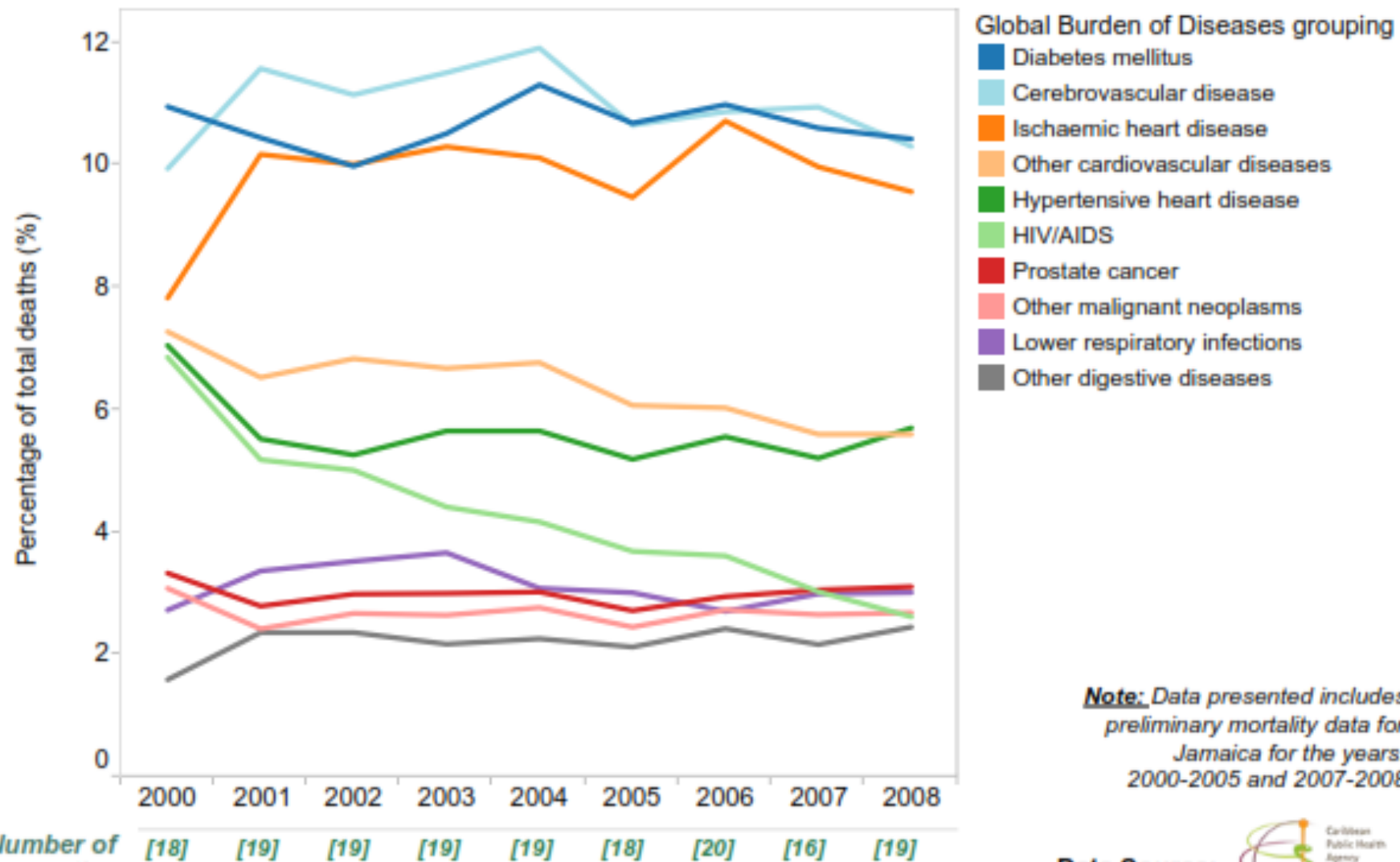
- Mortality in the Caribbean
- Risk Factors for NCDs
- Care of Hypertensive and Diabetics
 - Comparisons with CCMRC/CHRC Guidelines
- Best practices for NCD care



