

PaCT
**PARTNERSHIP FOR COHORT
RESEARCH & TRAINING**



COLLABORATION AMONG FIVE AFRICAN INSTITUTIONS AND HARVARD SCHOOL OF PUBLIC HEALTH

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Outline

- PaCT overview
- PaCT Pilot – SA
 - Objectives
 - Methods
 - Preliminary results
 - Conclusions
 - The way forward

PaCT overview

- PaCT is a collaboration among **five African Institutions and HSPH** which will investigate **chronic NCDs** among 500 000 people from Africa over the next 10-20 years.
- A project of this scale has **never** been undertaken in Africa before.



- Our aims are to:
 - **Investigate the causes of chronic NCDs** in Africa.
 - **Evaluate interventions** through nested RCTs.
 - **Provide training opportunities** for African researchers.
 - **Collaborate** with investigators conducting cohort studies of NCDs **globally**.

Linkage to cohort studies in other countries: Sweden, 2012



Representatives from Africa, US, India, Mexico, Sweden, and Iceland
PaCT, South Africa

PaCT Pilot study, South Africa

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Main objectives:

- 1) To determine the **feasibility** of conducting a cohort study on NCDs among teachers in SA
- 2) To investigate the **prevalence of CVD risk factors and CKD** among teachers in the Cape metropolitan area of the Western Cape Province.

Recruitment

Meet **director and circuit team managers** from the MSED (Nov 2010)

Invite the **principals** by letter and e-mail: **Jan, Mar, Jul 2011**

Follow-up on invitation by telephone

Principal gives **written** permission

Principal refuses permission:
Document reason

Deliver **questionnaire-consent (Q-C) packages** to schools (DHL/Person): **Principal distributes documents** to all the teachers at their schools

Baseline

Mar-Aug 2011

Teachers return completed Q-C packages in a pre-paid envelope

Assign unique PIN and file

May- Sept 2011

Trained nurses visit schools:
Physical measurements and biological samples

- Store and capture data
- Feedback of results :
 - i. Grapevine SMS
 - ii. MS Outlook

