
Epidemiology of Geriatric Urinary Incontinence

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AH! NO WONDER IT TOOK ME SO DAMN LONG TO GET ACROSS THE STREET!

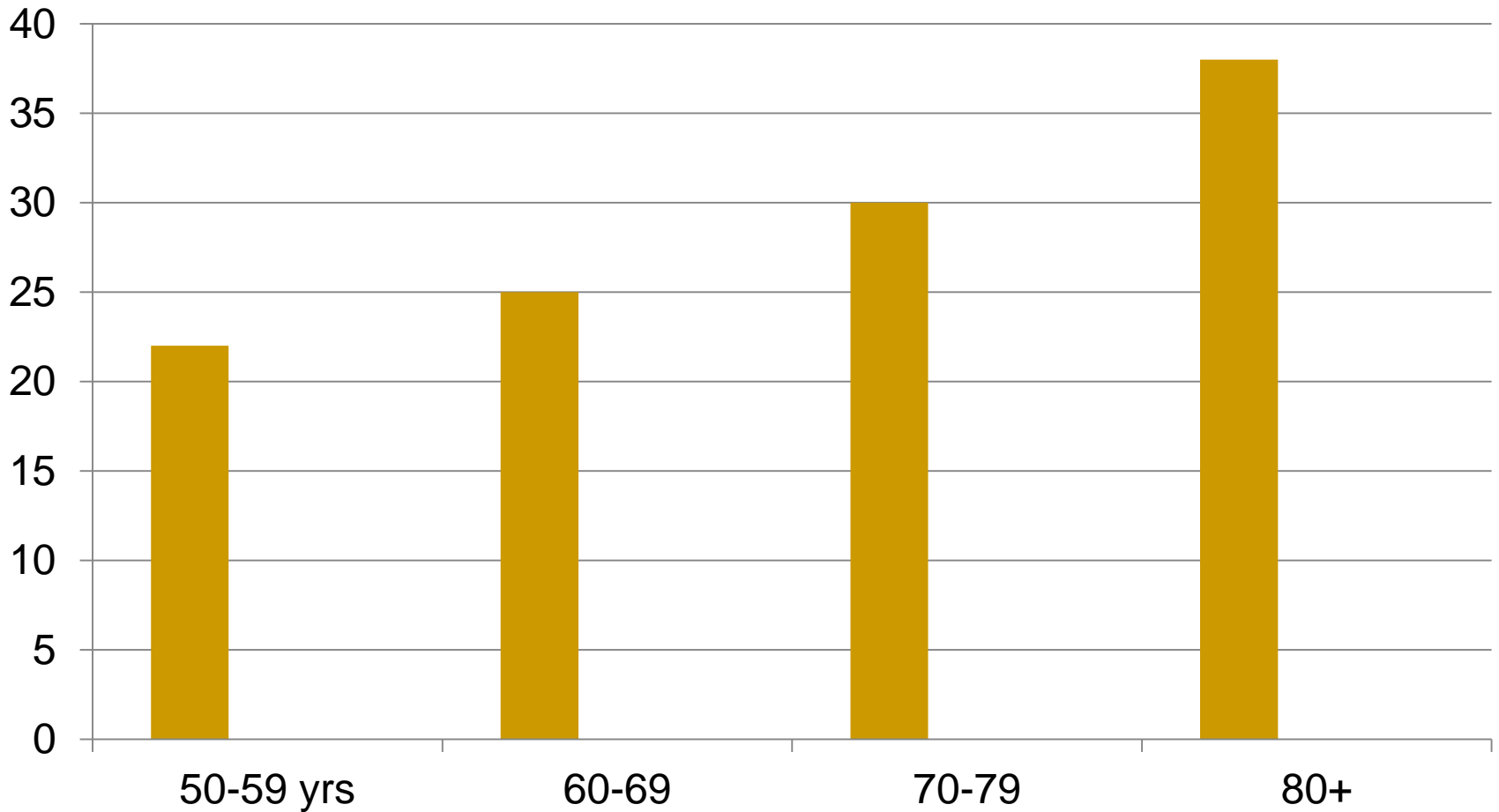
Urinary incontinence: Economic costs

