I’m Older But Not Old

A Positive Ageing Forum presented by

Aged Care Psychiatry Service

Eastern Suburbs Mental Health Service

South Eastern Sydney Local Health District

24 October 2017

Staying Upright Staying Independent

Professor Jacqueline Close

NeuRA
Discover. Conquer. Cure.

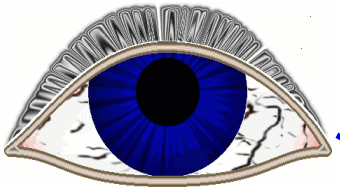
NSW GOVERNMENT Health
South Eastern Sydney
Local Health District

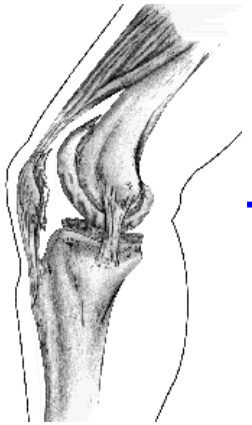
Falls are common

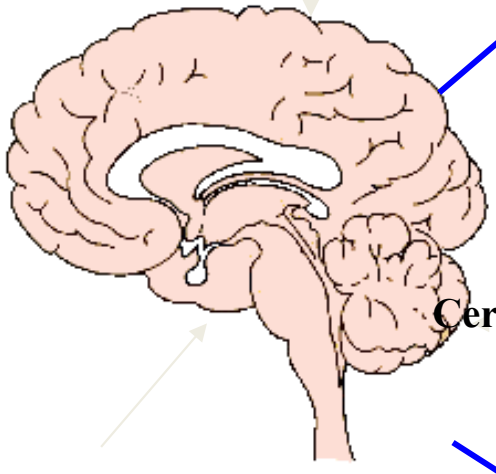
- 33% of people age 65+ will fall each year
- More common with increasing age
- Leading cause of accident related death in people aged 65+
- Falls more common in housebound and institutional residents
- Hip fracture is one of most serious consequences
- 25-33% of those who sustain a hip fracture are dead with a year

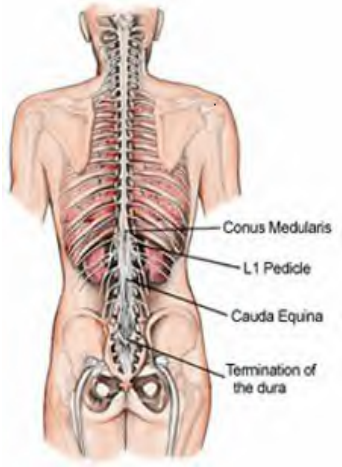
Staying Upright

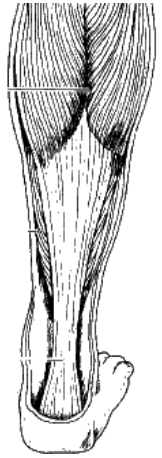
Sensory input → **Central Processing** → **Effector Response**