CARPHA

Preventing disease, promoting and protecting health

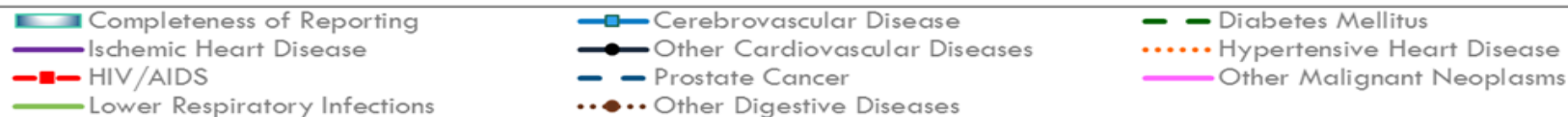
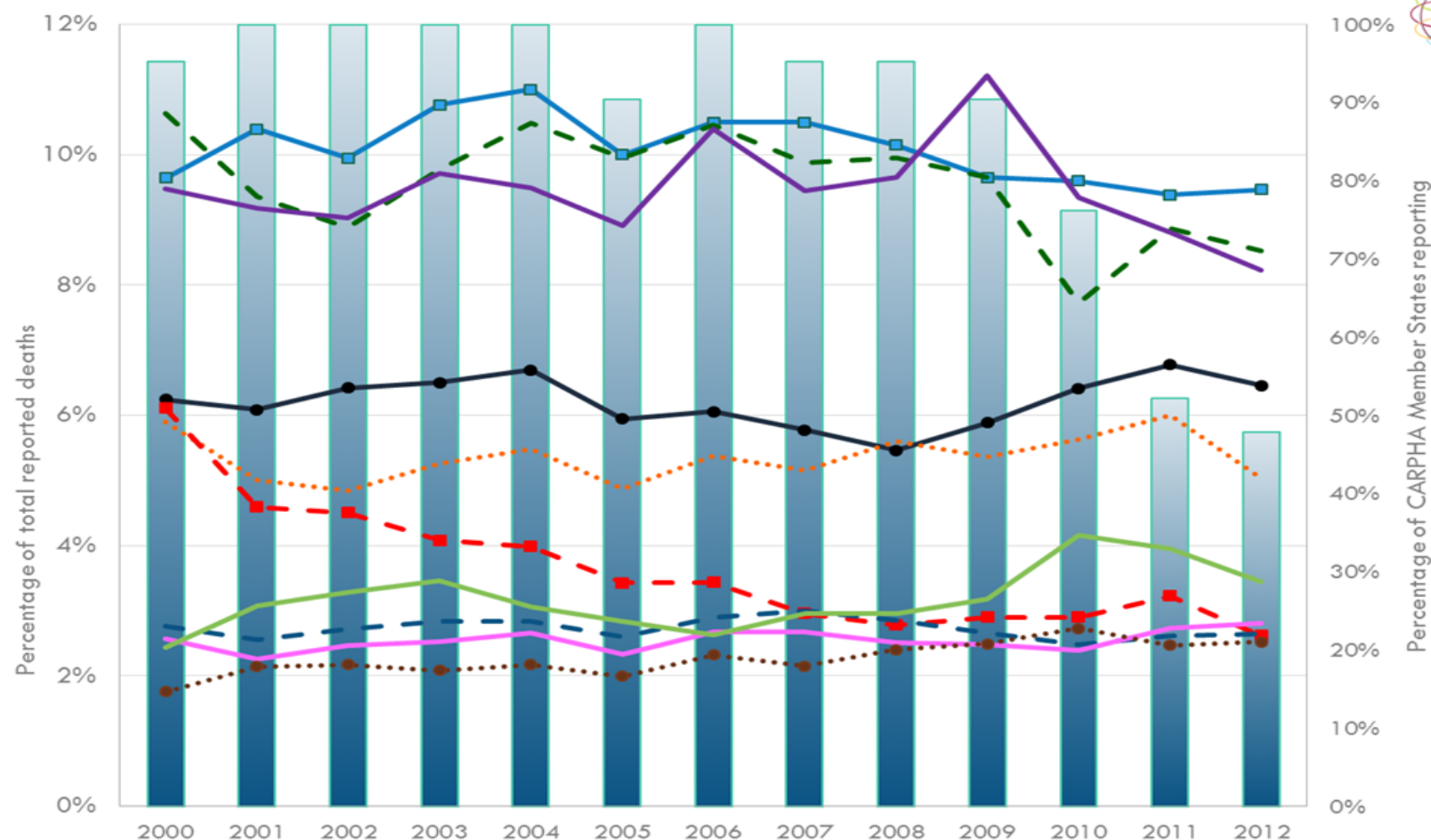
Leading Causes of Death in the English- and Dutch-speaking Caribbean, 2000-2008 *(using the Global Burden of Diseases grouping)*



