Falls prevention for the aged living at home – an occupational therapist's perspective

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Life Expectancy for Countries, 2014

Rank	Country	Life expectancy (yrs.)
1	Monaco	89.57
2	Macau	84.48
3	Japan	84.46
4	Singapore	84.38
5	San Marino	83.18
6	Hong Kong	82.78
7	Andorra	82.65
8	Switzerland	82.39
9	Guernsey	82.39
10	Australia	82.07

Prevalence of falls in the elderly

Approximately 28-35% of people aged of 65 and over fall each year.



(WHO, 2007)

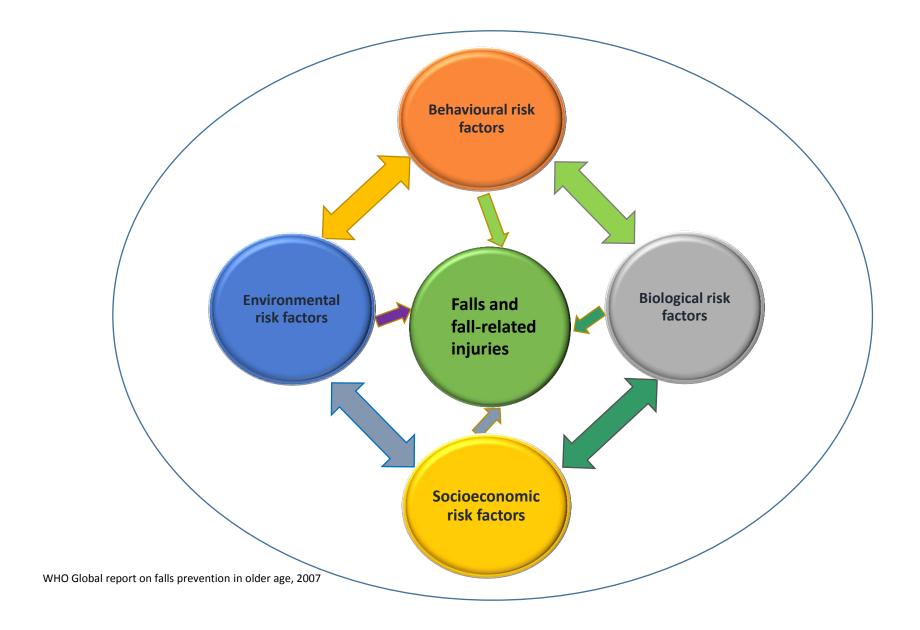
 Prevalence of community elderly falls in Hong Kong was 19% and the mean number of falls per faller was 1.4.

(Chu et al, 2007)

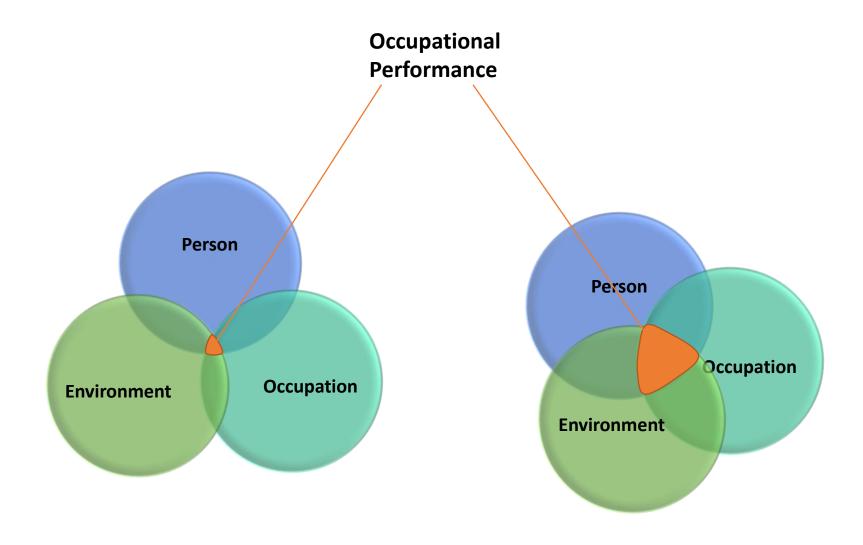
• 9.9% of falls resulted in bone fractures and 31.3% resulted in soft tissue injuries

(Chu et al, 1999)