Follow-up at 6 months

Nov 11- Jan12

Paper

Post FUQ&FFQ to willing teachers

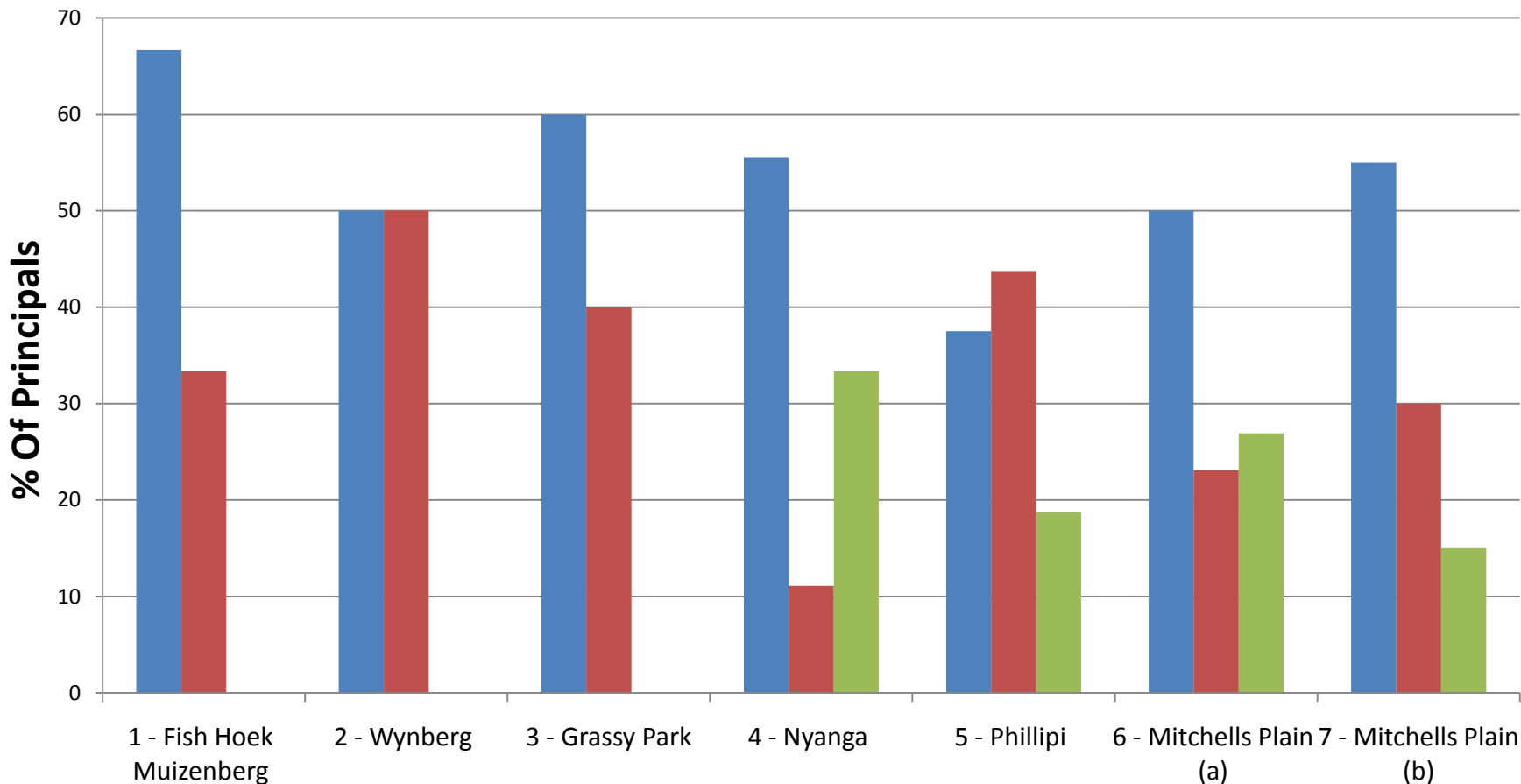
Feb- Apr 12

E-mail

E-mail FUQ&FFQ to willing teachers

- Telephonic follow-up, reminders by SMS and email
- Information bulletin

Response from 111 principals by circuit:



Invitation	Willing (%)	Not willing (%)	No reply (%)
Round 1	24 (21.6)	14 (12.6)	73 (65.8)
Round 2	48 (43.2)	29 (26.1)	34 (30.6)
Round 3	59(53.2)	36(32.4)	16(14.4)

1779 Packages distributed to 59 schools: 493 Participants

59 Principals agreed for their schools to participate	Number of documents sent to their schools	Number of teachers who enrolled	%
35 Principals enrolled	1053	448	42.5%
24 Principals did not enroll	726	45	6.2%

Willingness to complete a future questionnaire

Willing	409/482 (85%)
Not willing	54/482 (11%)
Not indicated	19/482 (4%)