■ Economic costs

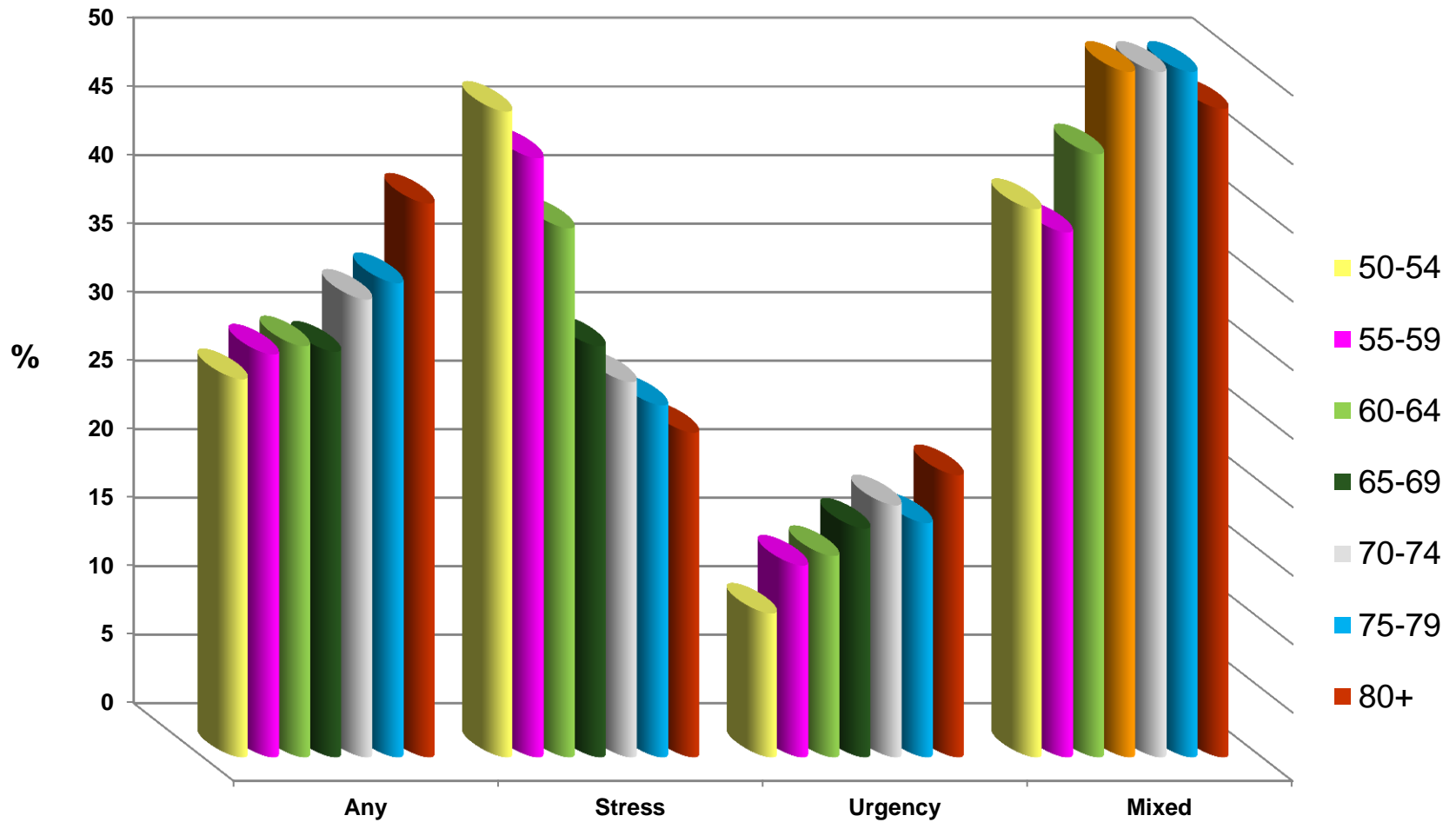
- ❑ Direct costs (absorbent pads/diapers, treatments)
- ❑ Indirect costs (lost wages by individual/caregivers)
- ❑ Total costs ~\$20 billion in 2000 in the U.S.

