

Faecal Incontinence in community dwelling older women- its associated factors and impact on quality of life

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Background: Faecal Incontinence

- **Defined as “involuntary loss of solid or liquid stool or mucus.”**
 - **Common devastating problem in elderly nursing home residents**
 - **Major reason for admittance to nursing homes.**
 - **Among nursing home residents FI has been associated with anatomic, physiologic and medical conditions such as diabetes.**
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Recognised risk factors for FI

- Age
- Pelvic floor muscle dysfunction
- Altered bowel habit
- Chronic obstructive airways disease
- Elevated BMI
- IBS
- Diet
- Urinary incontinence

Reilly et al '00

Barucha et al '06

Background: Faecal Incontinence

- There are very little data on the prevalence and other risk factors associated with FI in older women still living independently in the community.
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Aims of the study:

To determine the prevalence and risk factors for FI in a large population based cohort of older Australian women.

Method:

The Women's Health Australia Study

- Three age cohorts
 - 18-22 yrs (young)
 - 45-50 yrs (mid-aged)
 - 70-75 yrs (older)
 - 252, 285, 260 items respectively in each baseline questionnaire
 - Oversampling of rural and remote women
 - Re- surveying every 5 years for 20 years
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Longitudinal Survey

1996 1999 2002 2005 2008 2011

Older Cohort 1921-1926 n = 12432

70-75 73-78 76-81 79-84 82-87 85-90

Longitudinal Survey



Longitudinal Survey



Data available from 4859 women
Response rate 60%

Measures

Faecal Incontinence:

Please indicate how often you experienced accidental leakage of :

- solid stool
 - liquid stool
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Measures

Faecal Incontinence (Wexner Scale) :

Please indicate how often you experienced accidental leakage :

0 Never

1 1-3 x/month 2 once per week

3 two or more times per week,

4 once per day

5 > once per day

Other Measures

Demographics:

- Educational level

Nationality

- Marital
 - Socioeconomic status (SEIFA)
-

Other Measures

Medically Related Study Variables:

- Urinary incontinence
 - Constipation
 - Hysterectomy
 - Past repair of prolapsed vagina, bowel or bladder
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Other Measures

Lifestyle variables:

- Alcohol consumption
 - Smoking status
 - Body mass index
 - Number of live births
-

Other Measures

Quality of life: SF-36 – eight subscales including:

- Bodily pain
 - General health
 - Mental health
 - Physical functioning
 - Social functioning
 - Role emotional
 - Role physical
 - Vitality
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Prevalence of faecal incontinence