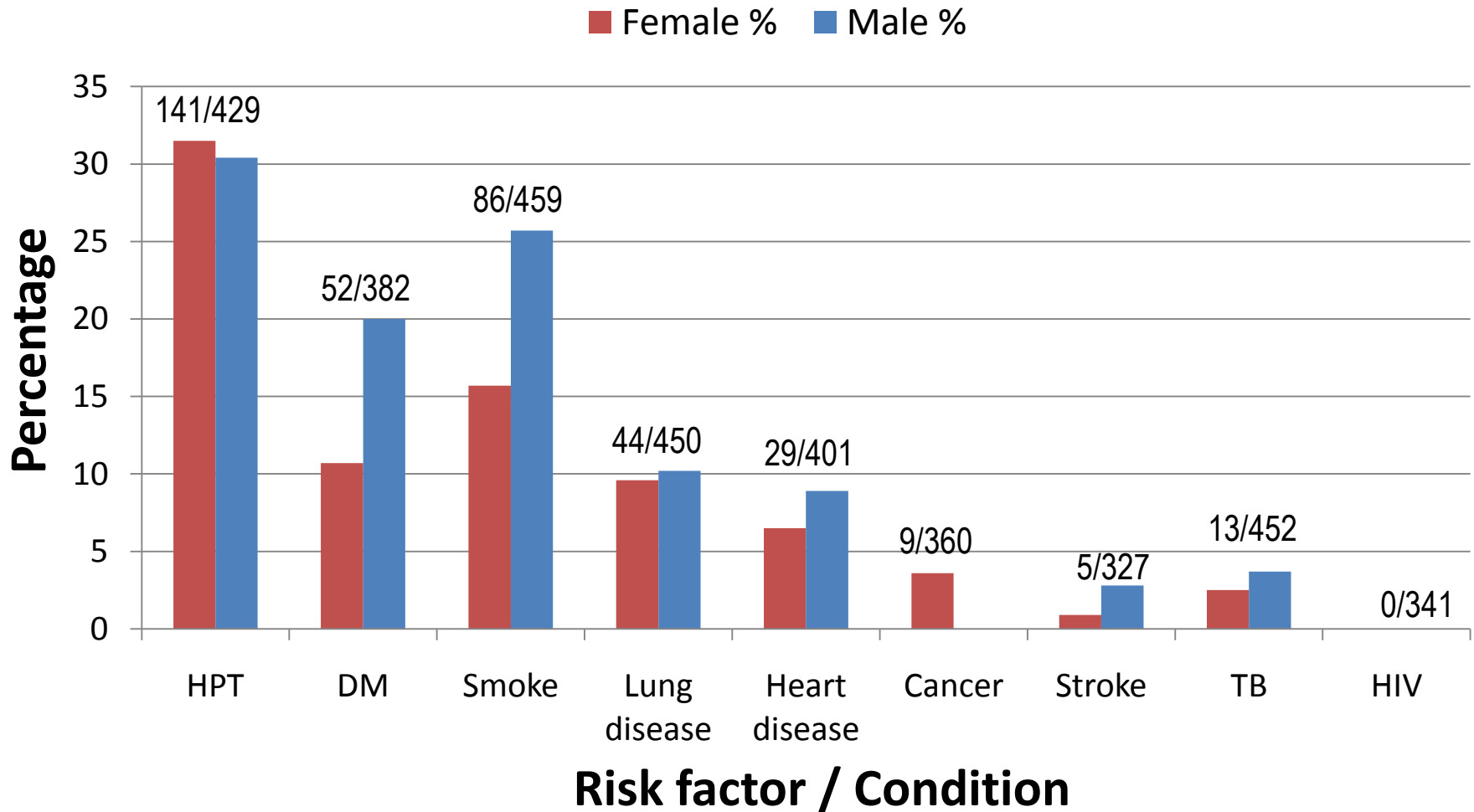
Retention after 6m: 212/428 (49.5%) (153 by post and 59 by e-mail)

Follow-up not successful	149/428(34.8%)
Decline follow-up	42/428 (9.8%)
Posted but not received	25/428 (5.8%)