Risk Factor Model for Falls in Older Age



Occupational Therapy Model of Practice Person Environment Occupation (PEO) Model Law et al, 1996



Home Visit by an Occupational Therapist (OT)

Environment

1. Assessment of the person's functional abilities

Occupation

Person

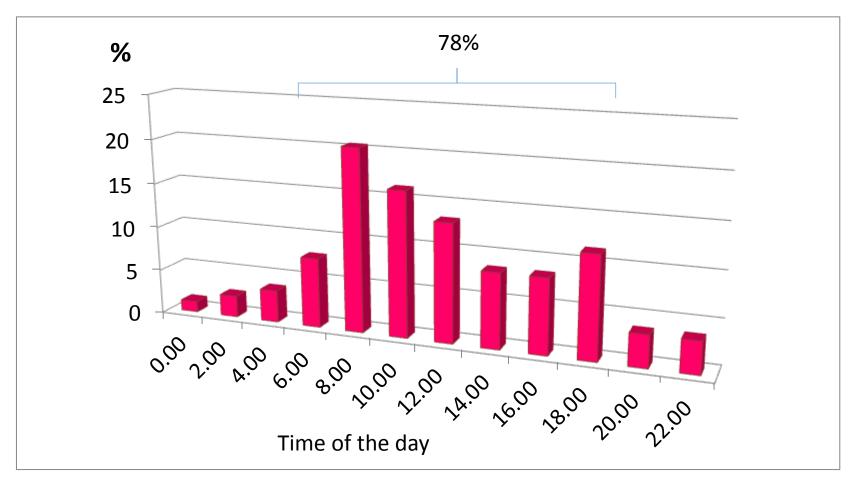
- 2. Daily Life Routine
- 3. Home Safety Assessment
- 4. Occupational Performance
- Fall risk behaviour identification



OT Intervention

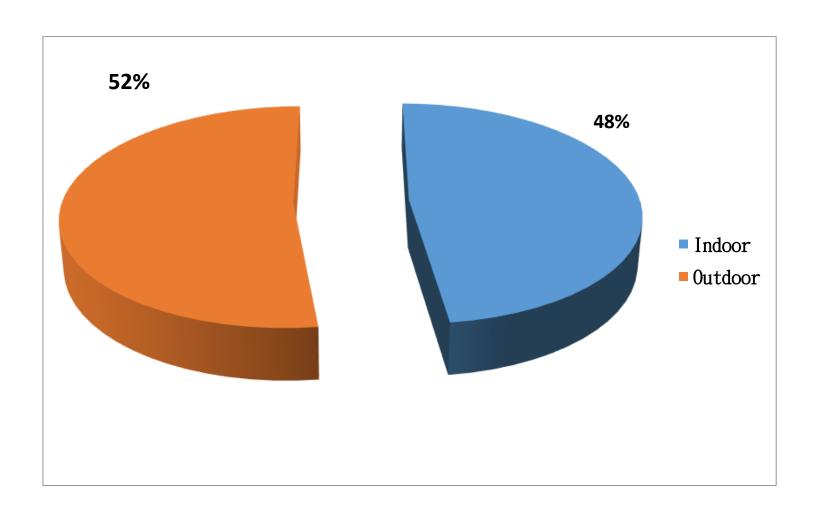


Elderly Fall



Source: Findings from a recent RCT study on using OT home visit to reduce falls in community elderly in Hong Kong.

Location of Fall



Top Five Environmental Fall Risks at home

- 1. Inadequate lightning
- Obstacles in the passage way
- 3. Loose carpets or rugs
- 4. Slippery floor
- 5. Bathroom hazards

- Lighting
- Obstacles in the passageway
- Loose rugs/cloth/electric cord
- Difference in floor level
- Threshold (height and width)
- Inadequate Colour Contrast
- Toilet Door
- Layout difficult to access

Lighting



No lighting inside toilet

Difference in floor level:



Inside threshold height difference = 0.9 cm



Outside threshold height difference = 5.8 cm.

