The Impact of Chronic Disease

Goal

The goal of this session is to foster the ability of individuals to remain safely in their home, minimizing hospitalizations and improving quality of life.

Objectives

- Identification of prevalence of abuse/neglect in the chronically ill elderly
- Greater understanding of the prevalence and impact of major chronic illnesses
- Considerations of disease progression

What Are Chronic Diseases?

Chronic diseases are noncommunicable illnesses that are prolonged in duration, do not resolve spontaneously, and are rarely cured completely.

- Examples—heart disease, cancer, stroke, diabetes, and arthritis.

(CDC, 2011)

Chronic Care in Overall Health Care Picture

- Level 5: Institutionalized difficult to place
- Level 4: 2-3 Chronic Diseases
- Level 3: Identified Disease State
- Level 2: Risk Factors Exist
- Level 1: Healthy

Problem is increasing

- About 133 million Americans—nearly 1 in 2 adults—live with at least one chronic illness
- More than 75% of health care costs are due to chronic conditions
- Approximately one-fourth of persons living with a chronic illness experience significant limitations in daily activities
- More common among older adults

(CDC, 2011)
**Reasons for Increase in Chronic Diseases**
- Advances in treatment of acute disease
- Earlier screening and diagnosis of chronic disease
- Aging of America
- Lifestyle factors: sedentary, diet (obesity), smoking, stress

**Correlation to Abuse and Neglect**
- Statistics
  - ↑Volume of elderly population with chronic illness in community
  - ↑Prevalence of abuse and neglect in elderly population
    - No uniform reporting system
    - Estimated 1-2 million Americans >65 have been mistreated by someone they depend upon for care
    - Estimates of frequency of reported elder abuse between 5-10%
    - Chronic illness is a major risk factor

**Mistreatment of the Elderly**
- Neglect
- Self-neglect
- Physical abuse
- Emotional abuse
- Sexual abuse
- Medical abuse
- Financial or material abuse
- Violation of rights

**Mistreatment of the Elderly..definitions**
- Neglect
  - Intentional or unintentional withholding of food, medication, or other necessities that result in the older person’s failure to thrive
- Self-neglect
  - Behavior that threatens person’s own health or safety
- Emotional abuse
  - Infliction of anguish or distress through threats, verbal aggression, intimidation, humiliation, harsh orders

**Mistreatment of the Elderly..definitions**
- Medical abuse
  - Intention withholding or improper administration of medications or other necessary treatments
- Financial or material exploitation
  - Theft (social security checks, personal property) or other misuse of income or financial resources
- Physical abuse
  - Bodily injury
- Sexual abuse
  - Nonconsensual sexual contact
- Violation of rights

**Mistreatment of the Elderly**

- Neglect, 46.0%
- Emotional, 46.0%
- Physical, 14.5%
- Sexual, 0.6%

[Levine, 2003]

[National Center for Elder Abuse, 2009]
Mistreatment of the Elderly

1. Neglect
   - Includes self-neglect
2. Emotional
3. Physical
4. Sexual
   - What about financial?
     - Same study
     - ~50% (Adult Protective Services) detected or suspected some degree of financial exploitation

Signs & Symptoms of Abuse and/or Neglect

- Weight Loss
- Dehydration
- Malnutrition
- Injuries in various stages of healing
  - Decubitus, Non-healing wounds
  - Unexplained bruises
- Depression
- Inattention to medical regimen
- Inattention to nutrition and/or hygiene
- Others....

Risk Factors for Self-Neglect

- Living alone
- Dementia
- Depression
- Bereavement
- Isolation
- Alcohol abuse
- Psychiatric disorder
- Impairment in functional status
  - ADL'S (activities of daily living)
  - IADL’s (instrumental activities of daily living)

Chronic Illness Today

- Diabetes
- Heart Failure
- Chronic Pulmonary Disease
- Arthritis
- Alzheimer's
- Stroke
- Kidney Disease
- Others....
  - Some of the signs and symptoms of chronic disease are the same as those of abuse/neglect

Diabetes Epidemic

- Total: 25.8 million adults and children in the United States
  - 8.3% of the population—have diabetes.
- Diagnosed: 18.8 million people
- Undiagnosed: 7.0 million people
- Prediabetes: 79 million people
- New Cases: 1.9 million new cases 2010

Who Has Diabetes?

- ↑ African American, Hispanic, American Indian, Asian

[Levine, et al., 2003]
[Levine, 2003]
[Levine, 2003]
[Levine, 2003]
[Diabetes, 2010]
[Diabetes, 2010]
[Diabetes, 2010]
What is Diabetes?

