

South Africa - Cardio-metabolic diseases by population group and gender

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Overview

Identification

ID NUMBER

Cardio-metabolicdiseasesbypopulationgroupandgender-2013

Overview

ABSTRACT

Aims

To describe the distribution and examine the associations of diabetes, hypertension and hypercholesterolaemia across and within population groups, gender and body mass index (BMI) categories

Methods

This national cross-sectional study was conducted in 2013 among =18-year-old black African, coloured, white and Indian adults self-selected for screening. Data collection included self-reported behavioural risk factors and clinical measurements comprising blood pressure, anthropometry and point-of-care random blood glucose and cholesterol assessments.

Results

Among the 7711 participants, 2488 men and 5223 women, the prevalence of diabetes and hypertension increased by BMI category across population groups. Compared with white men and women, black African men (odds ratio: 2.66, 95% confidence interval: 1.70-4.16) and women (2.10, 1.49-2.96), coloured men (2.28, 1.44-3.60) and women (2.15, 1.52-3.05) and Indian men (4.38, 2.65-7.26) and women (3.64, 2.50-5.32) were significantly more likely to have diabetes. The odds for hypertension were significantly higher only in coloured men compared with white men (1.37, 1.02-1.83), while it was significantly higher in black African, coloured and Indian women compared with white women. The odds for hypercholesterolaemia were significantly lower in black African men (0.64, 0.49-0.84) and women (0.52, 0.43-0.62) compared with white men and women, and significantly higher in Indian men (1.47, 1.05-2.08) compared with white men. Black African women compared with their male counterparts were less likely to have diabetes (0.64, 0.46-0.89). Black African (0.66, 0.54-0.82), coloured (0.65, 0.50-0.84) and white (0.69, 0.53-0.88) women were significantly less likely to have hypertension compared with their male counterparts. The odds for hypercholesterolaemia were higher in coloured (1.44, 1.16-1.80) and white (1.47, 1.18-1.84) women compared with their counterparts.

Conclusions

The cardio-metabolic diseases of diabetes, hypertension and hypercholesterolaemia were differentially associated with population groups and gender in South Africa. The insights obtained highlight the need for multi-disciplinary targeted management approaches in high-risk populations.

KEYWORDS

diabetes, hypertension, hypercholesterolaemia, obesity, population groups, ethnicity, gender, South Africa

Producers and Sponsors

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Sampling

No content available

Questionnaires

No content available

Data Collection

Data Processing

No content available

Data Appraisal

No content available

File Description

Variable List

Behavioural risk factors and clinical measurements

Content	
Cases	7713
Variable(s)	28
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

Variables

ID	Name	Label	Type	Format	Question
V1	ClientCode	Client Code	discrete	numeric	
V2	Province	Province	discrete	character	
V3	Date	Date	discrete	character	
V4	Age	Age	discrete	numeric	
V5	Gender	Gender	discrete	character	
V6	PopulationGroup	Population Group	discrete	character	
V7	Conditionhistory	Condition history	discrete	character	
V8	Paternalhistory	Paternal history	discrete	character	
V9	Maternalhistory	Maternal history	discrete	character	
V10	Selfreporteddiabetes	Self-reported diabetes	discrete	character	
V11	Smoking	Smoking	discrete	character	
V12	Selfreportedhypertension	Self-reported hypertension	discrete	character	
V13	Physicalactivity	Physical activity	discrete	character	
V14	FruitVeg	Fruit/Veg	discrete	character	
V15	Fat	Fat	discrete	character	
V16	Salt	Salt	discrete	character	
V17	Alcohol	Alcohol	discrete	character	
V18	Alcoholspecify	Alcohol, specify	discrete	character	
V19	Newsletter	Newsletter	discrete	character	
V20	Height	Height	discrete	numeric	
V21	Weight	Weight	discrete	numeric	
V22	bmi	bmi	discrete	numeric	
V23	chol	chol	discrete	numeric	
V24	bp1syst	bp1syst	discrete	numeric	
V25	bp1diast	bp1diast	discrete	numeric	
V26	bp2syst	bp2syst	discrete	numeric	
V27	bp2diast	bp2diast	discrete	numeric	

ID	Name	Label	Type	Format	Question
V28	glucose	glucose	discrete	numeric	

Client Code (ClientCode)

File: Behavioural risk factors and clinical measurements

Overview

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 Range: 1-7713

Valid cases: 7713
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File: Behavioural risk factors and clinical measurements

Overview

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 Width: 13

Valid cases: 7713
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Valid cases: 7713
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File: Behavioural risk factors and clinical measurements

Overview

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Valid cases: 7709
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Overview

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Smoking (Smoking)

File: Behavioural risk factors and clinical measurements

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File: Behavioural risk factors and clinical measurements

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File: Behavioural risk factors and clinical measurements

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bmi (bmi)

File: Behavioural risk factors and clinical measurements

Overview

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Decimals: 2
Range: 11-67

Valid cases: 7697
Invalid: 16

chol (chol)

File: Behavioural risk factors and clinical measurements

Overview

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Valid cases: 7705
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File: Behavioural risk factors and clinical measurements

Overview

bp1syst (bp1syst)**File: Behavioural risk factors and clinical measurements**

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 Range: 66-276

Valid cases: 7710
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 Decimals: 0
 Range: 21-177

Valid cases: 7710
 Invalid: 3

bp2syst (bp2syst)**File: Behavioural risk factors and clinical measurements****Overview**

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 67-267

Valid cases: 7711
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bp2diast (bp2diast)**File: Behavioural risk factors and clinical measurements****Overview**

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 Decimals: 0
 Range: 34-144

Valid cases: 7711
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glucose (glucose)**File: Behavioural risk factors and clinical measurements****Overview**

Type: Discrete
 Format: numeric
 Decimals: 2
 Range: 0.6-32

Valid cases: 7710
 Invalid: 3