Threshold (height and width)





Inadequate Colour Contrast









Improve Colour contrast

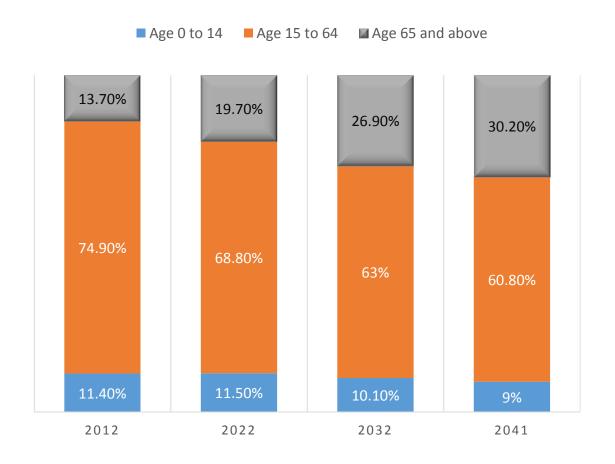
Layout – difficult to access



Risky behaviour

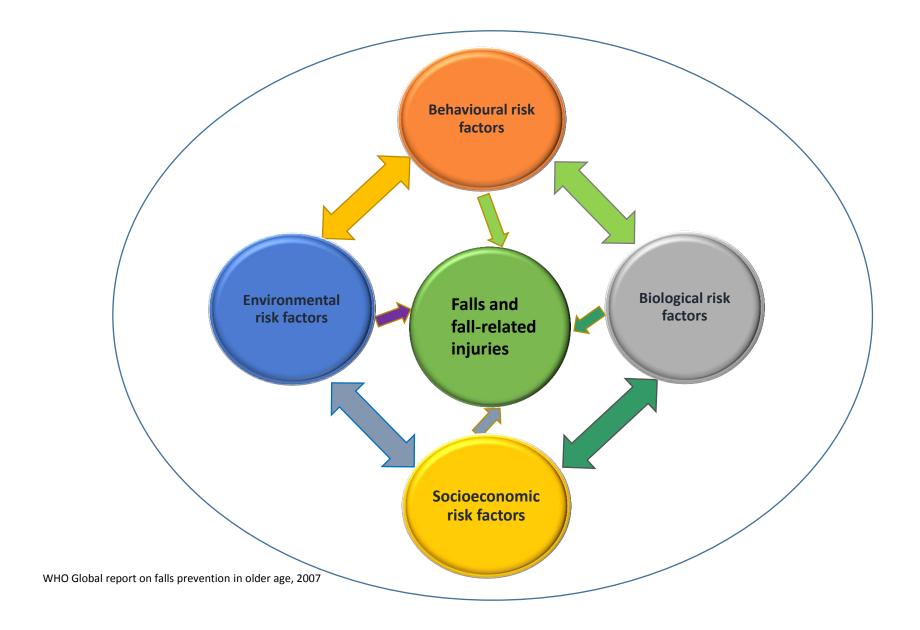


Population by Age Group



Source: 2013-14 Budget Speech

Risk Factor Model for Falls in Older Age

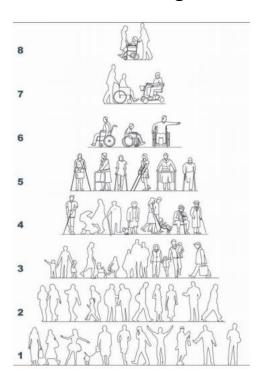


Reducing Environmental risk factors

• Housing design - Flexible to accommodate changing care needs

Accommodation and Prevention

Universal Design



A CHECKLIST FOR PREVENTING FALLS IN YOUR HOME

/ Make sure all handrails are not broken and are securely fastened.

✓ Both sides of the steps should have handrails.

/ Make sure all floor boards are even and rugs, including area rugs, are secured to the floor with tacks, non-skid pads or double-sided tape.

✓ Use non-skid floor wax.

/ Be sure that you can move safely in bathroom area, and in and out of the tub or

Remove soap build-up in tub or shower on a regular basis.

Place non-slip strips in bath/shower.

✓ Install adjustable height shower heads.

Mount grab bars at the toilet, bath and shower on walls with secure reinforcements, to prevent the bars from coming loose.

/ Secure bath mats with non-slip, double-sided rug tape.

Items that you use frequently, such as dishes and food items, should be easy to

If you have to use a step stool, make sure that it has a bar at the top to hold on to.

Place nightlights in hallways, bedrooms, bathrooms and stairways. ✓ Install light switches at the top and bottom of stairs.

✓ Place a lamp (and telephone) near your bed.

/ Keep lighting uniform in each room and add lighting to dark spaces.

http://www.eldercare.gov/

Thank You