

NURSING HOME OF THE FUTURE

What is an ADL/IADL?

ADL – activity of daily living

Some examples

- Eating
- Dressing
- Getting in and out of bed or chair
- Taking a bath or shower
- Using the toilet

IADL – instrumental activity of daily living – activities related to independent living

Some examples

- Preparing meals
- Managing finances
- Shopping
- Doing housework
- Using a telephone

Selected ADL/IADLs with medical conditions predisposing for risk of injury

Bathing/Showering (ADL)

- **Stroke** – leads to motor weakness of extremities – leads to fall
- **Osteoporosis** – leads to compression fracture of lumbar back – leads to lumbar root nerve injury – leads to fall due to lower extremity weakness
- **Osteoporosis** – increased risk of fracture due to decreased bone density – so when fall, is worse fall
- **Diabetes** – high glucose leads to nerve damage – leads to sensory loss in extremities – leads to fall

Raising from a chair or bed (ADL) or walking (ADL)

- **Arthritis** – leads to joint inflammation, pain, stiffness – leads to decreased mobility
- **Diabetes** – high glucose leads to nerve damage – leads to sensory loss in extremities- leads to difficulty with mobility
- **Depression** – psychomotor retardation associated with mental illness

Personal care/hygiene

- **Incontinence** – leads to increased risk of pressure ulcers
- **Stroke** – leads to motor weakness – leads to fear of

Taking medication (IADL)

- **Dementia (Alzheimers)** – cognitive impairment due to senile plaques – leads to difficulty in compliance: can't remember dosage, frequency, route
- **Visual disturbance** –(macular degeneration, glaucoma, diabetes) lead to visual disturbance – leads to difficulty with compliance

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Using the telephone (IADL)

- **Dementia (Alzheimers)** – cognitive impairment due to senile plaque – leads to difficulty with remembering phone numbers, how to dial – leads to loss of social support network – increased risk of depression
- **Visual disturbance** – (macular degeneration, glaucoma or diabetes) lead to visual disturbance – leads to difficulty dialing phone – leads to loss of social support – increased risk of depression
- **Hearing disturbance** – hearing loss leads to inability to hear/listen on traditional phone – loss of social support network- increased risk of depression

Keeping personal finances (IADL)

Dementia – cognitive impairment due to senile plaques – leads to difficulty with financial micromanagement

Main Pathophysiologies in the Elderly

Dementia

- 6-8% of people 65+ and 30% of those 85+ have some form of dementia
- 4.5 million people currently have Alzheimer's disease in U.S. – the cost of caring for them is approximately \$100 million
- The prevalence of Alzheimer's is expected to quadruple by 2050
- 70% of people with Alzheimer's disease will die in a nursing home

Diabetes

- Affects 20% of people over 65 (1 in 5)
- Affects 25% of nursing home residents
- 5th most prevalent chronic condition in the elderly
- In one study, diabetes tripled the risk of nursing home admission in those aged 45-64
- Only 42% of nursing home patients with diabetes were tested to gauge blood sugar control or had an eye examination in a recent study
- Diabetics have an increased risk of pressure ulcers in the nursing home

Glaucoma

- 2nd leading cause of irreversible blindness
- Two types:
 - Primary open angle (POAG): chronic and progressive (90% cases)
 - 2.2 million Americans 40+
 - Another 1 million Americans have POAG but do not realize it because they have no symptoms
 - Estimated to increase 50% to 3.6 million by 2020
 - 1.6 million with significant visual impairment
 - About 100,000-120,000 blind bilaterally
 - Causes about 9 million doctor visits per year

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- Acute angle-closure: ocular emergency (10% cases)
 - Prevalence heavily dependant on race: 1/1000 Caucasians, 1/100 Asians, 2-4/100 Eskimos
 - Elderly women most at risk

Incontinence

- 34% of nursing home residents had a diagnosis of incontinence in 2006
- Incontinence causes about 10% of nursing home admissions at a cost of about \$6 billion/year
- Nursing home residents that are incontinent have an increased risk of pressure ulcers

Stroke

- 3rd leading cause of death in 65+ age group (all cerebrovascular disease)
- The lifetime risk for stroke at age 65 is about 15%
- 35% of stroke related deaths occur in the nursing home

Arthritis

- Affects 60% of the population over 65 and is the leading cause of disability in this age group
- 21.4 million people had arthritis or chronic joint symptoms in 2005
- By 2030, that number is expected to double to 41.1 million sufferers

Macular degeneration

- Leading cause of legal blindness in those 55+ in U.S.
- The risk for MD in those over 75 is 30%
- Currently 1.75 million people have MD
- By 2020, 3 million people are expected to suffer from MD

Depression

- An estimated 15% of community dwelling elders and 25% of the nursing home population have depressive symptoms
- 15 elderly suicides occur every day; 1 every 95 minutes
- The prevalence of undiagnosed and untreated depression in the elderly is estimated at 6-20%

Osteoporosis

- 60% of nursing home residents have clinically low Vitamin D levels

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- A recent study found that only 36% of NH residents with osteoporosis or a recent fall were provided with any fracture protection***
- Osteoporosis doubles the risk of fractures in the nursing home

Pressure ulcers

- Seventeen percent to 35% of patients have pressure ulcers at the time of admission to a nursing home
- The prevalence of pressure ulcers among nursing home residents ranges from 7% to 23%
- Federal law ("F-Tag 314") requires that nursing homes ensure that:
 - A resident who enters the facility without pressure sores does not develop pressure sores unless the individual's clinical condition demonstrates that they were unavoidable
 - A resident having pressure sores receives necessary treatment and services to promote healing, prevent infection and prevent new sores from developing