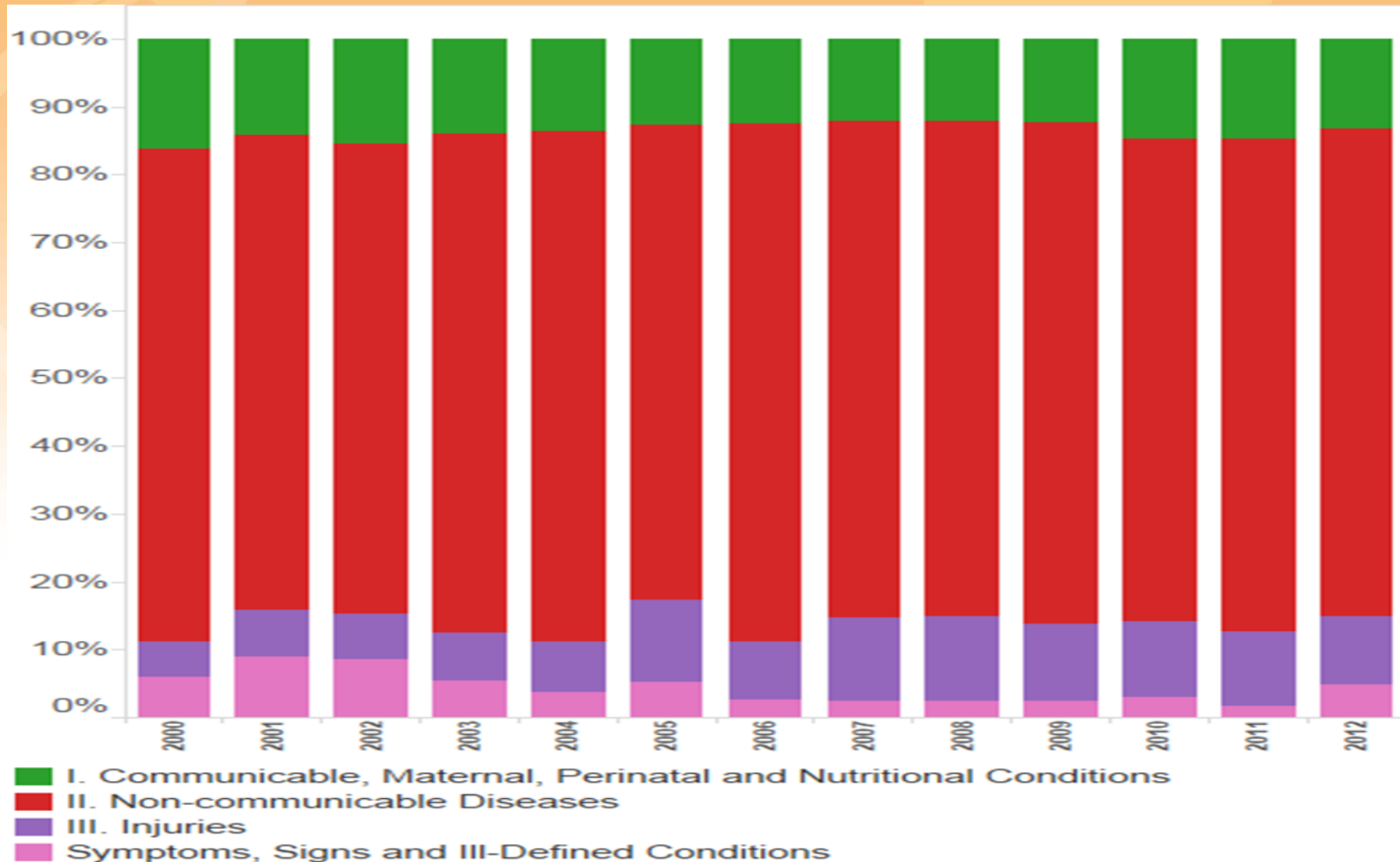
Number of reporting countries:

