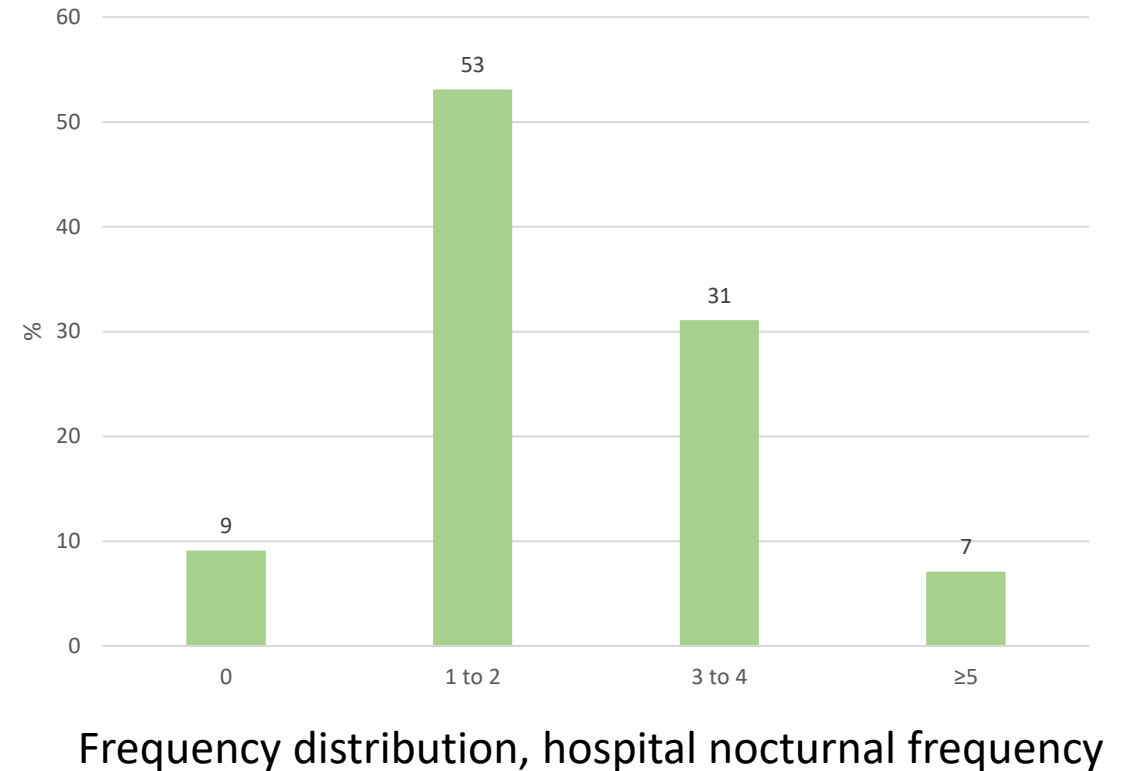


Perceptions of nocturnal LUTS

Sample

- N=100, 54 females, 46 males
- Age: mean (SD) 75 (9.2)
- 79% thought nocturia was normal
- 19% thought that there things about the hospital ward that make them more likely to go to the toilet at night
- 23 women and 13 men needed mobility aids to get to the washroom



Management of nocturia at home

Questions	Yes	No	Total
Did you have a way to manage this at home?	10	83	93*
Do you lose urine on the way to the toilet at night?*	35	56	91*
Is it Urgent to reach the toilet during the night?*	55	36	91*

Just "went to toilet"

*Participants answered questions based on their current situation in the hospital.

93* (total number of participants, 7 participants stated they weren't getting up at night to use the toilet at home).

91* (total number of participants, 9 participants indicated they were getting up 0 times a night to use the toilet while in hospital).

What do you think causes you to go to the toilet at night?	Number (N)
Full Bladder*	36
Fluid Intake*	19
Medications (Lasix)	22
Medical Condition (Diabetes, enlarged prostate, retroverted bladder, cancer,)	12
Being Awake	6
Age	3
No Idea	2
Total	100

*Full Bladder (some patients elaborated that fluid intake and medication was the reason for their full bladder)

*Fluid Intake includes all fluids (water, coffee, tea, juice, beer)

Women

Question	Nothing	Commode	Light	Handle Bars/Rail	Walker/Cane	Help	Total
What do you need to feel safe using the toilet during the night while in hospital?	31	2	1	7	5	9	54