- Diabetes Mellitus is a multisystem disease
- Biochemical disease with consequences to all parts of the body
- It is a chronic disease of carbohydrate, fat, and protein metabolism caused by problems with the hormone insulin
- The body is unable to use the glucose for energy
- The build up of glucose starves the cells and causes problems in all organs of the body

[ADA, 2010]
What is Diabetes?

- Too much glucose in the bloodstream
- Either to body (pancreas) is not making insulin OR
- Not making enough OR
- The cells are resistant to the insulin being produced

[Milner-Fenwick, 2008]

Types of Diabetes: Type 1 and Type 2

Type 1
- Insulin not being produced
- Autoimmune disease
- Occurs mostly in juveniles but can occur in adults in their 30’s-40’s
- Often not related to obesity
- Initially these individuals present with diabetic ketoacidosis
- 5-15% of all diabetes are type 1

Also: Prediabetes, Gestational Diabetes

[Milner-Fenwick, 2008]

When is it Diabetes?

- Classic symptoms of diabetes
  - Frequency of urination
  - Thirst
  - Weight loss
  - Blurred vision
  - Tired
  - Glucose >200 (random)
  - Fasting glucose > 126  (Note: prediabetes 100-125)
  - A1c >6.5  (Note: prediabetes 5.5-6.4)
  - 2 hour test (called Glucose Tolerance Test)

[AHA, 2010]

Complications

- Diabetes impacts all organs and parts of the body
- Men & women with DM have decreased life expectancy of 7-8 yrs as compared to non-DM
- Heart, Kidneys, Eyes, Extremities, Wounds, etc
- Cause...blood sugar elevation impacts circulation

Management:
- Smoking cessation
- Low dose aspirin therapy (according to MD)
  - NOTE: Bruising
- Control of blood pressure
- Manage cholesterol (HDL/LDL)
- Weight

[ADA, 2010]

Complications

- Vision
  - Impact can begin even with pre-diabetes
  - Diabetic retinopathy
- Non-healing wounds in extremities
- Calluses
- Lack of circulation

Management:
- Annual eye screening
- Foot care is very important
- Should have annual microfilament test

[Milner-Fenwick, 2008]

Management of Diabetes

Goal: Maintain target blood sugars

- Glucose testing
  - Provides information
  - Impact of food, activity, medication on blood sugar
- Many things can impact blood glucose
  - Illness
  - Stress

Management:
- Blood sugar testing (based on advice of MD/diabetes educator)
  - Generally recommend 2-3 times/day
  - Before breakfast (fasting for 8 hrs), before meals (vary which meal), and (periodically) 2 hours after meal
  - Record Keeping
  - Technique
  - Lower insulin resistance

[Milner-Fenwick, 2008]
Insulin Resistance
- Factor in Type 2 diabetes
- Things that ↑ insulin resistance:
  - Weight
  - Stress
  - Inactivity
  - Smoking

Tip: Method to reduce insulin resistance:
- Anything to address above factors
- Some medications will help

What do caregivers need to know?
- There is no “Diabetic Diet”
- There is no list of “Good” and “Bad” foods
- One size does NOT fit all

Management:
- Decrease portions
- Watch liquid calories
- Balance and consistency are key
- Focus should be on healthy food choices
  - Whole grains, fresh fruits and vegetables, and foods lower in fat
  - “Plate” method (9” plate: ¼ plate protein, ⅓ carb, ½ low carb vegetable)

What about Alcohol?
- Drink in moderation
- Alcohol is processed similarly to fat
- One drink=12 ounces beer, 5 ounces wine, or 1 ½ ounces hard liquor

Management:
- Should NOT drink if taking medication metformin, glucophage (or any other medication that does not mix with alcohol)=causes lactic acidosis
  - Some symptoms of lactic acidosis include shortness of breath, persistent nausea, and a slow or irregular heartbeat
  - Impact on triglyceride levels (body fat)
    - Remember, diabetes=heart disease

Hypoglycemia (low blood sugar): Possible Signs & Symptoms

Mild Symptoms
- Hunger
- Shakiness
- Weakness
- Paleness
- Blurry vision
- Increased heart rate/palpitations

(ADA, 2010)

Hypoglycemia or LOW blood sugar
- Onset:
  - Can be sudden
  - Progress to unconsciousness if not treated
  - Can result in brain damage or death