Leading Causes of Death CARPHA Member States*, 2000-2012

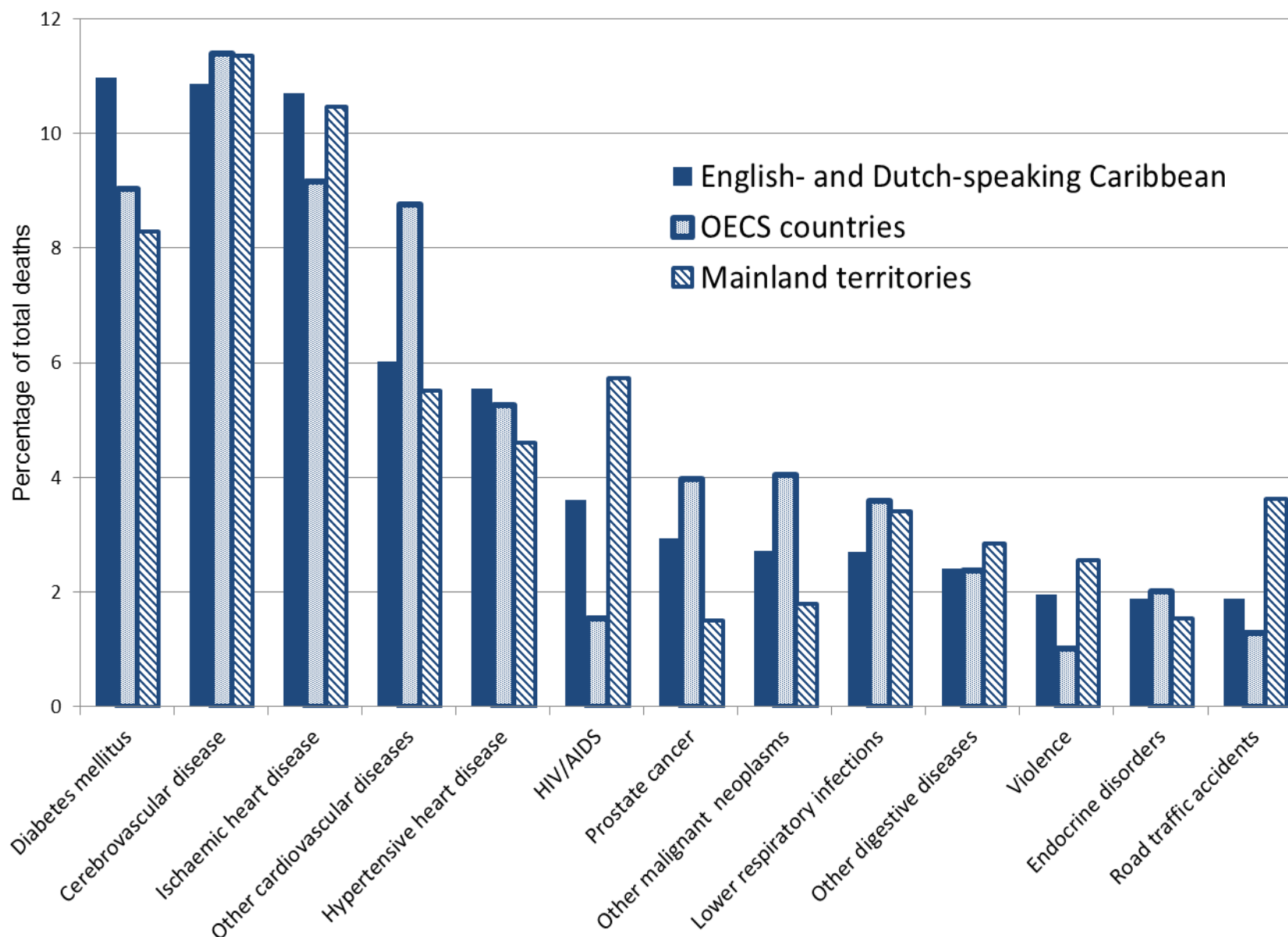
* Excluding Haiti



Broad Groupings of Conditions Causing Death in CARPHA Member States



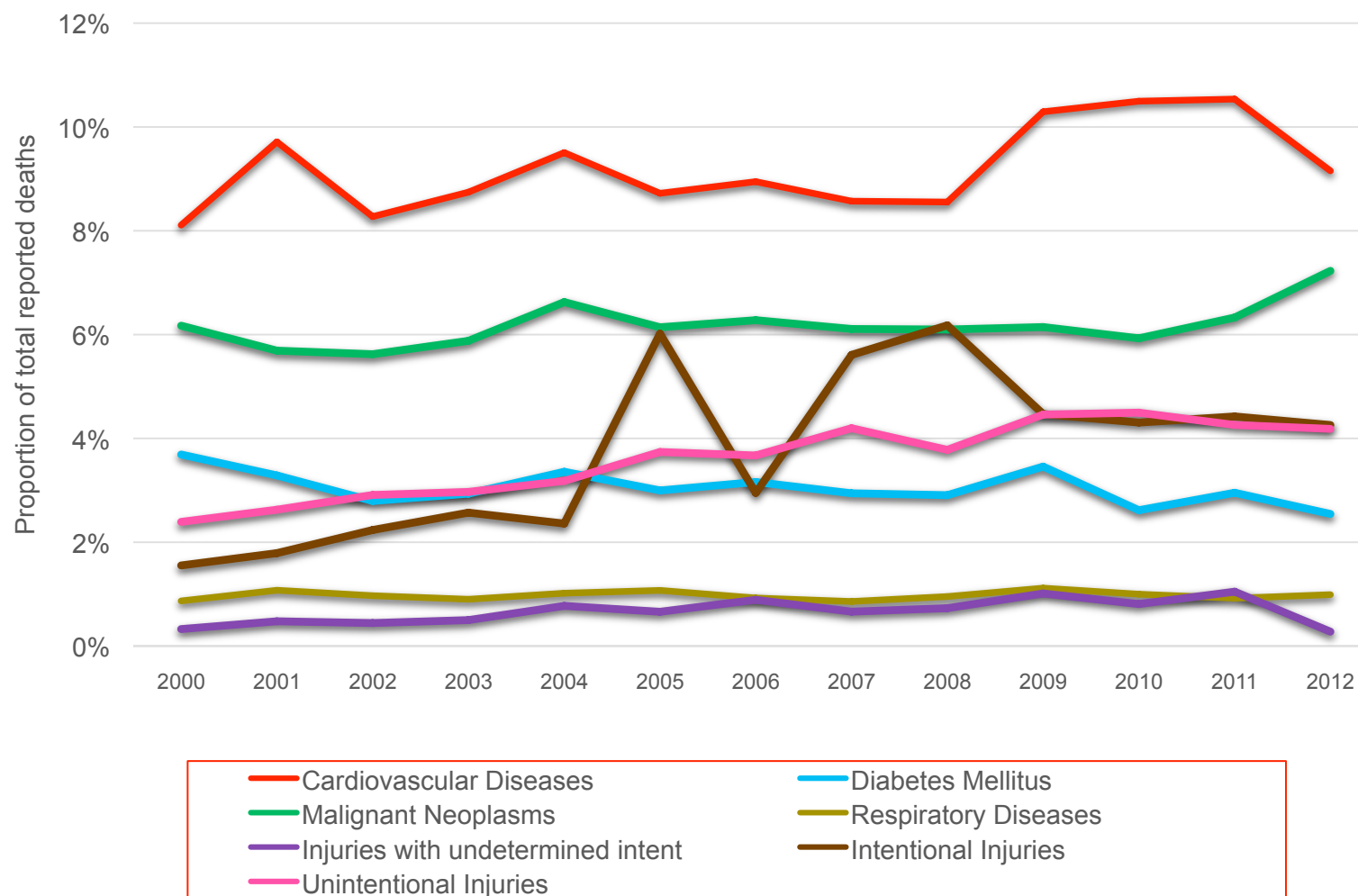
Leading causes of death in the English- and Dutch-speaking Caribbean and in the OECS countries and the Mainland territories , 2006



Source: Quesnel S, et al. 2013. *Leading causes of death in the English- and Dutch-speaking Caribbean during the period 2000-2008.*

Paper presented at the 58th Annual CHRC/CARPHA Scientific Conference.