Men

Question	Nothing	Commode	Light	Handle bars/rail	Walker/Cane	Help	Extra Room	Other*	Total
What do you need to feel safe using the toilet during the night while in hospital?	31	3	1	1	4	4	1	1*	46

Other* (patient listed using pyjamas from home to feel using while the toilet at the hospital)

Questions	Women answering YES	Men answering YES
Has a staff member asked you about going to the toilet during the night?	13	18
Have you talked to staff about ways to manage your bladder at night?	4	4
Has anyone given you pads manage your bladder overnight?	25	8
Has anyone woken you at night to help you go to the toilet at night?	3	1

- 41 women indicated that staff did not ask them about going to the toilet at night
- 50 women stated they did not talk to the staff about ways to manage their bladder at night.
- 51 women indicated they were independent and did not need help to use the toilet at night.

- 28 men indicated that a staff member did not ask them about using the toilet at night
- 42 men stated they did not talk to the staff about ways to manage their bladder at night
- 45 men indicated they were independent and did not need help to use the toilet at night.

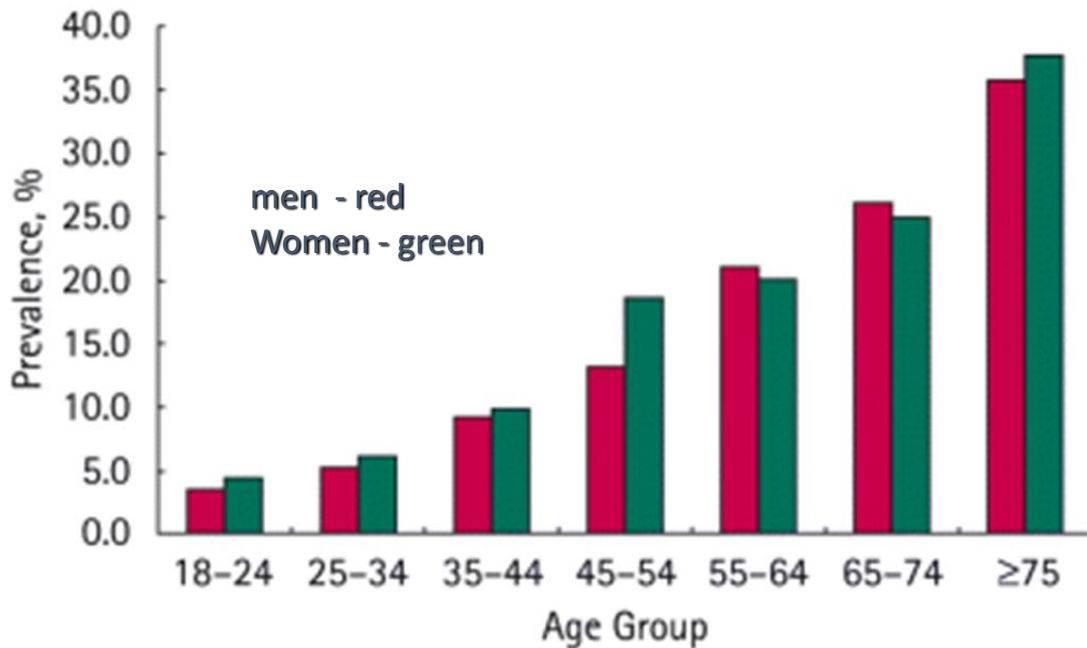
In the hospital do you use a commode/ bed pan/ the toilet at night?	Men	Women
Toilet	32	31
Commode	4	15
Bed Pan	1	4
Urinal	8	
Pads	1	4
Total	46	54

	Yes
Do you have to wear glasses to get to the toilet?	14
Is there enough time to put on your shoes/ slippers?	58
Can you find the toilet easily during the night?	94
Is there enough light to reach the toilet safely?	93