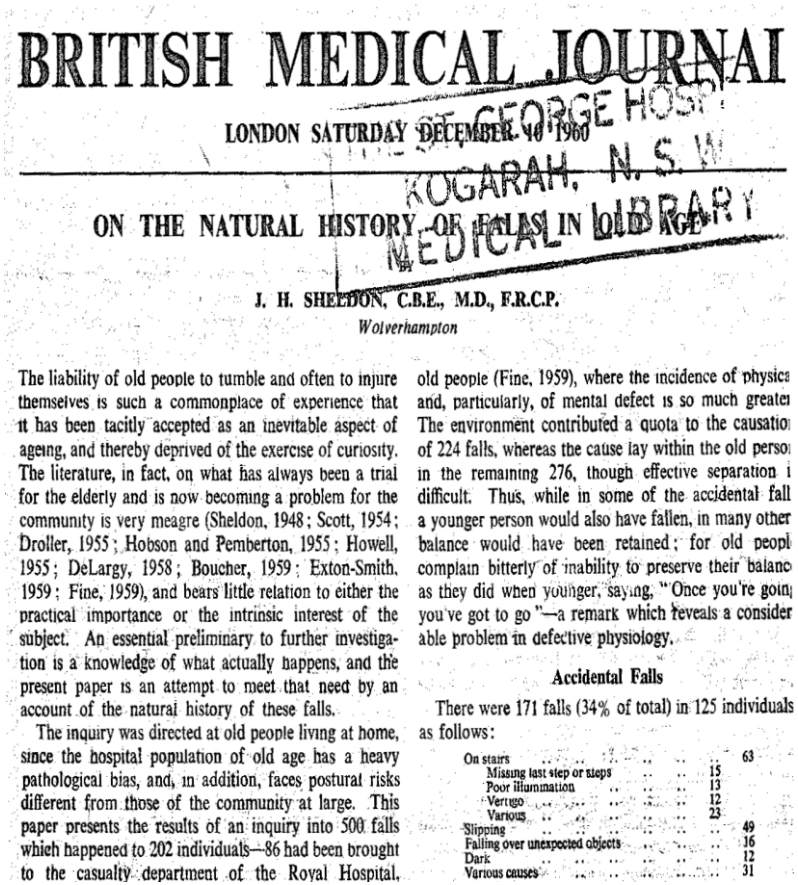








J. H. Sheldon – the grandfather of falls



BRITISH MEDICAL JOURNAL

LONDON SATURDAY DECEMBER 10 1960

ON THE NATURAL HISTORY OF FALLS IN OLD AGE

J. H. SHELDON, C.B.E., M.D., F.R.C.P.
Wolverhampton

The liability of old people to tumble and often to injure themselves is such a commonplace of experience that it has been tacitly accepted as an inevitable aspect of ageing, and thereby deprived of the exercise of curiosity. The literature, in fact, on what has always been a trial for the elderly and is now becoming a problem for the community is very meagre (Sheldon, 1948; Scott, 1954; Droller, 1955; Hobson and Pemberton, 1955; Howell, 1955; DeLargy, 1958; Boucher, 1959; Exton-Smith, 1959; Fine, 1959), and bears little relation to either the practical importance or the intrinsic interest of the subject. An essential preliminary to further investigation is a knowledge of what actually happens, and the present paper is an attempt to meet that need by an account of the natural history of these falls.

The inquiry was directed at old people living at home, since the hospital population of old age has a heavy pathological bias, and, in addition, faces postural risks different from those of the community at large. This paper presents the results of an inquiry into 500 falls which happened to 202 individuals—86 had been brought to the casualty department of the Royal Hospital, old people (Fine, 1959), where the incidence of physica and, particularly, of mental defect is so much greate The environment contributed a quota to the causatio of 224 falls, whereas the cause lay within the old perso in the remaining 276, though effective separation difficult. Thus, while in some of the accidental fall a younger person would also have fallen, in many other balance would have been retained; for old peopl complain bitterly of inability to preserve their balanc as they did when younger, saying, "Once you're goin you've got to go"—a remark which reveals a consider able problem in defective physiology.

Accidental Falls

There were 171 falls (34% of total) in 125 individuals as follows:

On stairs		63
Missing last step or steps	15	
Poor illumination	13	
Vertigo	12	
Various	23	
Slipping		49
Falling over unexpected objects		16
Dark		12
Various causes		31

"The liability of old people to tumble…. is such a commonplace experience that it has been tacitly accepted as an inevitable aspect of ageing and thereby deprived of the exercise of curiosity

Stroke & Falls

Patients with stroke rarely fall because they walk slowly and concentrate hard

Lord Brain 1964

Causes of Falls

- **D** Drugs and alcohol – especially centrally acting medications
- **A** Age related physiological changes – changes in balance, gait speed, eyesight etc
- **M** Any acute medical problem. Also specific diseases such as stroke, dementia, depression, Parkinsonism.
- **E** Environmental hazards

Drugs


Anti-depressant


SLEEPING
PILLS


NDC 59011-410-10
OxyContin
(oxycodone hydrochloride controlled-release) tablets
10 mg
100 Tablets
Purdue Pharma L.P.