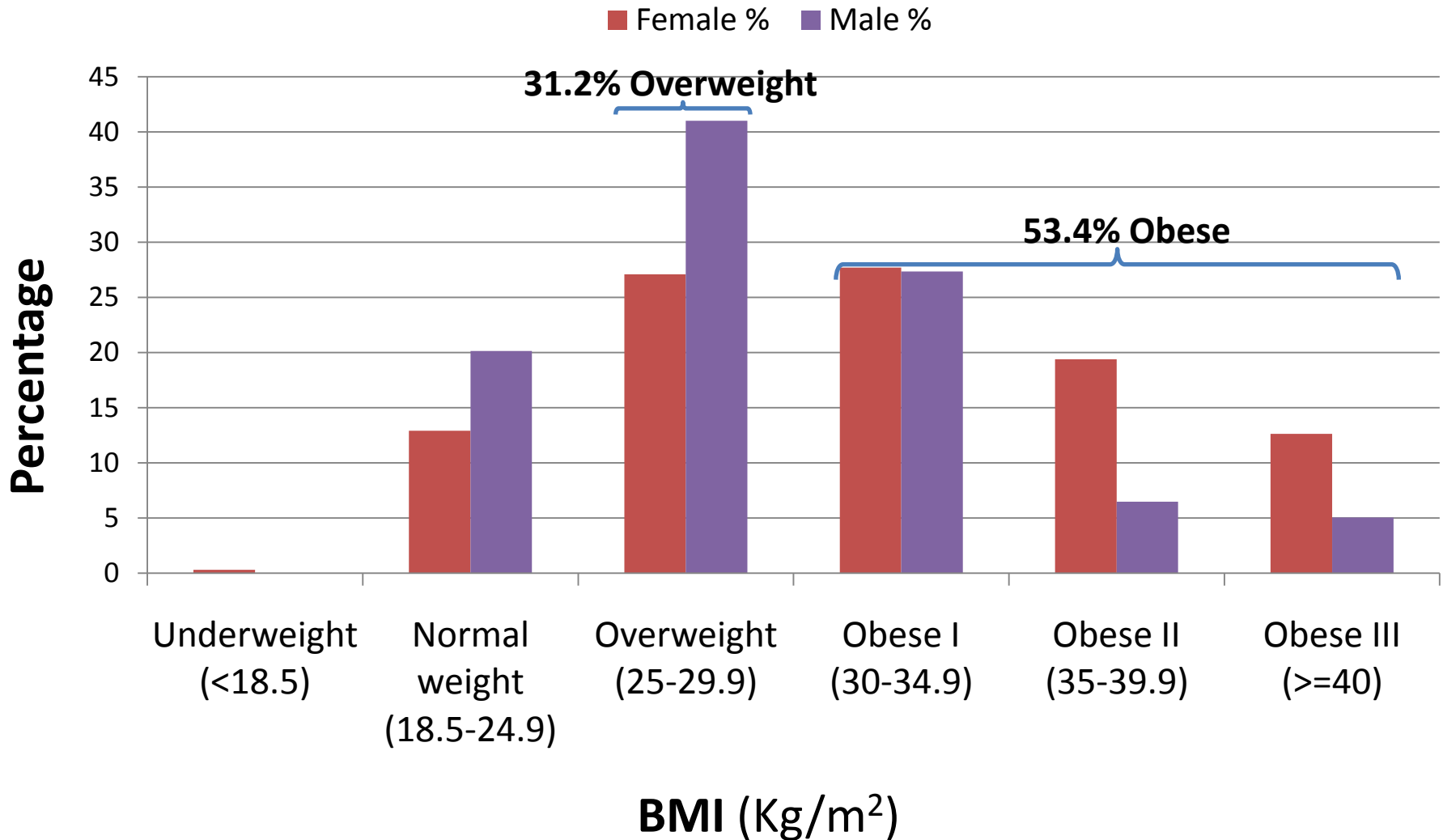
Ethnic and gender distribution of teachers in Pilot vs. Province vs. Country

	PaCT pilot, SA		Western Cape Province		National	
	Number	Percentage	Number	Percentage	Number	Percentage
Coloured	346	71.8	14868	58.3	26091	7.0
Black	68	14.1	5483	21.5	301185	81.1
White	35	7.3	5068	19.9	33602	9.0
Indian	6	1.2	103	0.4	10571	2.8
Other	11	2.3				
Not indicated	16	3.3				
Female	338	70.1			245686	67
Male	144	29.9	—	—	120467	33