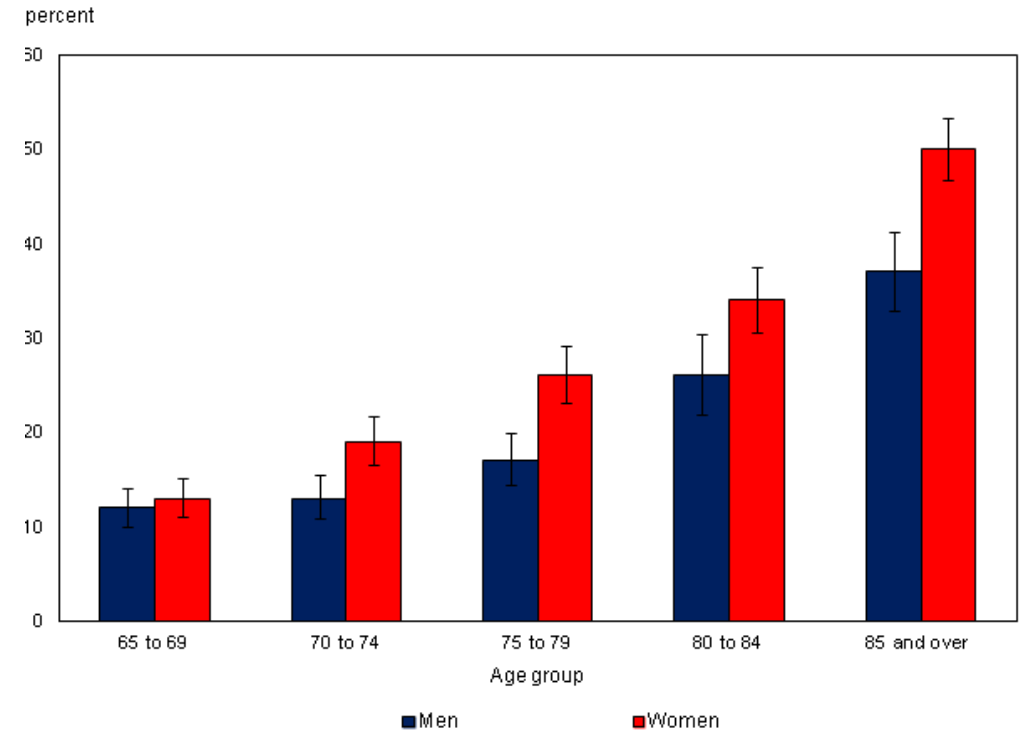
- 56 participants stated they don't worry about tripping/ slipping or falling
- 68 participants indicated they're self-sufficient and don't need to ring the buzzer before going to the toilet.
- 50% of participants stated they get a restful sleep at the hospital
- 78 participants identified that getting up night to use the toilet does not bother them
- 79 participants stated they're not interested in looking at ways to reduce the frequency in which they urinate at night.

- Many of the participants were willing to participate in the survey and seemed enthusiastic and hoped the research would provide some good insight.
- Female patients were more excited and enthusiastic in completing the survey and were also more likely to ask why this survey was being conducted compared to their male counterparts.
- participants for the most part understood what was being asked of them, and were able to answer the questions.
- The survey was organized in a manner that was adequate and effective.