- MD and/or diabetes management plan should specify signs and action steps each level of severity:
  - Mild
  - Moderate
  - Severe

- Causes
  - Not eating enough, skipping meals, eating late
  - Extra or unplanned activity
  - Too much insulin and/or some medications

(ADA, 2010)
Low Blood Sugar: Prevention

Important Tips:
- Keep a quick acting sugar source with the participant (always)
- Hard candy
- Don’t wait...act the minute symptoms appear
- Test blood sugar again
- Don’t skip meals
- Medications/insulin taken as prescribed
- Check blood sugar regularly especially when sick

Low Blood Sugar: RULE of 15

- 15 grams of a fast acting carbohydrate
- ½ cup juice
- 4-5 lifesavers
- 3-4 glucose tablets
- ½ cup regular soda
- Wait 15 minutes
  - Test blood sugar again
  - if still low, retreat with 15 more grams.
  - DO NOT over treat low blood sugar

Hypoglycemia Treatment:
15 gram options

- 4 glucose tablets
- 1 tablespoon sugar
- 4 oz. juice
- 8 oz. low fat milk
- 8 hard candies (e.g. Lifesavers)

Hyperglycemia or HIGH blood sugar

Onset:
- Severe hyperglycemia is usually slow to develop
- Can be rapid if on an insulin pump

Causes
- Food (especially carbs)
- Stress (even good stress)
- Illness
- Hormones

Hyperglycemia (High blood sugar):
Possible Signs & Symptoms

- Thirst or Hunger
- Frequent urination
- Tired
- Confused
- Stomach pain
- Cuts and infections that are slow to heal
- Tingling or numbness of hands or feet

Risk & Complications of Hyperglycemia

- Hyperglycemia due to insufficient insulin can lead to diabetic ketoacidosis (coma/death)
  - Generally type 1
- Untreated hyperglycemia leads to complications

Management:
- Forgot to take insulin or medications?
- Misjudged carbohydrate intake?
- Over-treated low blood sugar?
- Illness or infection?
- Infusion set occluded or dislodged (if on pump)?
Medications to Treat Diabetes
Oral medications and Insulin

- Oral medications
  - Different Actions
  - Stimulate insulin production
  - Decrease cellular resistance to insulin

- Insulin
  - Replace insulin body isn’t making
  - Synthetic insulins also address cellular resistance
  - Many types of insulin

Management:
- Know to know what the medication is supposed to do
- Insulin management can be tricky
- Important to know whether taking long acting or short acting insulin
- Impact on blood sugar levels is KEY...makes tracking of sugar levels important

FYI: Secretagogues are medicines that stimulate the beta cell to secrete insulin

Insulin

- Action of insulin
  - Replaces insulin that is NOT being produced by the body
  - Stimulates proper utilization of glucose by the cells and reduces blood sugar levels

- There are four main types of insulin available.
  - Rapid acting
  - Regular
  - Intermediate acting
  - Long acting

Management:
- Important for participant to know which insulin they are taking
  - Issues related to eating
  - Issues related to hypoglycemia
  - Site rotation considerations

Insulin Delivery

Diabetes Management: Summary

- DM is a chronic disease
- Goal is to maintain glucose control and prevent complications
- Balance food intake, physical activity, and medication to achieve the best patient outcome
- Management includes the following
  - Lifestyle choices
  - Food
  - Monitoring
  - Consistency
  - Exercise
  - Medications
  - One more thing: Impact of Depression

Examples

Heart Failure
Statement of the Problem
Heart Failure is Problematic because
- It is Chronic
- It is Progressive
- It is Incurable

Tip:
It CAN be managed

Facts
- Increasing in prevalence & incidence
  - Only cardiovascular condition
  - New diagnosis every 53 seconds
  - 600,000 annually (new)
  - 8 million people living with HF
  - Over 65 (1 in 10)

(American Heart Association [AHA], 2011a)

Healthy Heart
- Heart is a muscle
- Primary function is a pump
- Function is to pump oxygenated blood to all parts of the body

What is problem in HF?
- Heart muscle is damaged
- Problem with lower chambers of the heart
  - Not strong enough to pump blood out
    - Systolic heart failure
    - Left ventricle has become weak
  - Allows less blood in
    - Diastolic heart failure
    - Right ventricle becomes rigid

(AHA, 2011a)

Common symptoms of HF
- Shortness of breath
  - Activity or at rest
  - May wake up at night
- Cough, wheeze
- Bloating, swelling (edema)
  - ↑ urination at night
  - ↑ weight gain
  - ↑ fatigue
- Irregular heart beat
- Swollen neck veins