- ❑ UUI/OAB: direct costs of \$66 billion in 2007

UI Prevalence, NHANES 2005-10

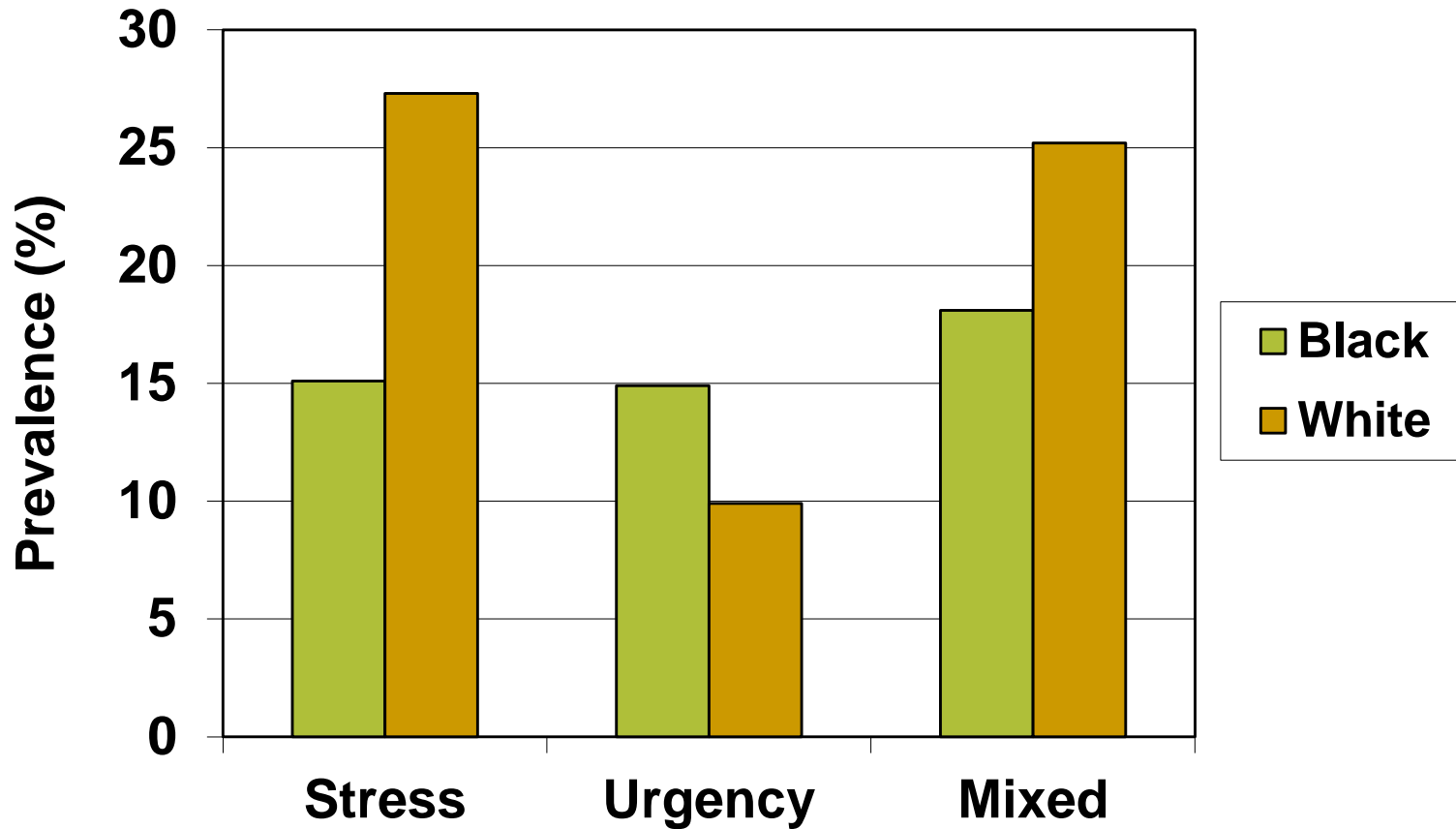


UI Prevalence in EPINCONT

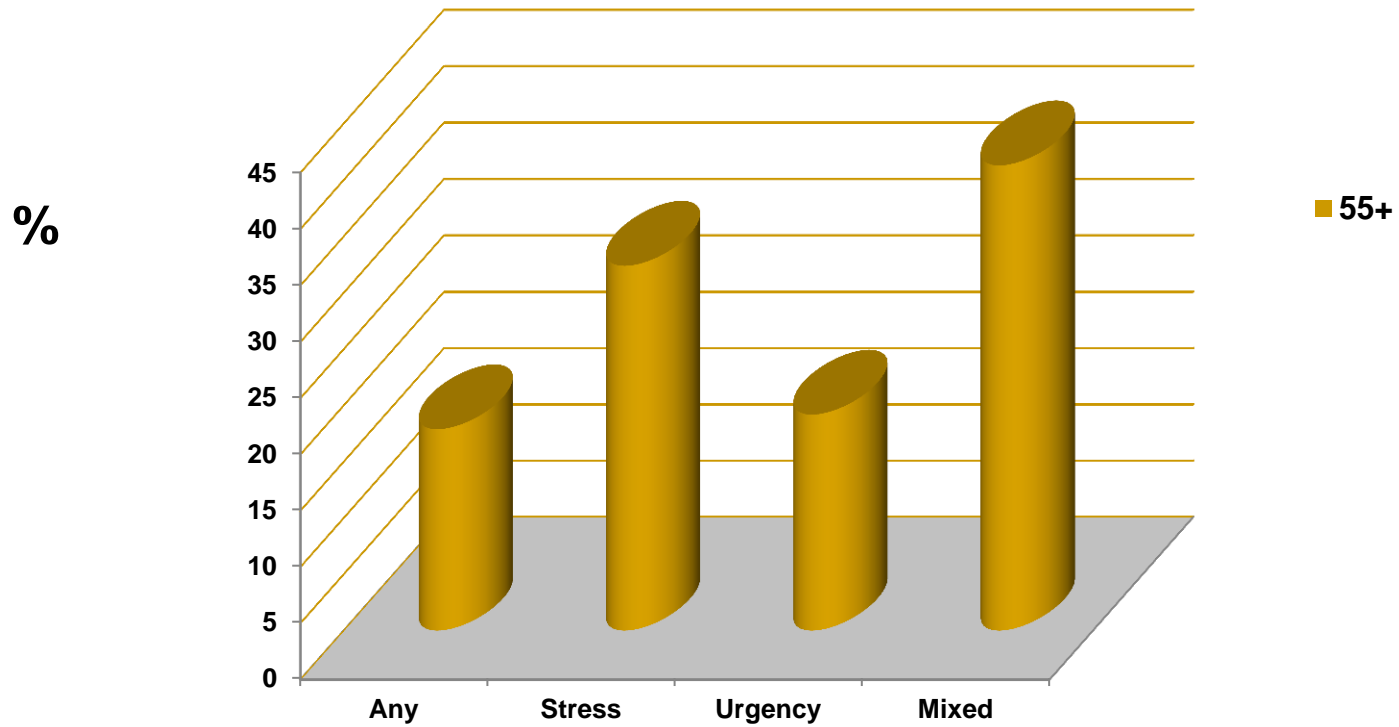


Ebbesen, M.H., BMC Urology, 2013

Prevalence by type, race – NHANES, 2001-2004, women age 40+

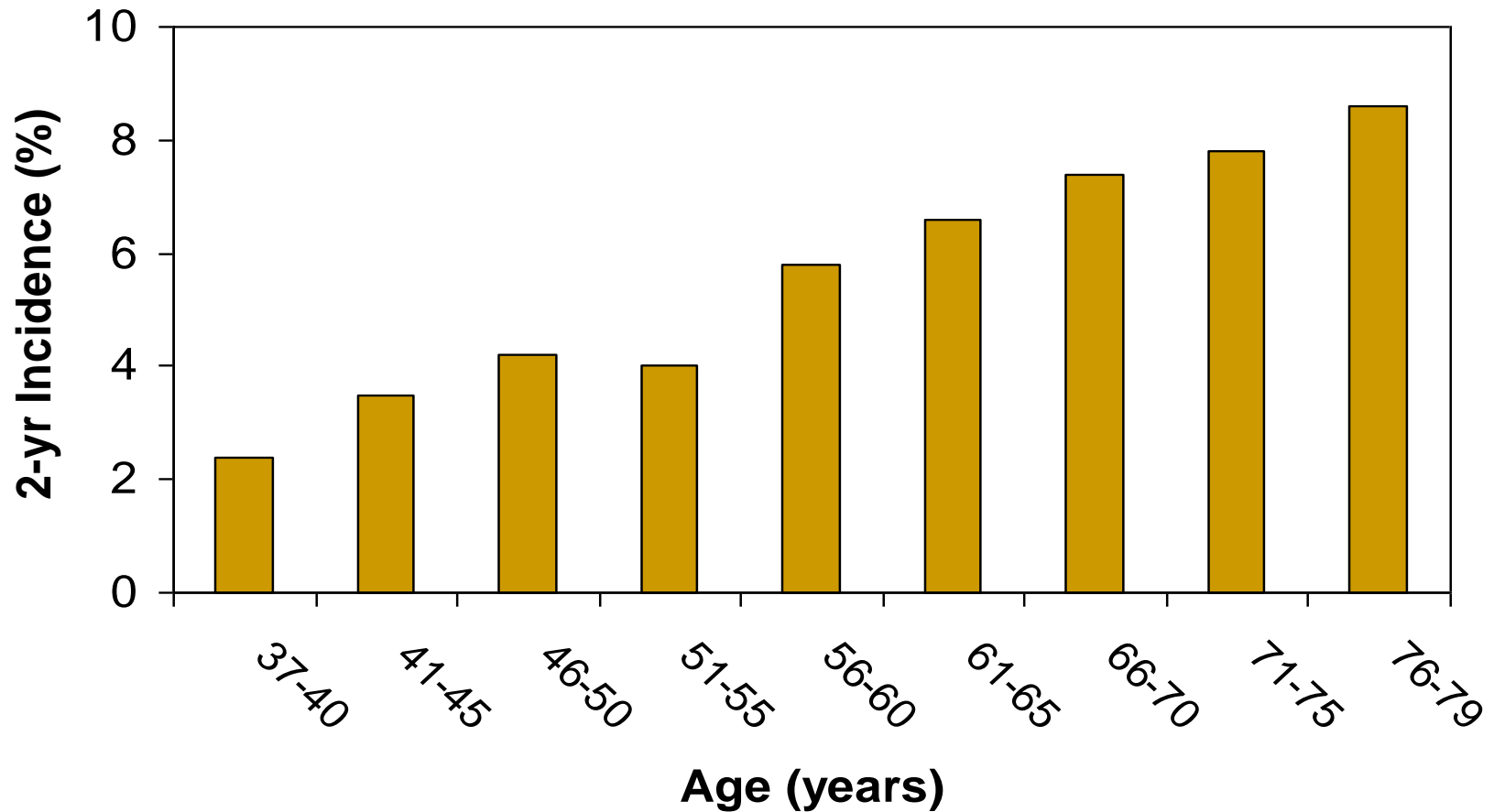


UI Incidence in EPINCONT

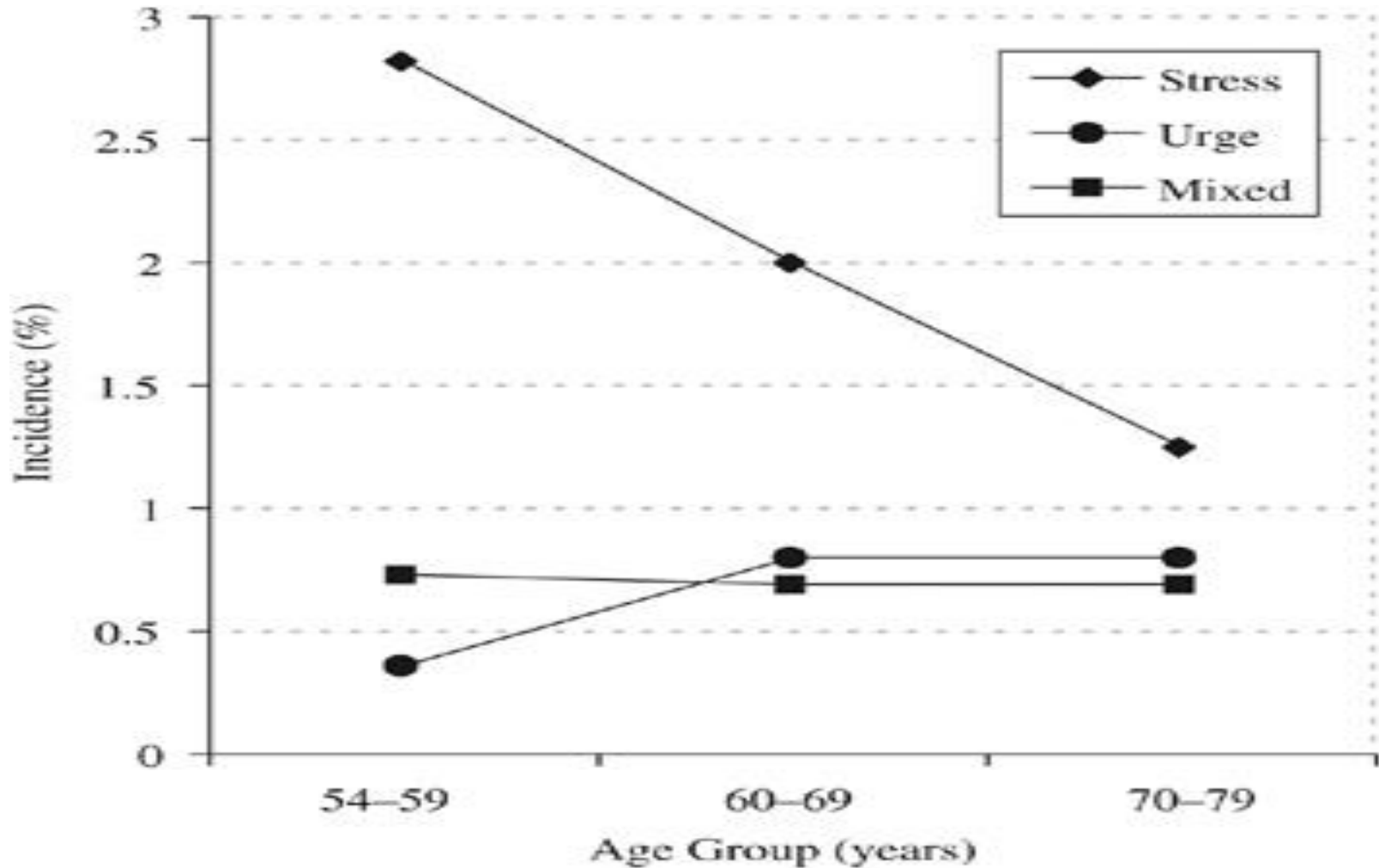


Ebbesen, M.H., BMC Urology, 2013

2-year incidence of at least weekly incontinence – NHS



Two-year Incidence of UI, by UI type and age:



Incidence/100 PYs, by race – NHS

	PY	Any UI		Weekly UI	
		Cases	IR	Cases	IR
Asian	2,708	155	*5.7	48	2.1
Black	3,742	178	*4.8	52	*1.4
White	254,446	18,538	7.3	5,375	2.1

* Significantly different vs. white women

