The Complicated Older Patient…Who are you gonna call??

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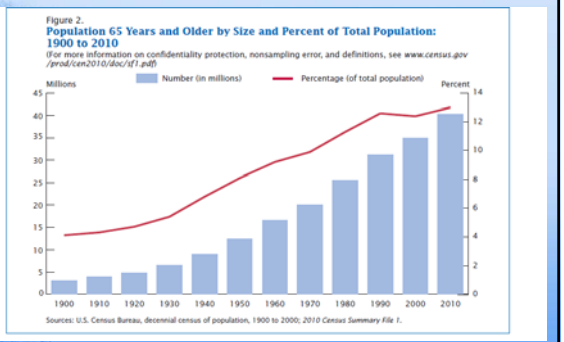
Objectives

- Review demographics
- Differentiate between frail elders and those who exemplify healthy aging
- Discuss when to request a geriatric consultation
- Explore ways geriatricians can assist with complicated patients

DEMOGRAPHICS

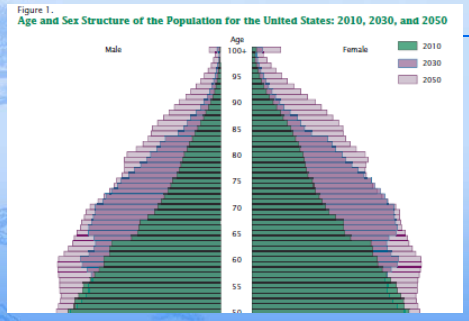
Current Statistics

- Between 2000 and 2010, population > 65 years old increased at rate of 15.1 %
  - Total US population increased at rate of 9.7%
- 40.3 million people > 65 years
  - 5.3% increase from 2000 (35 million)
- 13% of total population
  - Increased from 12.4% in 2000
- 1.3 million people > 65 live in skilled-nursing facilities (3.1% of population > 65)



Population Changes

- 2050: Projected to be 88.5 million people > 65
- Population will become more ethnically and racially diverse



CHARACTERISTICS OF ELDERLY

Healthy Aging

- Avoiding premature morbidity/mortality
- Monitoring functional health status
- Remaining independent in spite of functional loss and/or illness
- Remaining productive in society
- Maintaining economic resources as long as possible
- Retaining cognitive and creative skills
- Adjusting psychologically to losses and trauma of the aging process

Complicated Patients

- Heterogeneity of health status
- Age related physiologic changes
- Increased incidence of comorbidities
- Atypical presentation of illness
- Increased iatrogenic illness
- Increased need for social support system
- Different goals of care
- Adverse reactions of medications
- Polypharmacy

Frailty

- Predicts mobility and progressive decline in ADL
- Fried Frailty Criteria (FFC):
  - Unintentional weight loss of 4.5 kg in past year
  - Self-reported exhaustion
  - Weakness (decreased grip strength)
  - Slow walking speed
  - Low physical activity
- Comprehensive Geriatric Assessment and intervention improves frailty status and functional status

Atypical Presentation of Disease

- Functional decline caused by infection, CVA, hypoxia, etc.
- Misleading symptoms:
  - Infection with normal WBC, afebrile
- Signs of one disease obscured by another
- No presentation at all:
  - Silent infarct, silent acute abdomen
- No single cause for presenting symptoms → Most symptoms are multifactorial

Iatrogenic Illness

- Common
- 1/3 of hospitalized elderly have problems with iatrogenic side effects
- Adverse drug reactions are the most common complication
- Other complications:
  - Deconditioning
  - Delirium
  - Falls
  - Infection
  - Pressure ulcers

Risk Factors for Medication Complications

- > 6 concurrent chronic illnesses
- > 12 doses of medicine per day
- > 9 meds
- One prior drug reaction
- Low body weight or BMI
- > age 85
- Estimated creatinine clearance of 50 or less

Cognitive Impairment

- At age 65, 10% have dementia
- At age 85, 50% with dementia
- 2012: 5.2 million people with Alzheimer's
- 2050: estimated 16 million will have Alzheimer's
- Dementia, delirium, depression → overlapping symptoms → more difficult diagnosis
- Often accompanies and complicates chronic conditions

WHEN TO CONSULT A GERIATRICIAN

Reasons to Consult a Geriatrician

- Patients > 65 years old
- Multiple comorbidities
- Psychosocial issues (depression, isolation)
- Geriatric syndromes (dementia, falls, functional disability)
- Previous or high medical utilization
- Possible change in living situation

Geriatric Philosophy

- Functional based focus of care
- Coordinate with interdisciplinary teams
- Tailor treatment plan to individual's needs, considering all aspects of the patient (physical, functional, social, financial, spiritual, psychological, etc)

Geriatric Teams

- Geriatrician/medical director
- Midlevel practitioner
- Social Worker
- Nurse
- Dietician
- Physical therapist
- Occupational therapist
- Speech therapist
- Pharmacist

Settings for Geriatric Consultations

- Inpatient
- Outpatient
- Office Based Primary Care
- Nursing Home
- Home Visits

- A geriatric consult on every patient > 65 is not needed or cost effective

Components of Geriatric Consultation

- Functional status
- Fall risk
- Cognition
- Mood
- Polypharmacy
- Social support
- Financial concerns
- Advance care wishes

Components of Geriatric Consultation

- Nutrition/weight change
- Urinary continence
- Sexual function
- Vision/hearing
- Dentition
- Living situation
- Spirituality