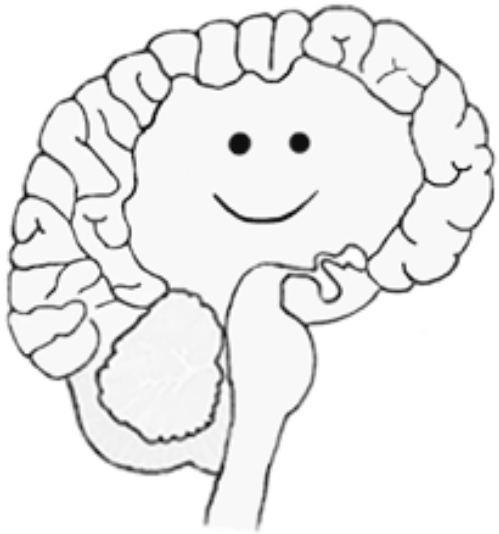

PRESCRIPTION ONLY MEDICINE
ZYPREXA
Olanzapine
10 mg tablets

Age Related Physiological Changes

- Reduced walking speed
- Decreased strength
- Poorer balance
- Slower reaction times

Medical Conditions

- Stroke
- Depression
- Dementia
- Parkinson's disease



Environment

How to Prevent Falls

Exercise

- Must challenge balance
- Need to be doing the exercises for about 3 hours a week

- Walking is not a falls prevention strategy
- Housework doesn't count as exercise