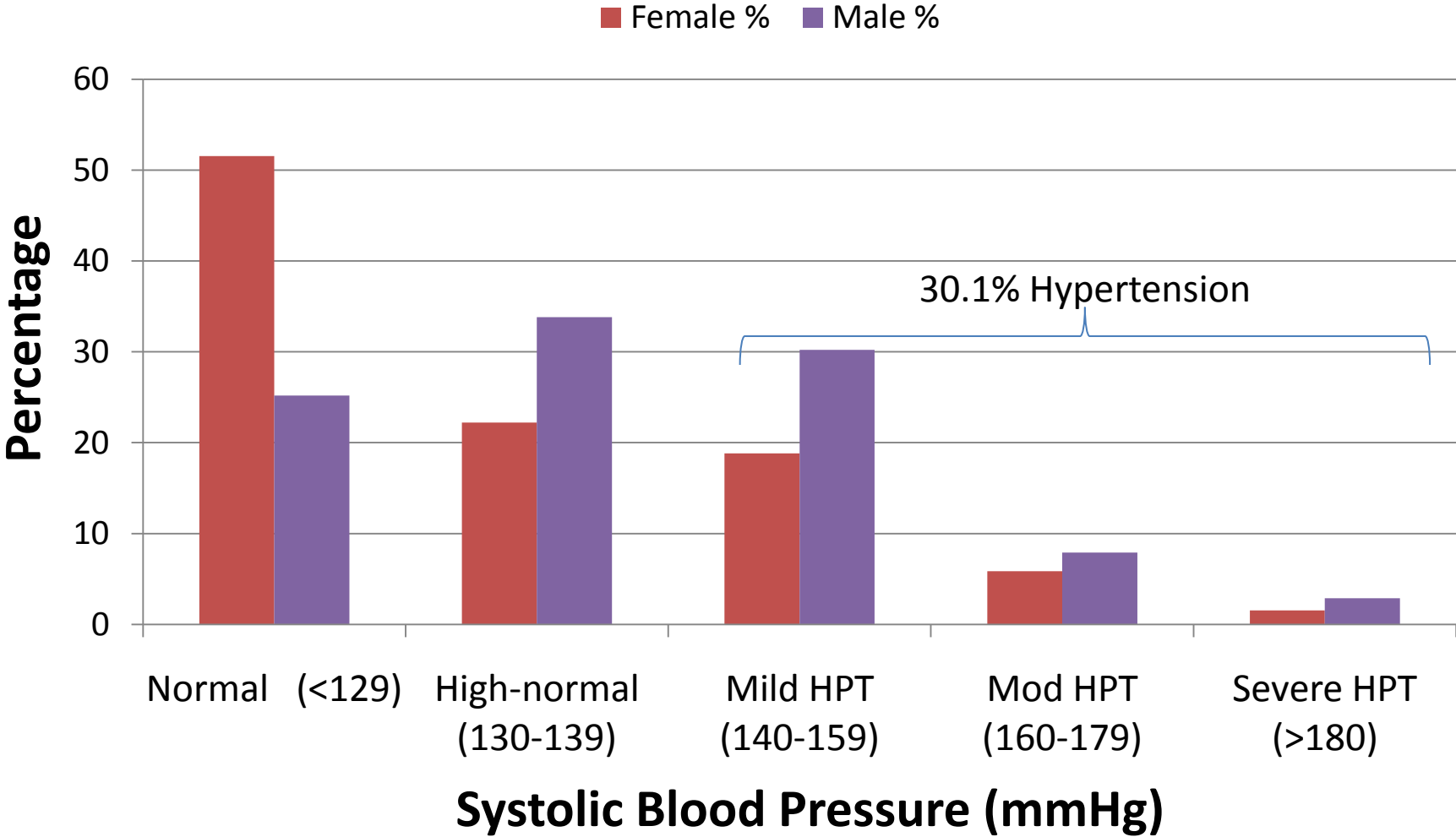
Self-reported Health Status



Prevalence of obesity by gender (464 participants)



Prevalence of HPT defined by SBP (463 Participants)



Random Plasma Glucose (430 participants)

Random Plasma Glucose mmol/l (<i>mg/dl</i>)	Frequency (%)
<7.8 mmol/l	403 (94%)
7.8-11mmol/l	17 (4%)
>11.1 mmol/l	10 (2%)

In addition: **35/468 (7.5%)** of participants reported that they are known diabetics and are currently on prescribed treatment.

Prevalence of CKD:

40/476 (8.4%) has CKD as defined by either proteinuria $\geq 0.3\text{mg/mg}$ or a GFR ≤ 60 ml/min/1.73 m²

Conclusions

Feasibility:

- Recruitment and retention lower than expected.
- Need to adjust recruitment strategy for full scale project.
- Possibly conduct further pilot studies.

Prevalence of risk factors for CVD:

High prevalence risk factors (smoking, HPT, DM and obesity) among teachers in the Cape metropolitan area.

Prevalence of CKD:

CKD is common among teachers in the Western Cape.

The way forward→

- **Disseminate findings** from pilot studies to raise awareness about NCDs and promote participation in future studies. (Teachers, education department, unions, and media.)
- **Publish results** from pilot studies (Site-specific data and pooled data.)
- Apply for **funding** to support the project.
- Continue **collaboration** with other cohorts.

Thank you

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