Functional Status

- Activities of Daily Living (ADL)
  - Bathing
  - Dressing
  - Toileting
  - Grooming
  - Feeding
  - Transferring
- Instrumental Activities of Daily Living (IADLs)
  - Grocery shopping
  - Driving
  - Telephone
  - Preparing food
  - Taking medications
  - Managing finances

Falls

- History of falls
- Associated events with falls
- Symptoms
- Injuries
- Balance
- Gait assessment

Cognition

- History (from patient and caregivers)
- Memory screen (clock drawing, MMSE, SLUMS)
- Studies to rule out other underlying causes
- Evaluation for depression/mood disturbance
- Referral for formal Neuropsych testing

Mood

- Depression often underdiagnosed and inadequately treated
- Depression may present atypically
- Geriatric Depression Scale (GDS)
- Patient Health Questionnaire-9 (PHQ-9)

Polypharmacy

- Multiple medications prescribed by multiple providers
- Often medications are treating adverse effects of other medications
- Increased risk of drug-drug interactions and adverse events
- Patients should bring medications with them, including OTC and herbals

Social and Financial Issues

- Social support
- Caregivers
- Surrogate decision makers
- Caregiver stress
- Finances

Advance Care Planning

- Living will
- Preferences
- Decision-making capacity

EXAMPLES OF SUCCESSFUL GERIATRIC CONSULTATION SERVICES

Geriatric Trauma

- Falls and MVA predominant causes
- Delay in recognition of elderly trauma → Increased time in ER → Delay in care
- Geriatric Trauma Team consult
  - Advance care planning
  - Disposition decisions to promote function
  - Medication changes
  - Decreased inappropriate medications
  - Assisted with pain management
- Chronological age + comorbid disease + moderate injury → overwhelms coping of frail elders
  - Death, disability, loss of independence

• Fallon, et al, 2006

Geriatric Consultation in Cancer Patients

- Geriatricians detected and described patients' problems
  - Strengths
  - Limitations
  - Needs for services
- Geriatrician ranks problems
- Tools used:
  - Cumulative Illness Rating Scale—Geriatrics (CIRS-G)
  - Katz Activities of Daily Living Index
  - Lawton Instrumental Activities of Daily Living (I-ADL)
  - Mini Nutritional Assessment
  - Folstein MMSE
  - Clock drawing test
  - Geriatric Depression Scale (GDS)

• P. Chaibi et al, 2011

Table 2
Geriatric treatment at baseline before cancer care.

	No.	%
Overall geriatric therapeutic intervention	122	76
Nutritional intervention	76	47
Depression treatment	30	19
Cognitive impairment exploration and/or treatment	29	18
Polymedication modifications	60	37
Social intervention	32	20

Table 3
Characteristics of geriatric assessment patients related to change in the initial treatment proposed.

	Higher dose intensity $n = 45$		Lower dose intensity $n = 34$		Same dose intensity $n = 82$	
	No	%	No	%	No	%
Serious comorbidity	21	46	23	68	31	38
ADL dependency	21	46	19	56	12	14.5
Malnutrition	33	73	29	85	42	51
Cognitive impairment	11	24	14	41	17	21
Metastatic disease	33	73	17	50	36	44

Results

- Patients who received lower dose intensity treatment
  - Higher rate of serious comorbidity and ADL dependence ($p < 0.001$)
  - Needed geriatric intervention in two or more areas
  - Poor overall condition related to previous geriatric state, NOT cancer
- Patients who received higher dose intensity treatment
  - Higher rate of ADL dependence ($p < 0.01$)
  - Rates of serious comorbidity and cognitive impairment similar to patients with same dose intensity
  - No need for frequent geriatric interventions
  - Loss of autonomy due to cancer, NOT geriatric conditions

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GERIATRICS

References

- Chaibi P, et al. (2011). Influence of geriatric consultation with comprehensive geriatric assessment on final therapeutic decision in elderly cancer patients. *Critical Reviews in Oncology/Hematology*, 79, 302-307.
- Fallon, WF, et al. (2006). Geriatric Outcomes are Improved by a Geriatric Trauma Consultation Service. *Journal of Trauma*, 61, 1040-1046.
- Fried LP, et al. (2001). Frailty in older adults: evidence for a phenotype. *J Gerontol A*, 56, 146-156.
- Li, CM, et al. (2010). The effectiveness of a comprehensive geriatric assessment intervention program for frailty in community-dwelling older people: a randomized controlled trial. *Archives of Gerontology and Geriatrics*, 50, 39-42.
- Sennour Y, Counsell SR, Jones J, Weiner M. (2009). Development and Implementation of a Proactive Geriatrics Consultation Model in Collaboration with Hospitalists. *Journal of American Geriatrics Society*, 57, 2139-2145.
- United States Census Bureau. (2012). *Population Projections* [Data file]. Retrieved from http://www.census.gov/population/www/projections/summarytables.html
- United States Census Bureau. (2012). The Older Population: 2010. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-09.pdf
- United States Census Bureau. (2012). The Next Four Decades. Retrieved from http://www.census.gov/prod/2010pubs/p25-1138.pdf
- White, SJ, et al. (1994). Effectiveness of an Inpatient Geriatric Service in a University Hospital. *J of Tennessee Medical Association*, 87 (1), 425-428.


QUESTIONS