Crude mortality rates for select Non-Communicable Diseases for deaths among persons 65 years or younger, English- and Dutch-speaking Caribbean, 2000-2012

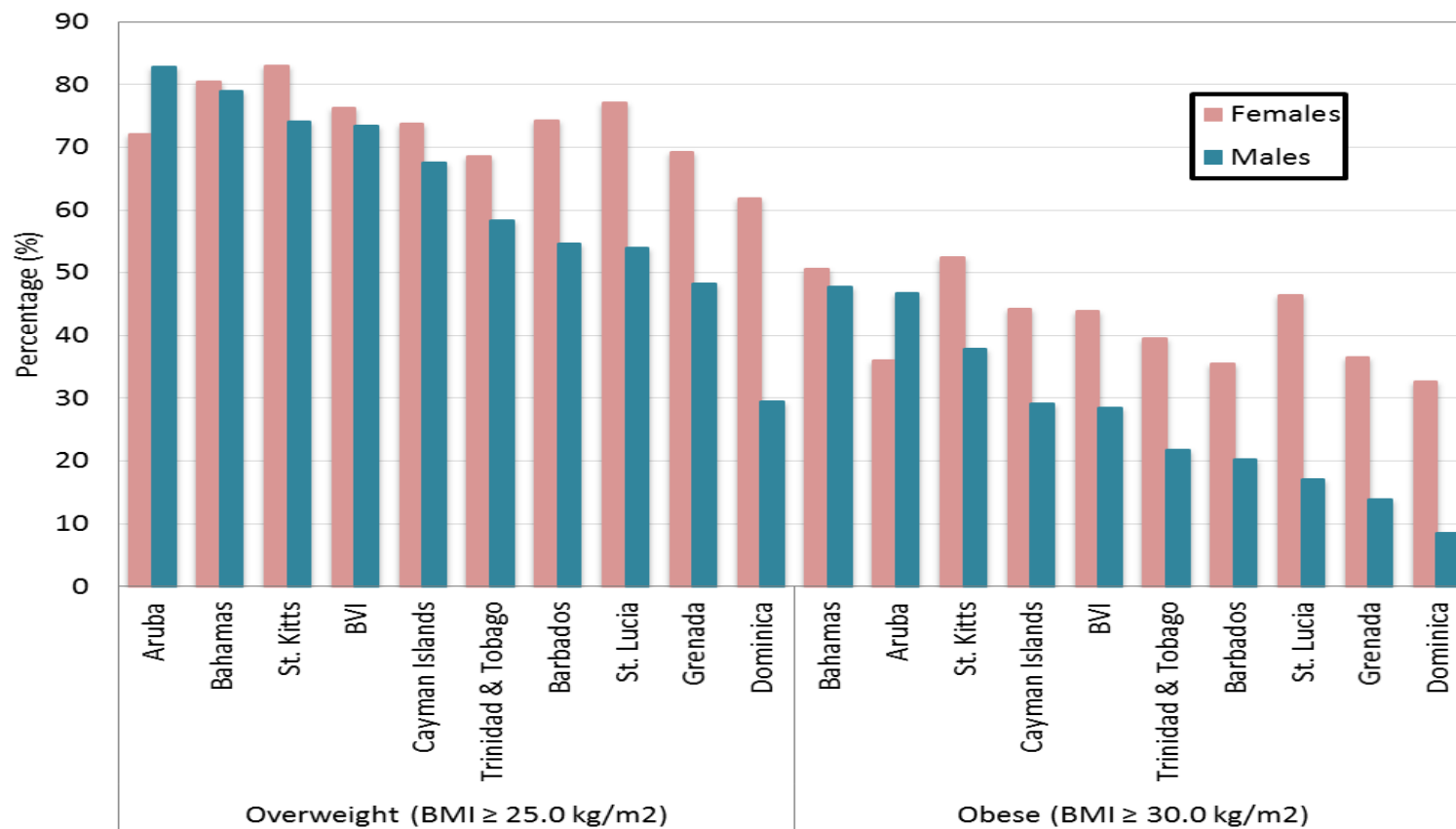


Agency