Nocturia & falls in older people



Coyne K et al. BJU Int 2003;92:948-54

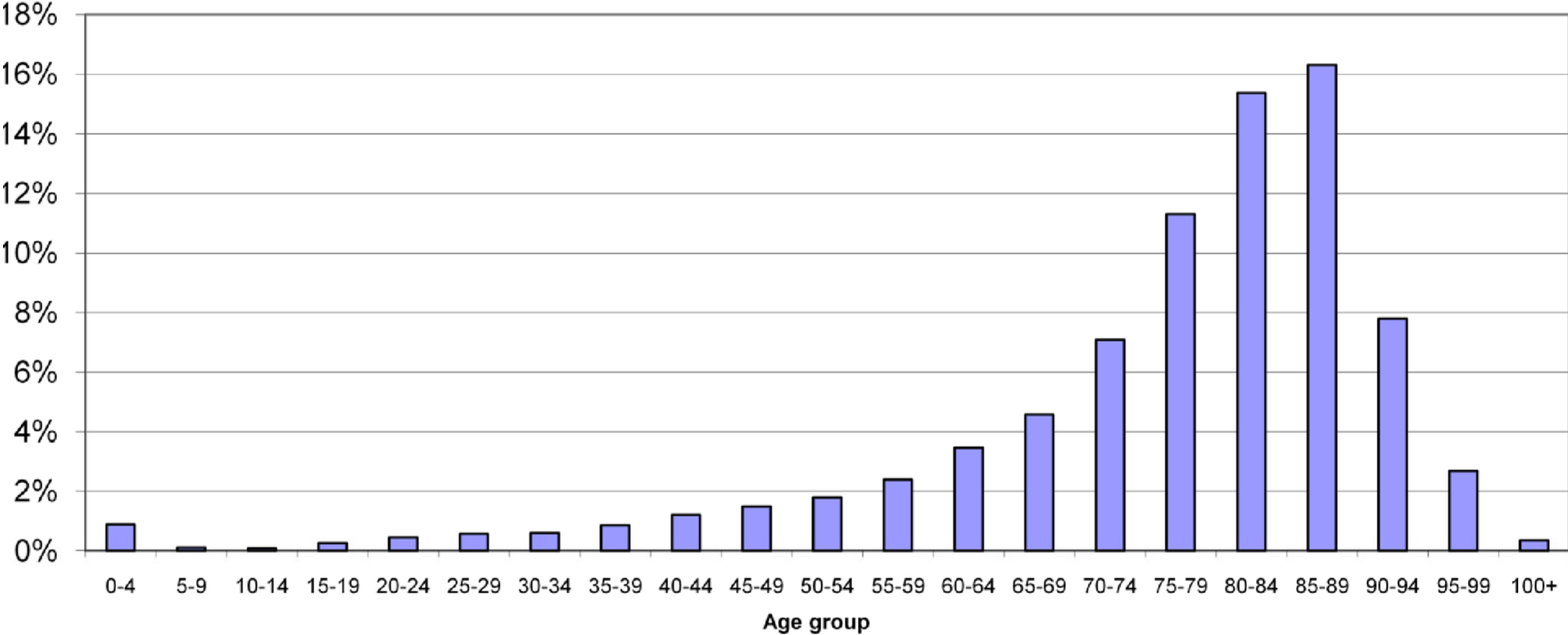


Percentage of seniors who were at a high risk of falling by age and sex, household population aged 65 and older, Canada, 2008-2009