UI type incidence/100 PYs by race – NHS, NHSII

	PY	Stress		Urgency	
		n	IR	n	IR
Asian	2,790	33	1.2	6	0.2
Black	3,828	8	*0.2	19	0.5
White	266,718	2,544	1.0	1,229	0.5

* Significantly different vs. white women

UI Remission Rates in Older Women, Nurses' Health Study*: Preliminary Data

	Age Group in 2000 (Baseline)				
	< 60	60-<65	65-<70	70+	p-trend
Remission (No UI for 2 consecutive time periods from 2000-12)					
Remission (n)	3072	2828	2351	3294	
Person-years	74490	73520	70720	100734	
Rate per 100 PYs:	4.1	3.9	3.3	3.7	
RR (95% CI)	Ref.	0.93 (0.89, 0.98)	0.81 (0.76, 0.85)	0.79 (0.75, 0.83)	<0.001

*Confidential data, Please do not quote or cite

Natural History of UI over 12 years, Nurses' Health Study*: Preliminary Data

	Any UI
Incident UI in 2000	N=14,995
Persistent UI across 12 years (6/6)	51%
Persistent UI for at least 8 years (4+/6)	78%
Complete remission after baseline	3%
Remission for at least 6 years (3+/6)	13%

* Confidential data, please do not quote or cite

UI Type and Extent of Severity and Bother

	Stress UI	Urgency UI	Mixed UI
Nurses' Health Study			
Severe UI	15%	27%	37%
Bothers "moderately" or "greatly"	33%	44%	43%
All p<0.05			
EPINCONT			
At least some bother	24%	36%	47%

Minassian V Obstet Gynecol 2013
 Hannestad Y J Clin Epi 2000

Healthcare Seeking in UI

- **Olmsted County: 13% with UI report seeking healthcare in previous year**
- **NHS: 48% with new onset of weekly UI report careseeking**
- **SWAN: Over 9 years, 68% with UI reported discussing UI with health prof**

Risk Factors for Healthcare Seeking in SWAN

	OR (95% CI)
African American (vs Caucasian)	1.2 (0.8, 2.0)
Daily UI (vs monthly)	2.4 (0.9, 6.4)
UI >7 years (vs. <4 yrs)	2.7 (1.5,4.8)

Directions in Translational Research

- UI is common and increases with age
 - UI patients rarely experience remission
 - Urgency and mixed UI particularly important in older women, and translational research should focus more on these patients
 - Critical need to increase healthcare seeking in UI patients, and increase awareness in healthcare professionals
 - More large, prospective cohorts needed - especially with multiple repeated measures of UI - to better define natural history and treatments, including details such as by UI types
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