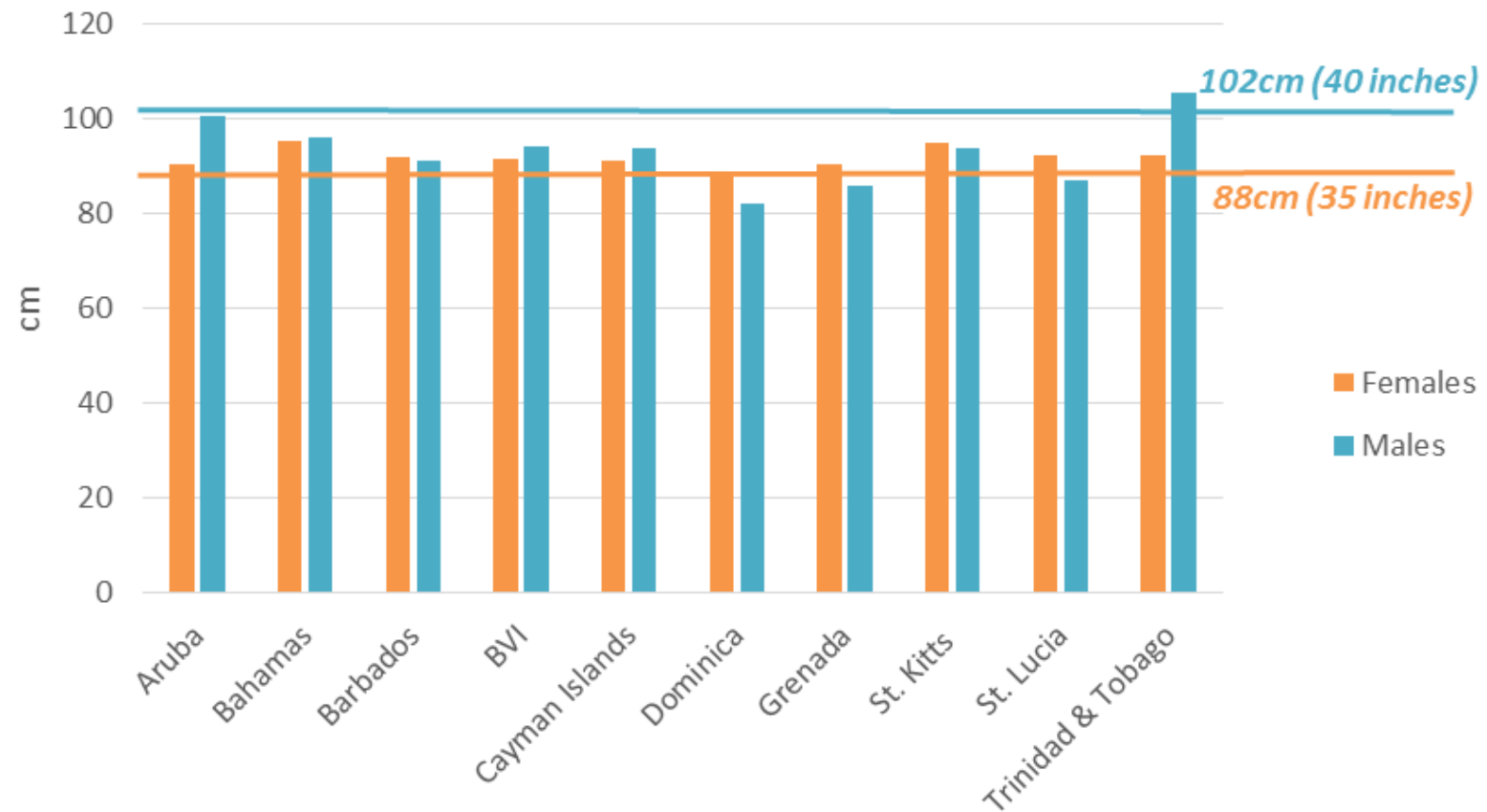
CARPHA

Preventing disease, promoting and protecting health

Prevalence of overweight and obesity



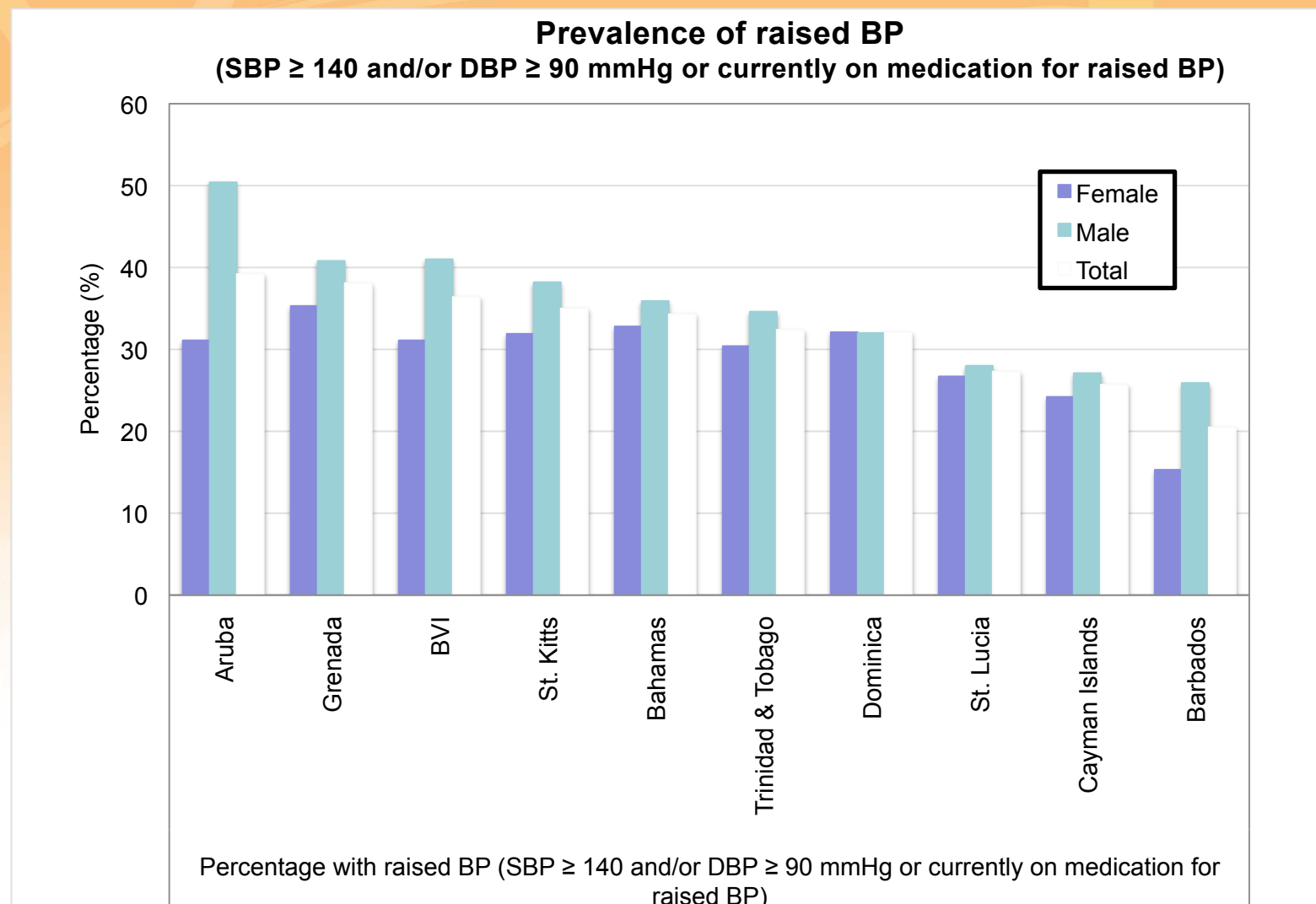
Average Waist Circumference (cm)