<https://www150.statcan.gc.ca/n1/pub/82-624-x/2014001/article/14010-eng.htm>

Breakdown by age of falls in acute clusters

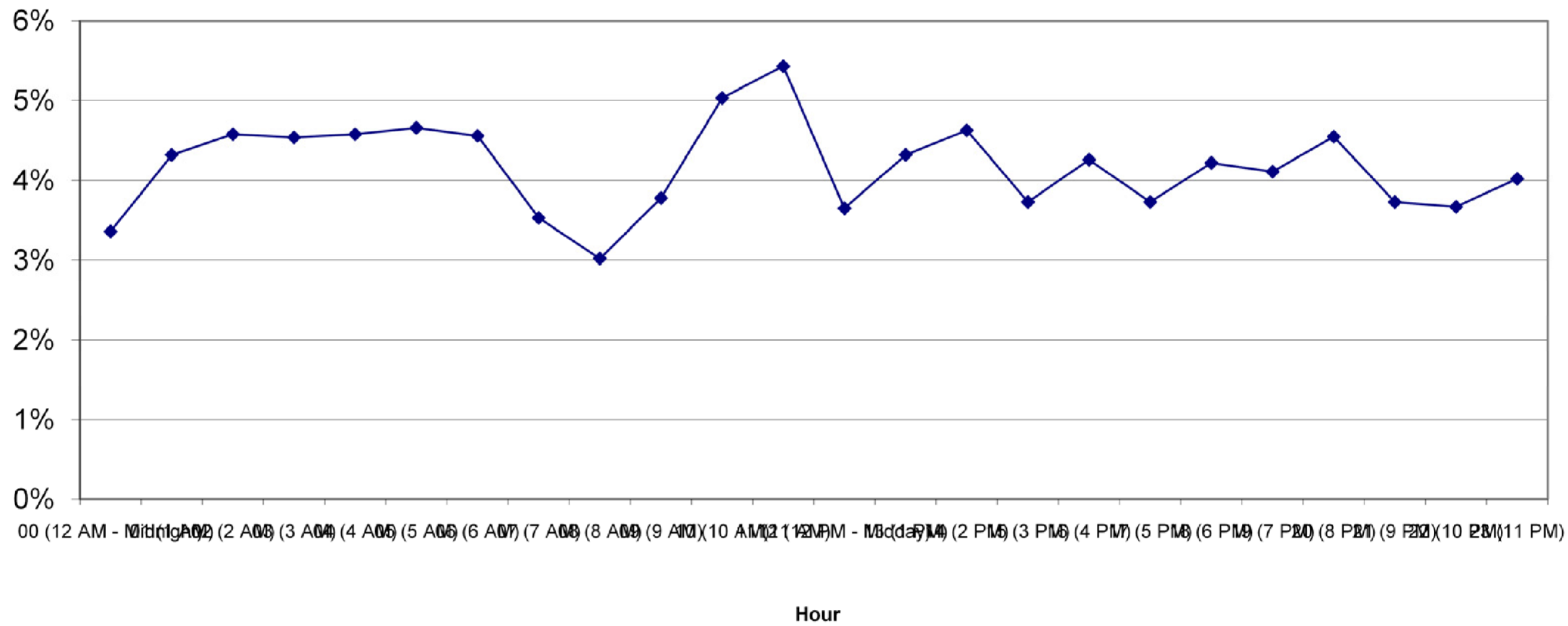