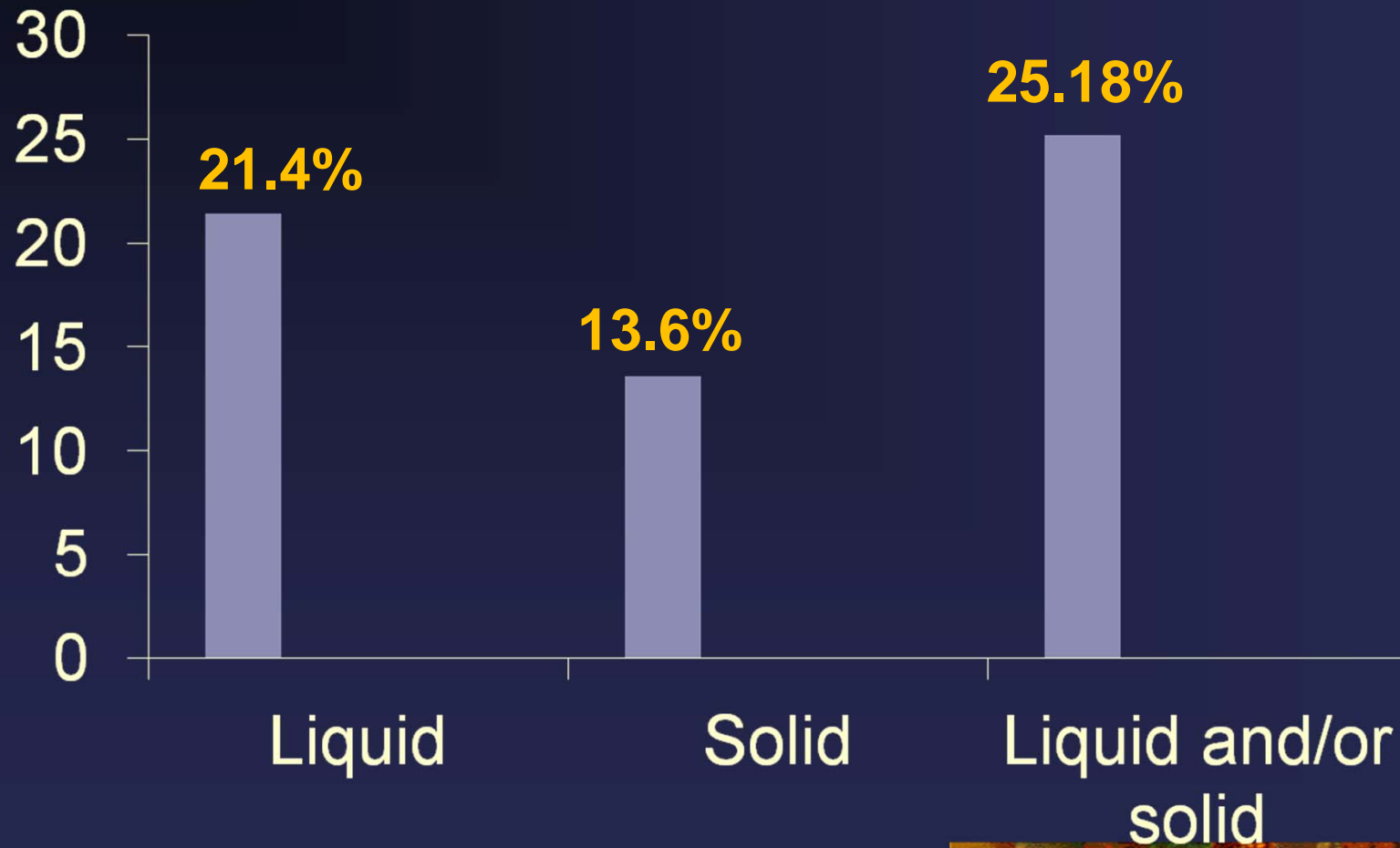
Older cohort
n=4889
Age:82-87 years

FI group
N =1231

Controls (no FI)
N= 3658

33.65%

Symptoms of FI (%)



Statistical Analysis

- Logistic regression was carried out after the response variable was dichotomised, initially assessing each risk factor in a univariate model before conducting a multivariate model
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Risk factor	FI (%)*	No FI (%)*	OR (95%CI), P Value
DEMOGRAPHIC			
Australian Born	74.3	75.9	0.93 (0.77-1.12) P=0.44
Educational level	68.1	65.6	
-Less than High School	12.7	15.0	0.82 (0.65-1.04) P=0.10
-High School	19.1	19.4	0.95 (0.77-1.16) P=0.59
->High School	30.2	29.7	1.0 (0.97-1.05) P=0.69
Married/Defacto			
Socioeconomic status (Mean) (SEIFA)	980.2	978.3	1.0 (1.0-1.0) P=0.12