Public Health
Agency

CARPHA

Preventing disease, promoting and protecting health



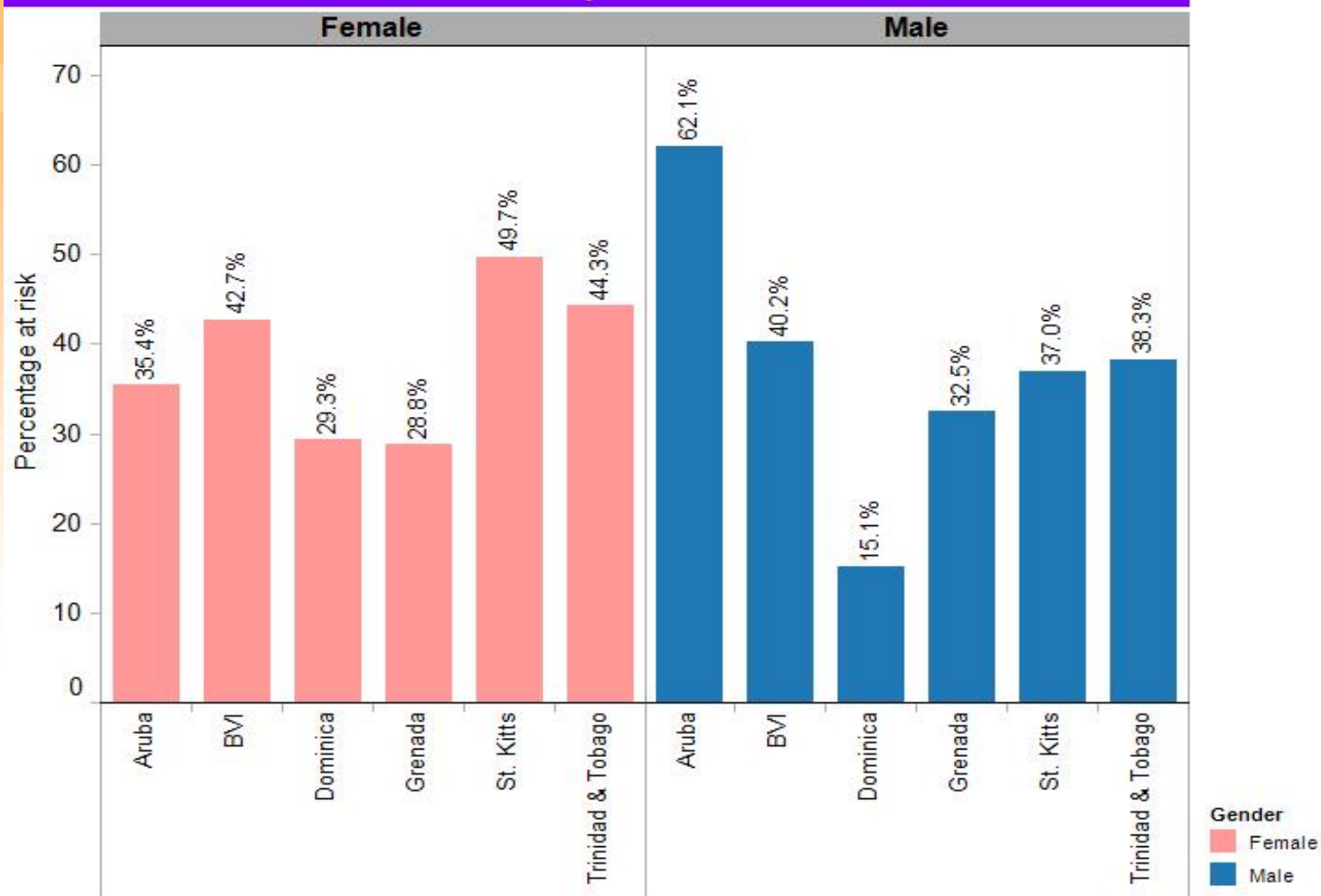
Prevalence of Raised Risk for Development of Chronic Diseases in 25-44 year olds*

Risk factors:

- current daily smokers
- less than 5 servings of fruits & vegetables per day
- low level of physical activity
- overweight or obese
- raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP)

Raised Risk:

3-5 Risk factors



* For Dominica, raised risk is calculated for 15-44 year olds

Chronic Renal Failure in the English-speaking Caribbean

Soyibo AK and Barton EN (WMJ 2009 Dec (6): 596-600)

- Major causes of chronic kidney disease and end-stage renal disease:
 - Hypertension, Diabetes mellitus and Chronic Glomerulonephritis (CGN)
- Leading causes of death:
 - Ischaemic heart disease/heart failure, sepsis and cerebrovascular accident