% of all reported acute falls



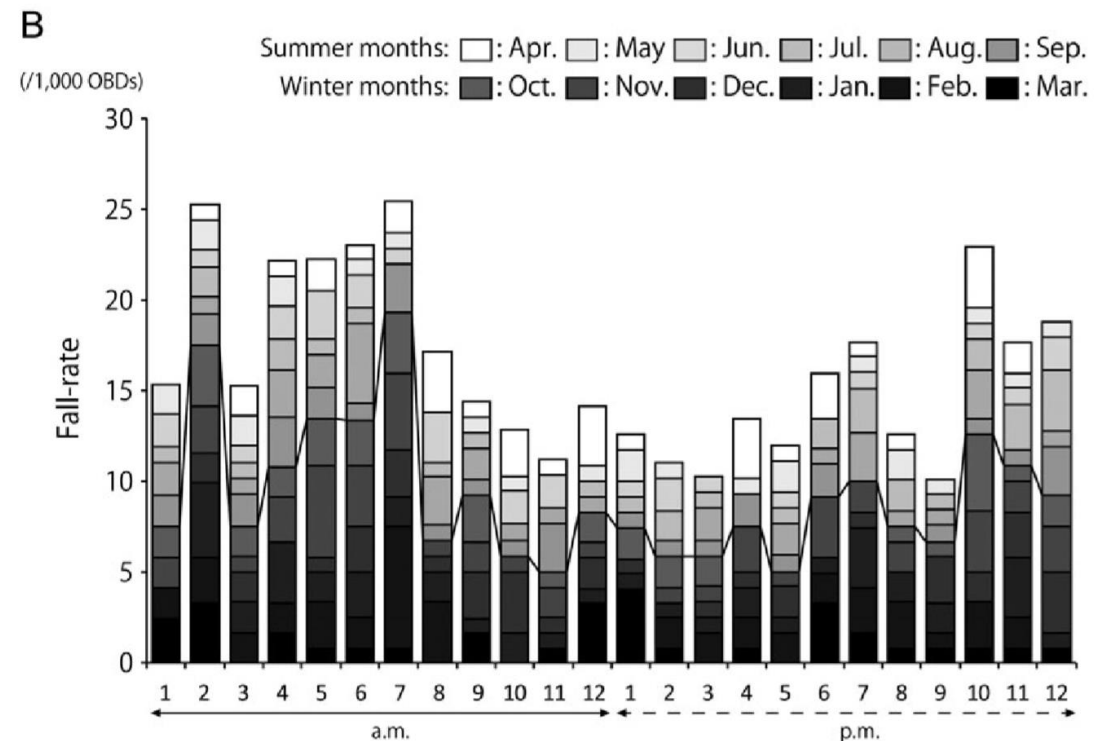
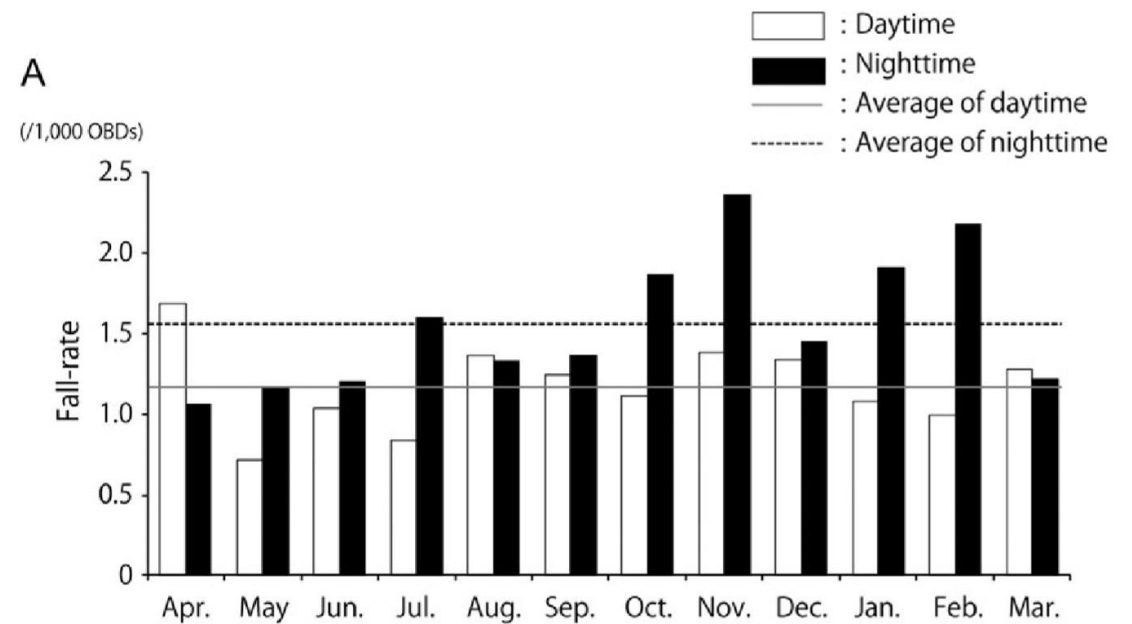
Fall timing