(AHA, 2011b)
HF Management

- Salt
- Fluids
- Medications
- Activity

Management:
- Good news and bad news
- These are the big FOUR
- Should be easy…but it isn’t

Salt or Sodium restriction

- Sodium
  - Restrict to 2000 mg/day
  - 1%-drinking water
  - 11%-table/cooking salt
  - 11%-naturally inherent in foods (bacon and ham)
  - 77%-processed foods

Management:
- Remove the salt shaker (use spices)
- Fresh or frozen, not canned
- Read labels (20% daily value or more is high…look for 5%)

Fluids

- Fluid Management
  - 8-8 ounce fluid daily unless otherwise ordered by physician
  - Alcohol restriction
    - Depresses heart
    - Usually limited to one drink a day

Management:
- Fluids are not just water

Activity

- Exercise
  - Can be of benefit
  - Improve flow of blood, strengthen heart
  - Increase energy
  - Raise spirits

Management:
- Low and Slow
- Walking is good
- STOP exercise if tired, chest pain, short of breath

Other ManagementTips

- Daily weights
  - Keep record
  - Weigh at same time every day
  - Report weight gain
- Oxygen
- Smoking Cessation
- Immunizations
  - Flu and pneumonia
  - Watch the weather (cold or hot)
  - Keep legs elevated (might need hose)
  - Stay away from people who have respiratory infections
    - Wash hands
    - Avoid large crowds
  - Plenty of rest (naps are OK)

Medication Management

The primary drugs used:
- Diuretics
- ACE Inhibitors
- ARB’s
- Beta-Blockers
- Aldosterone Antagonists
- Digitalis
- Hydralazine & Isosorbide Dinitrate

(Mayo Clinic, 2010)
Important Tips related to HF Medications

- Purpose of these meds--
  - Get rid of excess fluid
  - Reduce workload of heart pump
  - Open up arteries and lower blood pressure
  - Reduce production of hormones impacting workload

Some side effects could be:
- Cough, dizziness, metallic taste in mouth, dehydration, tired, dizzy, thirst, skin rash, low potassium, leg cramps, diarrhea, irregular, fast, or slow heartbeat

Drugs Generally Avoided

- Nonsteroidal Anti-inflammatory drugs
  - Advil, Motrin
- Calcium Channel Blockers
- Antiarrhythmic Agents
- Long term use of an infusion of positive inotropic agents
- Nutritional supplements
- Hormonal therapies

Case Study

Caregiver Role in Heart Failure

- EDUCATION is critical
  - Help the participant and family understand
  - Especially related to activity
- Know the medications
  - Adjustment a key factor
  - Good to have HF nurse or HHC nurse involved
  - Assist with patient transitions from hospital inpatient and outpatient settings
- Assist with end of life
  - Palliative care or hospice

Examples

Chronic Respiratory Disease
Chronic Obstructive Pulmonary Disease...aka COPD

- 4th leading cause of death in US
- Smoking accounts for 85% of cases
- Primarily a disease of the working age (70% in 45-65 age group)
- Third most costly among chronic conditions
- From 1980 to 2000 mortality increased 64%
- Less than 50% have a doctors diagnosis of COPD
- About 50% of patients die within 10yrs of diagnosis

[Rodriguez-Roisin, 2010]

Normal Breathing

- Air containing Oxygen enters trachea→bronchial tubes→bronchioles→alveoli
- Alveoli
  - Elastic
  - Microscopic air sacs
  - Job-exchange oxygen and carbon dioxide from blood stream
  - Like balloons
- Diaphragm
  - Flat muscle below lungs
  - When breathing in, flattens
  - Breathing out, expands to help push the air out

[Milner-Fenwick, 2011]

Definition

COPD is a disorder characterized by:
- Chronic airflow limitation in and out of the lungs
- Progressive disease
  - Generally not reversible
- Preventable
- Treatable

[Milner-Fenwick, 2011]

COPD

- Chronic Bronchitis
  - Airways inflamed
  - Swelling of bronchi
  - Lots of mucous
- Asthma
  - Inflamed and narrowed bronchi
  - May or may not have mucous
  - Wheezing/tight feeling chest
- Emphysema
  - Damaged alveoli (oxygen can’t get in, CO2 can’t get out)
  - Lungs stay partially inflated
  - Puts pressure on diaphragm