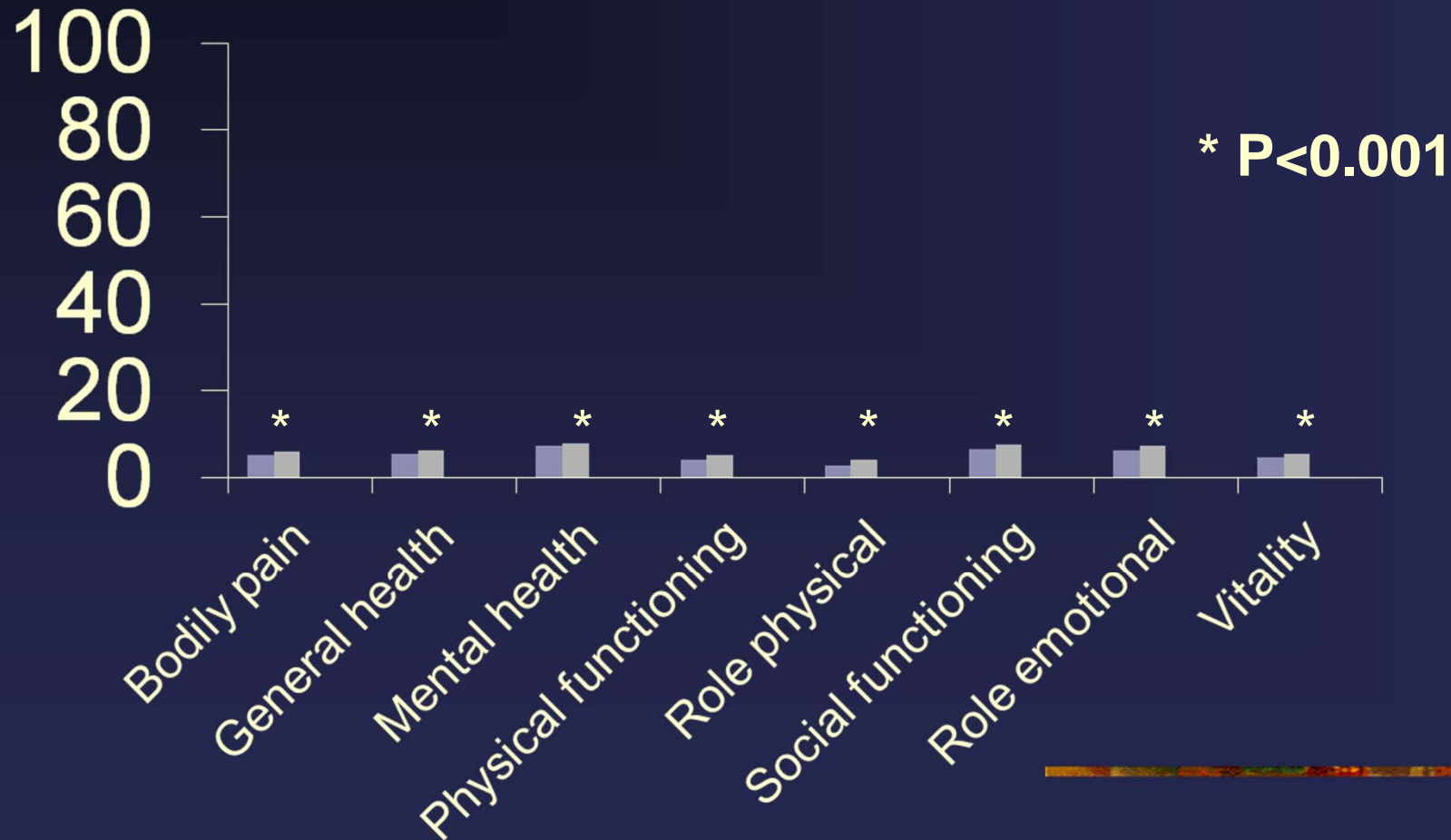
Risk factor	FI (%)*	No FI (%)*	OR (95%CI), P Value
MEDICAL			
Urinary incontinence	81.9	58.3	3.26 (2.69-3.96) P<0.000
Constipation	64.9	50.3	1.83 (1.55-2.15), P<0.000
Hysterectomy	1.5	1.3	1.20 (0.63-2.28), P=0.587
Prolapse	5.9	3.2	1.93 (1.34-2.50), P<0.000

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Risk factor	FI (%)*	No FI (%)*	OR (95%CI) P Value
LIFESTYLE			
Alcohol – Nil	56.3	58.6	
-Low	39.3	38.0	1.01(0.83-1.31), P=0.75
-High	4.2	3.4	1.50 (0.99-2.52), P=0.11
Smoking – Never	64.3	66.7	
-Current	31.1	27.4	1.20 (0.99-1.70), P=0.063
-Past	4.3	5.8	0.77 (0.54-1.12), P=0.169
BMI (Mean)	25.3	25.2	1.01 (0.99-1.03), P=0.173
Given birth	93.2	91.7	1.07 (1.01-1.14), P=0.92

Quality of life in older women with FI versus no FI

Mean Score



Final multivariate model

- Urinary incontinence

OR=2.74 (95%CI 2.25-3.33) P<.001

- Constipation

OR=1.45 (95%CI 1.22-1.72) P<.001

- Hx surgery for vaginal, bowel or bladder prolapse

OR=1.65 (95%CI 1.10-2.45) P=0.015

- History of smoking

OR=0.66 (95%CI 0.45-0.97) P=0.032

- Reduced general health score on the SF-36

OR=0.87 (95%CI 0.83-0.91) P<0.000

- Reduced mental health score on the SF-36

OR=0.90 (95%CI 0.85-0.95) P<0.001

CONCLUSION

FI is a common problem among older community dwelling women and is associated with urinary incontinence, constipation, prolapse repair, a history of smoking and impaired quality of life.

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