Falls incidents by hour of occurrence, for acute clusters

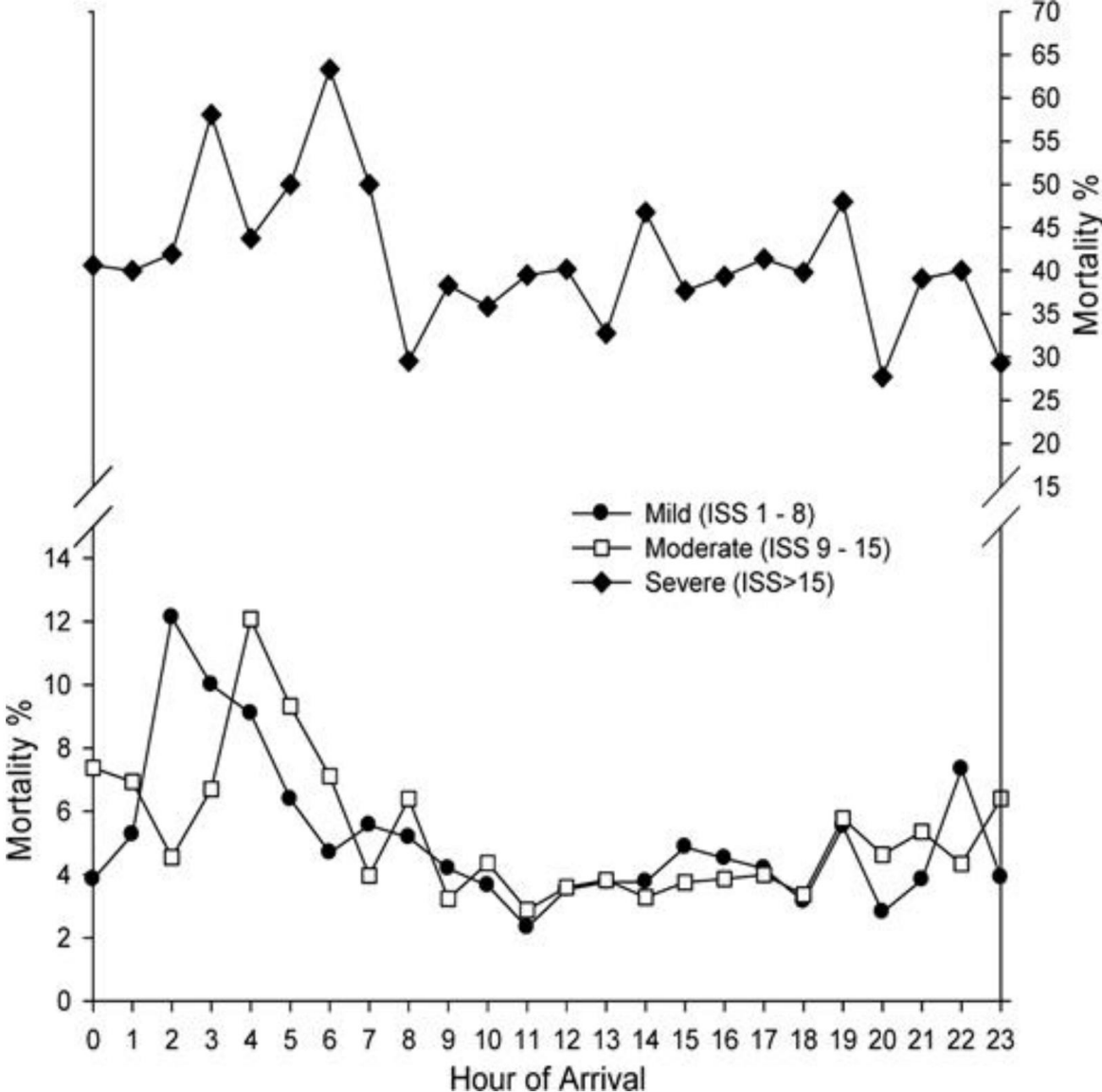
% of all reported acute falls



- (A) The monthly variations in the fall-rate at daytime and night-time. The fall-rates at night-time was significantly higher the fall-rates at daytime ($P = 0.001$).
- (B) Diurnal variations in the sum of the fallrates of all months. The winter months are shown in darker grey scale, while the summer months are shown in lighter grey scale. The winter months (October–March) are shown by polygonal lines, while the summer months (April–September) are shown by lines