[Milner-Fenwick, 2011]
Chronic Bronchitis
- Defined as a chronic cough and sputum production for 3 consecutive months over 2 consecutive years.
- Productive cough, recurrent infections

Asthma
- Airways inflamed and narrowed
- The muscles around the airways spasm and tighten

Emphysema
- Damage airways lose their elasticity, become baggy
- Collapse with exhalation
- Trapping air
- Destroys the Alveoli
- Less oxygen absorbed
- CO2 retained

Complications
- In addition to airflow limitation-
  - Respiratory infection
  - Depression
  - Pulmonary hypertension
  - Weight Loss/Muscle Atrophy
  - Lung Cancer
  - GERD
  - Right Sided Heart Failure

A person with stable COPD
- Productive Cough
- Progressive Dyspnea
- Wheezing
- Chest tightness
- Fatigue & Weakness
- Weight Loss
- Poor Sleep Quality
- Anxiety and Depression
- Morning headache (advanced disease)

A person with unstable COPD
By definition, an exacerbation requires 2 of the 3 following symptoms:
- Increased shortness of breath
- Increased cough
- Increased sputum
May have:
- Colored sputum if infected
- Fatigue, activity intolerance, disturbed sleep
- Fever is rarely present
COPD Management Tips
- Reduce Risk Factors
  - Like Diabetes and HF....easier said than done
  - Avoid smoke
    - Quit smoking
    - Avoid second hand smoke
- Take medications
  - Education
  - Pharmacologic

Important Tip:
- Most people who quit smoking have quit several times before

(Milner-Fenwick, 2011)

COPD Management Tips
- Avoidance of Risk Factors
  - Might want to avoid crowds during cold and flu season
  - Annual Influenza vaccine
  - Pneumococcal vaccine
  - Drink fluids
  - Stay active
  - Weight
    - Healthy diet
    - Lungs work harder with extra weight

Important Tip:
- Most people who quit smoking have quit several times before

(Milner-Fenwick, 2011)

Medications
- Bronchodilators
  - Albuterol, Serevent (long and short acting)
  - Relax smooth muscle
  - Aids in mucus clearance
- Anticholinergics (Atrovent, Sprivia)
  - Most commonly used
  - Low cost
- Anti-inflammatory
  - Corticosteroids (Flovent, Pulmicort)
  - Reduce airway inflammation
  - Indicated for repeated exacerbations
- Combination
  - More effective in treatment of stable COPD
  - Advair, Symbicort (long acting corticosteroid)

Rodriguez-Roisin, 2010

Medications
- Others
  - Oral steriods (only if unstable)
  - Theophylline (only if doesn’t respond to other)
  - Singulair (chronic asthma/COPD/helps block allergens)
- Cough Medications
  - Clear mucus (Guaifenesin)
  - Suppress
  - Antibiotics
  - Oxygen

Rodriguez-Roisin, 2010

Medications
Things to Know:
- Bronchodilators
  - some work fast, some take longer
  - HR, shakiness, headache, nausea, dizzy, nervous
- Antibiotics
  - Make sure to finish
  - If not better in 3-4 days, call MD
- Anti-inflammatories
  - Can be powerful/follow instructions carefully
  - Indigestion, weight gain/swelling, nausea, fatigue, moodiness, sore throat

Rodriguez-Roisin, 2010

Metered Dose Inhalers (MDI)
Important Tips:
- Many individuals do not get the benefit of their inhaled medications due to incorrect technique
- Difficulty activating the inhaler
  - Lack of coordination of inspiration with release of medication
  - Patient’s inability to take a slow, deep breath
  - Recommend use of spacers with MDI

NOTE:
- Technique for dry powder inhalers is different than for MDI
- Dry powder inhalers require a more forceful, deep inhalation than MDI’s for adequate dosing

Rodriguez-Roisin, 2010
Tips on Nebulizers

- Instructions for use
  - Sit Upright
  - Place mouthpiece between teeth, over tongue, with lips comfortable sealed
  - Take deep relaxed breaths until nebulizer begins to sputter

- Instructions for cleaning
  - Based on DME, frequency varies (each treatment, daily, weekly)
  - Wash in soapy water, rinse, disinfect, rinse, air dry

Oxygen Therapy

- Oxygen therapy
  - Compressed gas
  - Concentrator
  - Liquid oxygen
  - Portable concentrator

- Oxygen therapy
  - Nasal cannula
  - 24hr use / Night use
  - Medicare coverage

Important Tips:

- Keep away from open flames
- More oxygen is not always helpful
- Safe storage/Signs good/exit strategy
- No smoking
- Tubing safety issues/colored tubing or duct tape

Oxygen Therapy

- Education is essential to assure the success of oxygen therapy
  - Benefits (extend life, decrease cardiac workload, decrease work of breathing)

- Patient/Caregiver misconceptions
  - Profound deterioration vs. life enhancing therapy
  - Save until they really need it
  - Embarrassed to use in public
  - Addictive

COPD Caregiver Management Tips

- Energy conservation
  - Sit instead of stand when performing chores
  - Avoid bending
  - Organize kitchen for easy access to most commonly used items
  - Instead of drying use a terry cloth robe to dry

- Adaptive Equipment
  - Bath bench and long handled shower hose
  - Rolling Carts
  - Reachers

Management Tips to Prevent Exacerbation

- Annual influenza Vaccine
- Pneumonia Vaccine
- Hand washing
- Avoid crowds during cold & flu season
- Stay indoors if air quality is poor

Examples
Other Considerations

What about other chronic illnesses?
Alzheimer’s
Stroke
Functional impairment

Hospitalization
Why is this Important?
- Cost
- Effect on Individual & Family
  - ↑ need for institutionalization
  - ↑ co-morbidities
  - Death
- Our Industry
  - Health Care System
  - Community
  - What we DO

Hospitalization Statistics
- 38% of admissions => 65 years
- 49% of total days hospitalized => 65 years
- The >65 population represents 13% of population
- By 2030...
  - 20% will be over 65
  - 10 million people will be over 85

Primary Causes of Hospitalization for those >65
- Heart Failure
- Coronary Artery Disease
- Pneumonia
- COPD
- Stroke

Most arrive via the Emergency Department

Risk Factors
- Chronic Illness
- Multiple Co-Morbidities
- Age
- Functional Issues
  - History of falls
  - 2 or more falls—or any falls with an injury—in the past year
  - Social isolation/Lack of Support
  - Multiple hospitalizations
  - 2 or more in past 12 months
  - Fear
- Multiple Medications
  - Taking five or more medications
  - Recent decline in mental, emotional or behavioral status
  - Frailty indicators
  - weight loss, self-reported exhaustion
  - Lack of identification of goals
  - end of life decisions
  - Ignore or unaware of early signs of trouble

Impact of Inactivity/Bedrest
- Musculoskeletal
  - 1.5% loss per day
  - 5% loss per day if >65
- Weakness leads to falls
- Reconditioning
- Skin
  - Direct Pressure (from lying in bed)
  - Capillary pressure, Moisture, Shearing (friction)
  - Result: 20% of time pressure sores
Impact of Inactivity/Bedrest

- Bones
  - Loss 50 times faster than normal when on bedrest
  - 1 week in hospital...takes 5 months of normal activity to recover bone loss
  - Can lead to ↑ bone fractures
- Lungs
  - Normal aging process ↓ residual volume compliance
  - Bed rest further subtracts ~8%
- Genitourinary
  - Normal aging: 5-15% incontinent
  - When hospitalized, ↓ ability to compensate
  - Incontinence then ↑ to 40-50%

(Hermes et al., 2010)

Impact of Inactivity/Bedrest

- Nutrition/Hydration
  - Normal aging process 25-30% undernourished
  - When in hospital, further impact
  - Can result in instability, blood pressure changes
- Brain
  - ↓ or altered sensory inputs or drugs
  - ↓ oxygen perfusion to brain
  - Delirium or altered thinking, confusion
- Nosocomial Infections
  - Hospital acquired infections
  - Due to devices, handwashing or increased vulnerability

(Hermes, 2010)

Causes of Elder Neglect and Abuse

- **Inadequate Social Support**
  - A factor is almost all forms of mistreatment
  - An increasing issue with lack of support for identified needs (unwilling or unavailable caregiver)
  - Socioeconomic factors
  - Functional impairment
    - Correlated with emotional/financial mistreatment
  - Depression
  - Self-neglect
  - Caregiver exhaustion
  - Research shows limited support
  - No significant predictor related to gender or race

(Aceirno et al., 2010)

Important Components of Chronic Care Management to Consider:

- Support
  - Respite and support for family
  - Oversight
  - Self-management support
- Communication
  - Education
  - Understanding
  - Collaboration
  - Among all providers/physicians and caregivers
  - Patient involved and agrees
  - Funding!!

Questions?

mary-newberry@riversidehealthcare.net

References


References


