

**Undiagnosed chronic disease:
Rates and their association with access to
preventive care among Los Angeles adults**

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October 31, 2011

APHA 139th Annual Meeting
Session #3158.0
Washington, DC

Presenter Disclosures

Malia Jones and Anne R. Pebley

- **The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**
- No relationships to disclose.

2

Background

Background

- People with undiagnosed chronic disease experience poor outcomes and complications of disease
- Regular access to preventive care can provide opportunities for diagnosis and early secondary prevention
- People without insurance are at highest risk for failure of diagnosis

4

Research Questions

- Does access to preventive care affect rates of diagnosis for three chronic diseases?
 - Hypertension
 - Obesity
 - Diabetes
- What population subgroups are at highest risk for undiagnosed disease?

5

Methods

Data

- Data: L.A.FANS Wave 2—a representative sample of Los Angeles County Adults, 2006-2008 (n=1,406)
- Data collected using in-person interviews and health assessments by trained interviewers

7

Key Variables

- Diagnosis of chronic disease:
 - "Has a doctor ever told you that you have..."
 - ...diabetes or high blood sugar"
 - ...high blood pressure or hypertension"
 - ...excess weight or that you need to lose weight"
- Measured chronic disease status:
 - Diabetes = HbA1c \geq 6.0
 - Overweight/Obesity = measured BMI \geq 25 or 30
 - Hypertension = 4 NHLBI categories
- Access to preventive care:
 - Usual source of care
 - Insurance status

8

Results

Descriptive Statistics

Characteristic	Mean(SD)%
Age (years)	49.9 (16.5)
Education (years)	13.5 (4.2)
Family income (\$1,000)	60.3 (76.5)
Male	50%
White NH	35.4%
Latino	41.0
Black	8.8
Other	14.8
US Citizen	81.6%
% of days covered by ins last 5 yrs	75.8% (40.2%)
No usual source of care	18.3%

10

Descriptive Statistics

Characteristic	Mean(SD)%
Self-reported disease diagnosis	
Diabetes	10.4%
Hypertension	28.4
Excess weight	25.7
Measured disease status	
Diabetes	18.0%
Hypertension (Stage I or II)	18.4
Overweight or obesity	71.4

11

Rates of Undiagnosed Disease

	Current measured Disease status	No self-reported diagnosis	Self-reported diagnosis
Diabetes (n=288)	Normal	97.2%	2.8%
	Elevated HgA1c	56.4%	43.6%
Hypertension (n=840)	Normal	86.8%	13.2%
	Prehypertens.	67.5	32.5
	Stage 1 hypert.	45.3	54.7
	Stage 2 hypert.	46.9	53.1
Overweight (n=812)	Underweight	100.0%	0.0%
	Normal	95.9	4.1
	Overweight	86.3	13.7
	Obese	47.0	53.0

12

Odds of disease diagnosis

	Diabetes (n=313)	Hypertension (n=1124)	Overweight (n=1087)
Measured disease status	9.39 **	1.04 **	1.29 **
Female	1.26	0.98	1.47 **
Education	1.02	0.97	1.10 **
Age	1.02	1.04 **	1.02
Insurance coverage	1.67	0.91	1.53
Usual Source of Care (ref:none)			
Clinic/HMO	3.41	4.51 **	2.35 **
Doctor's office	4.95	3.52 **	2.72 **
ER/Outpatient clinic	0.05	3.85 **	1.75
Comorbidity status			2.20 **

13

* = significant at $\alpha = 0.05$ ** = significant at $\alpha = 0.01$

Conclusions

Strengths & Limitations

- Small samples, especially for diabetes
- Unable to parse people whose present disease status is controlled by lifestyle/medication from those who have never had disease

15

Conclusions

- We observe alarming rates of undiagnosed hypertension, obesity and diabetes
- Having a usual source of care is an important factor in accurate and timely diagnosis
- Health insurance had no effect in our models
- Improved access to doctors and basic diagnostic services among high-risk subgroups is key for secondary prevention

16

Acknowledgements and Notes

- This work was made possible by NICHD (R01 HD35944 and R01 HD41486)
- Expanded obesity results from this analysis are currently under review at the Journal of Immigrant and Minority Health

17

Thank you!

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