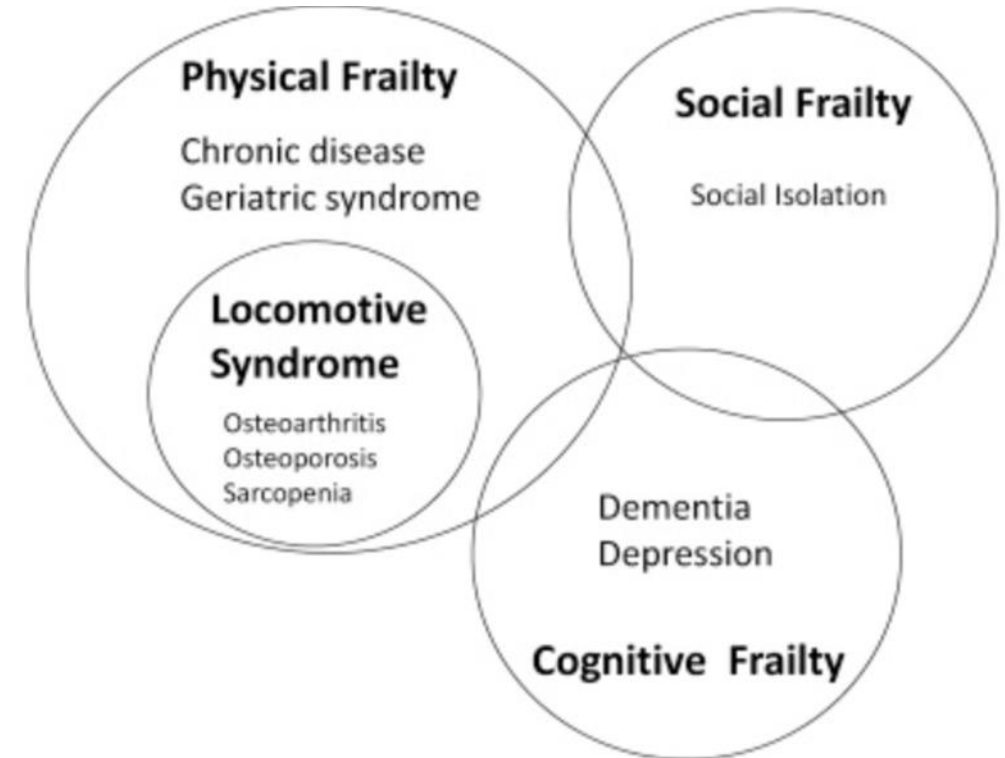


In the community, nocturnal falls are associated with increased mortality

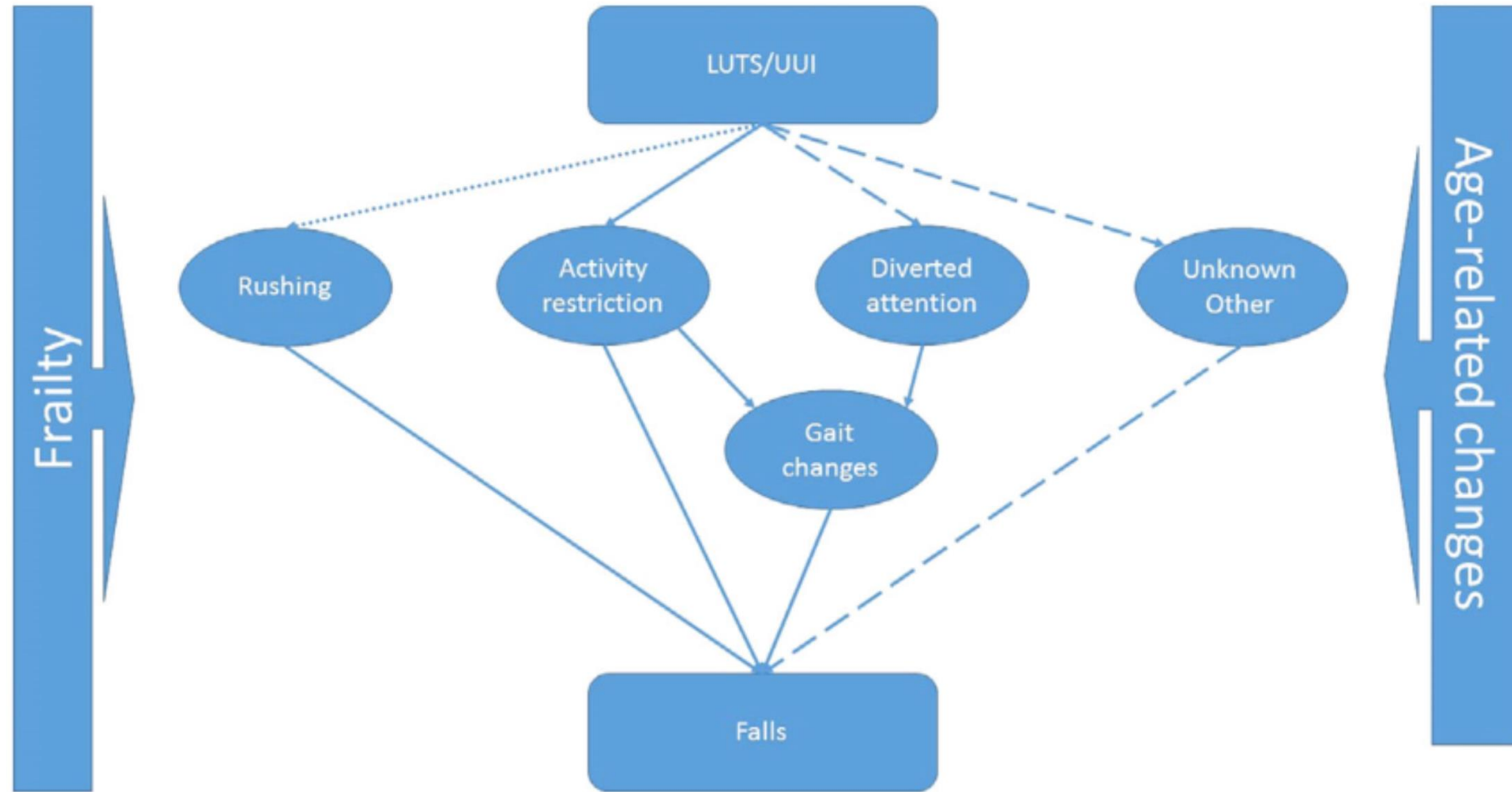


Mechanisms:

- **Urgency** - clearer mechanism
- diverted attention?
- **Nocturnal polyuria** – marker of frailty, associated with comorbidity & disability



Theoretical framework linking falls with LUTS - UUI



Potential (dashed line), known (solid line), and suggested but likely incorrect (dotted line) links between urgency/LUTS and falls

Potential interventions

- Aims:

- 1. Reduce number of toilet visits**

- a) Management of Nocturia / NP
- b) Medication review

- 2. Make toilet visits safer**

- a) **Environmental modification**

- a) Lighting, passage, transfers

- b) **Medication optimisation**

- a) Hypnotics, sedatives, antipsychotics

- c) **Reduction of falls risk**

- a) Exercise, footwear, glasses, hearing aids, walking aids etc