CARPHA

Preventing disease, promoting and protecting health

Clinical Guidelines for Managing Diabetes and Hypertension

- Managing Diabetes in Primary Care in the Caribbean (CCMRC/CHRC)
 - 1995
 - 2006
- Managing Hypertension in Primary Care in the Caribbean (CMRC/CHRC)
 - 1998
 - 2007



CARPHA

Preventing disease, promoting and protecting health

Diabetes Care in the Caribbean

Study Country	Bdos TnT BVI	TnT	Bdos	Mont	Ant & Bar	Jam	Bdos
Year	1996	1998	2005	2009	2010	2012	2013
Indicators	(%)	(%)	%	(%)	(%)	(%)	(%)
Rec. BMI	*	*	0	0	53	*	*
Waist circumference	*	*	0	0	*	*	*
Treated BP within recommended limits	23	61	43	29	33	41	38
Foot examination	11	22	41	7	1	*	*
Eye examination	2	9	18	5	*	2	*
Rec. dietary advice	32	54	61	54	64	19	*
Rec. exercise advice	5	34	49	26	54	60	*
Fasting lipid profile recorded	*	*	48	*	*	*	75 (LDL)
Poor blood glucose control	50	61	73	75	83	69	59

* NA

Hypertensive Care in the Caribbean

Study Country	TnT	Bdos	J'ca	Ant & Bar
Year	1998	2005	2005	2010
Indicators	(%)	(%)	(%)	(%)
BP recorded	98	98	100	100
Rec. BMI	*	1	*	61
Waist circumference	*	0	0	*
Advice about smoking	8	17	50	1
Advice about alcohol consumption	6	19	45	1
Rec. dietary advice	36	55	33	66
Rec. exercise advice	19	45	*	47
Fasting glucose done		39	55	81
Fasting lipid profile	*	48	21	*
Treated BP NOT adequately controlled	42	64	*	63

Primary care for HTN and Diabetes

- ✓ Limited assessment of modifiable risk factors
- ✓ Limited advice on reducing risk factors
- ✓ Limited assessment for possible complications
- ✓ Threshold for control NOT being achieved with treatment by majority of patients
- ✓ CHRC Guidelines for HTN and Diabetes not being followed

Best Practices for Care of NCDs: Improving the primary care response

MULTI-pronged approach needed; comprehensive and multi-sectoral

GOAL: To reduce the burden of morbidity, disability and premature mortality related to NCDs

1. Strategy and targets for NCD control

Include assessment and addressing of modifiable risk factors in patients and general population

2. A package of interventions for quality care of NCDs



CARPHA

Preventing disease, promoting and protecting health

Best Practices for Care of NCDs: Improving the primary care response

Package of Interventions for Quality Care

1. Political commitment for health system strengthening for NCD prevention and control
2. Active case finding among those attending primary care services and early intervention
3. Standardized diagnostic and treatment protocols
 - building physician/patient partnerships
 - involving the family and community
4. Regular drug supply
5. Systematic monitoring and evaluation



CARPHA

Preventing disease, promoting and protecting health

References

Adams PO, Carter AO. Are primary care practitioners in Barbados following diabetes guidelines? –a chart audit. BMC Res Notes.2010;3:316

Adams PO, Carter AO. Are primary care practitioners in Barbados following diabetes guidelines? –a chart audit with comparison between public and private care sectors. BMC Res Notes.2011;4:199

Asnani M. et al. A clinical audit of the quality of care of hypertension in general practice. West Indian Medical Journal Vol. 54 No.3 ISSN 0043-3144

Buffonge I, West G, Hunte S. Diabetes Mellitus and its complications in patients on Montserrat: An assessment of management and control of risk factors for complications. (abstract) Oral presentation CHRC conference 2011.

Dermot M et al. A global framework for action to improve the primary care response to chronic non-communicable diseases: a solution to a neglected problem. BMC Public Health 2009,9:355

Gulliford MC et al. Diabetes Care in middle income countries: A Caribbean case study. Diabetes Med. 1996 Jun;13 (6);574-81



CARPHA

Preventing disease, promoting and protecting health

References

Gulliford MC, Mahabir D. A five –year evaluation of intervention in diabetes care in Trinidad and Tobago. *Diabetes Med.* 1999 Nov 16 (11):939-45

Gulliford MC, Mahabir D. A 4–year evaluation of blood pressure management in Trinidad and Tobago. *J Hum Hypertens* 1999 Jul 16 (7) 455-9

Harris M. et al. Minimal improvement in management of diabetes in primary care in Jamaica, over two decades: a clinical audit. 2014 (abstract) Oral presentation CHRC Conference.

Robinson HM, Hort K. Non-communicable diseases and health systems reform in low and middle-income countries, *Pac Health Dialog* 2012 Apr;18(1):179-90

Sealey-Thomas R, James J, Roberts, E. Hunte S, Management of diabetes and hypertension in health centres in Antigua and Barbuda: Results of a chart audit, 2010 (abstract) Oral presentation at CHRC conference.

Soyibo AK, Barton EN. Chronic renal failure from the English speaking Caribbean: 2007 data. *West Indian Medical Journal* 2009 Dec;58(6):596-600



CARPHA

Preventing disease, promoting and protecting health

**Thank You
??**



Preventing disease, promoting and protecting health