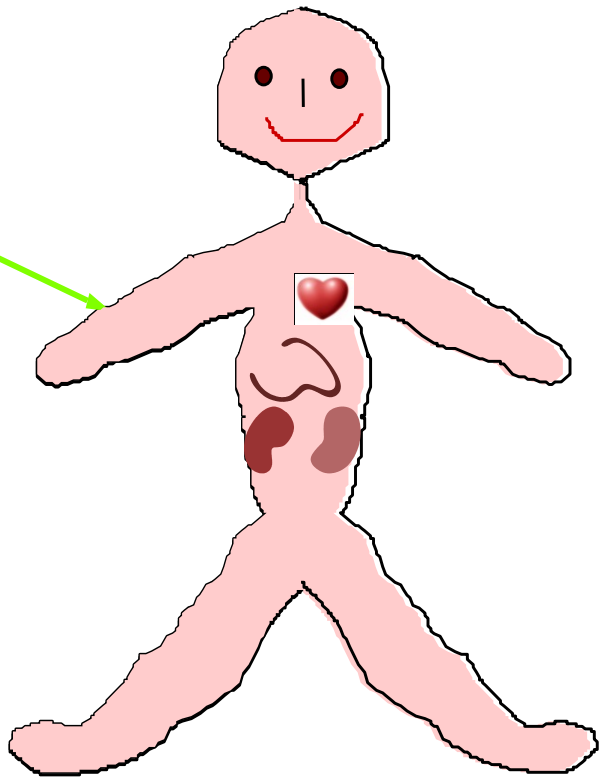
Medication review

Vitamin D

Synthesise vitamin D in the skin

Convert to 25-OH D In the liver

Convert to 1-25 di-OH D in kidney



Daily intake – 1,000iu/day

Aim for vit D level >50nmol/L

Consider liquid form especially for people with very low vitamin D levels

Neurocognitive performance

Nervous tissue

Cardiac benefits

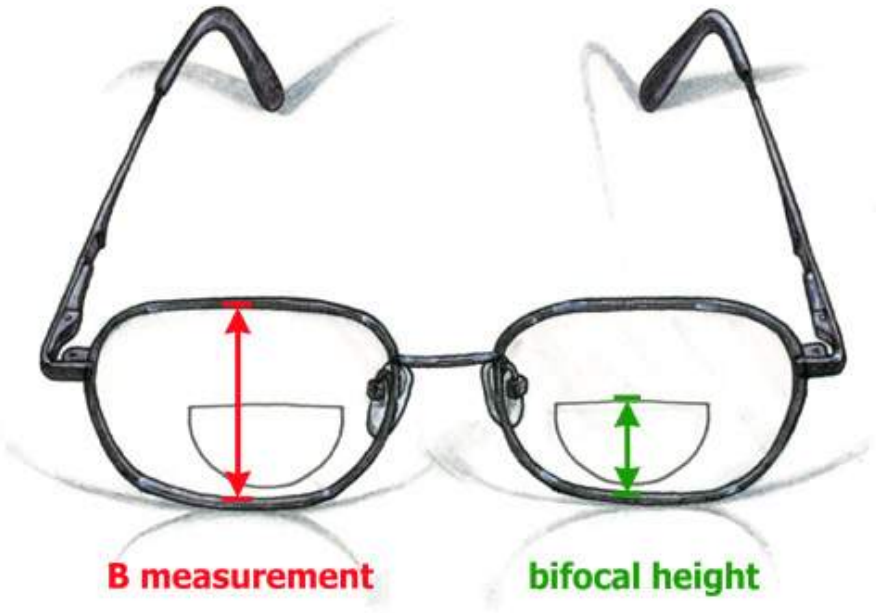
Protective against malignancy

Bone health

Muscle function

Prevents falls

Multifocal and Bifocal Glasses



Occupational home assessment

Cataract surgery

Podiatry and good footwear

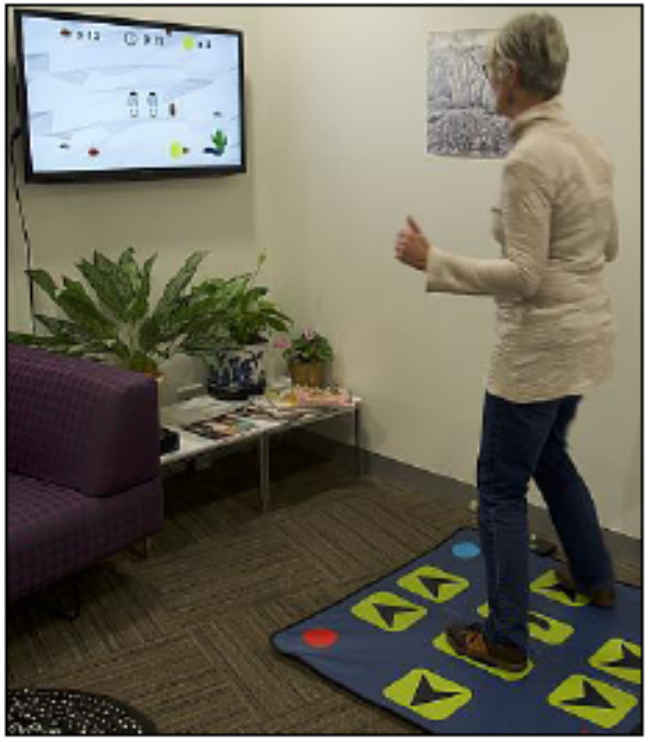
New Research
NeuRA

iFOCIS

- Trial to prevent falls in people with dementia
- 310 people recruited
- Intervention is home based exercise and home safety intervention
- Focus is on preserved cognitive abilities
- Results due Aug 2018

smart±step

A cognitive exercise training system for people aged 65+ years



The smart±step study aims to investigate:

- the benefits of balance and brain training on physical and cognitive functions, general health and accidental falls.

Slip and trip training

Conclusions

- Falls are common
- They can impact on independence
- Risk factors are well established
- Some evidence to tell us how to prevent falls
- More research needed