Teaching and Lifestyle Changes

Education

1. Heart failure is a life changing diagnosis
2. Overwhelmed patients are:
    a. More likely to disengage with medical providers
    b. **More likely to become non-compliant or less compliant with treatments**
3. Nurses:
    a. Brainstorm strategies to engage patients
    b. Personalize care and education:
        i. **Find out what's meaningful for them to learn**
        ii. **Engage with family members**
    c. Find patient barriers and tackle them
4. Researched strategies:
    a. The 60-minute Strategy:
        i. **Heart failure patients need at least 60 minutes of patient education prior to *every* hospital discharge**
        ii. 60 minutes has significant, positive impact on clinical outcomes:
            - Patients are more likely to be compliant with treatment plan
            - Reduces re-hospitalization
            - Slows down heart failure cycle
            - Patient and hospital costs significantly decrease
        iii. Must be presented by an RN educator (this is you)
        iv. 60 minutes can be broken up into shorter segments
    b. **The Teach-Back Method (TBM):**
        i. **Most effective and well-researched method of patient teaching**
        ii. **Teach: teach patient information**
            - Use clear, PLAIN language
            - Do not use any medical jargon (ever)
        iii. **Teach-Back: patient repeats and teaches back the information they learned in their own words**
            - This verifies patient understanding
        iv. The teach-back method does two things: it tells you if you did a good job communicating with the patient, and it helps the patient stay engaged when you are teaching!
5. Goals in Heart Failure Teaching:
    a. How to aggressively reduce risk factors for heart failure
    b. How to slow down the heart failure cycle

Aggressive Risk Reduction

1. Teach patient what their personal risk factors are
2. Risk factors include (whatever causes heart damage):
    a. Heart valve disease
    b. **Hypertension**
        i. **Blood pressure goal < 140/90**
        ii. **Blood pressure goal < 130/80 if patient has chronic kidney disease or diabetes**
    c. Sleep apnea
        i. Sleep apnea deprives the heart of oxygen, making heart failure worse
        ii. 80% of heart failure patients have sleep disordered breathing like sleep apnea
        iii. Heart failure patients need to be screened for sleep apnea
        iv. **CPAP compliance improves left ventricular function**
    d. Coronary Artery Disease Prevention
        i. Myocardial infarction can cause damage to the myocardium enough to cause heart failure
        ii. **Patients must prevent by controlling modifiable risk factors:**
            - **Obesity**
            - **Physical inactivity**
            - **High cholesterol**
            - **Diabetes**
            - **Smoking**
            - **Hypertension**
    e. Smoking
        i. Smoking cessation is an must
        ii. No “safe amount” of smoking
        iii. Includes all other forms of nicotine
    f. Alcohol
        i. Women: 1 alcoholic drink/day
        ii. Men: 2 alcoholic drinks/day
        iii. No alcohol for any patient with ventricular remodeling or cardiomyopathy; they cannot have any alcohol
            - Alcohol increases cardiomyopathy
    g. Illicit Drug Use

Slowing Down the Heart Failure Cycle

1. Patients need education about how to slow down the heart failure cycle at every medical care encounter
    a. Every doctor's appointment
    b. Every hospitalization
    c. Every home health visit
    d. Every tele-visit
2. **Sodium Restriction**
    a. Sodium holds onto fluid and prevents diuresis
    b. Some cardiologists recommend restricting sodium to 2-3 grams of sodium a day, while other cardiologists recommend 2 grams or less of sodium per day
    c. Patients need the skills to read a food label and tally up their sodium restriction throughout the day
        i. Have your patient practice with you
    d. Look for hidden sources of sodium (example condiments and salad dressings)
    e. Involve everyone who provides meal preparation for the patient
3. **Daily Weights**
    a. Patients need to weigh themselves every morning
        i. **Detects fluid retention early!**
        ii. **Sudden weight gain precedes edema or shortness of breath**
    b. An accurate daily weight is:
        i. Weigh after waking up
        ii. Naked (or wear the same clothes every time)
        iii. First thing in the morning after urinating and prior to eating
    c. Track the weight:
        i. Keep a log or calendar in the bathroom and record weight every day
    d. **Report sudden weight gain to doctor:**
        i. **Sudden weight gain definition: Gain 2 pounds overnight or 5 pounds in 1 week**
4. Possible Fluid Restriction
    a. *Per physician orders:* 1.5-2 liters a day
    b. Patients will need to be taught how to identify what is considered to be a fluid and how to tally up their fluids throughout the day
5. **Medication Compliance**
    a. Non-compliance is much more common than we realize
    b. **Ask patient at every encounter (visit) about medication compliance**

c. **Causes of non-compliance**
   i. **Not understanding medication purpose:**
      - Educating patient on benefits of each medication increases compliance
   ii. **Not being about to afford medications:**
      - Check for financial concerns
      - Financial barriers to purchasing medications can cause non-compliance
      - Coordinate with physician and a social worker to tweak the medication list to fit their budget
   iii. **Side effects:**
      - Patients who *don't understand* the side effects increases non-compliance, not patients who experience side effects
      - Patients who understand the side effects are more likely to report them to their doctor instead of self-discontinuing medications

6. **AVOID NSAIDS**
   a. NSAIDS can worsen renal function
      i. Bad combination for patients taking ACE-Inhibitors/ARBS/Diuretics
      ii. NSAIDS also cause sodium retention, which increases water retention
         - This REVERSES some of the work that heart failure medications do
7. Infection Prevention
   a. Respiratory illnesses reduce oxygen to the heart and can worsen heart failure
      i. **Flu vaccine**
      ii. **Pneumonia vaccine**
8. Get and stay active!
   a. Recovering from decompensated heart failure:
      i. Space out activities of daily living (ADLs) with periods of rest until fully recovered
   b. Compensated heart failure:
      i. Increase activity level!
   c. **Cardiac rehab reduces cardiovascular mortality significantly in heart failure patients**
      i. Exercise improves:
         - Metabolism
         - Heart rate
         - Resting norepinephrine levels
         - Exercise cardiac output
         - Endothelial vasodilation (from nitric oxide release)
         - Coronary blood flow

ii. Research data shows:
- Patients who participate in cardiac rehabilitation programs experience a *remarkable improvement in their functional status and their quality of life*

iii. **Patients who have STABLE and CHRONIC heart failure, meaning that they are not ACTIVELY in fluid overload, are encouraged to participate**

9. If appetite is poor, eat small and frequent meals to decrease gastric distention
10. **Signs and Symptoms to report to their doctor:**
    a. **Suddenly gain weight**
        i. **2 pounds overnight or 5 pounds in 1 week**
        ii. Sudden weight increase is due to fluid retention, not fat
    b. Symptoms of fluid overload:
        i. Shortness of breath
        ii. Non-productive cough
        iii. Edema
            - **When edema is present, the patient already has at least 10 pounds of fluid overload**
            - **A 10lb weight gain is 5L of fluid and precedes visible edema**
        iv. Loss of appetite, nausea
        v. Overly tired
        vi. Inability to perform regular exercises and activities
11. Written follow up appointment instructions
    a. Hospital discharge: follow up within 7 days
    b. Must include: location, date, and time provided in writing
    c. Appointment in writing increases patient compliance
    d. Teach rationale for follow up appointments:
        i. Follow up will reduce hospital readmissions
        ii. Knowing the rationale increases patient compliance

Barriers

1. Anxiety
2. Sleep deprivation
3. Education not meeting the needs of the patient
4. Depression
    a. **Depression is highly prevalent in heart failure patients**
        i. Need regular depression screenings
    b. Undertreated depression can really affect:
        i. Patient’s compliance to treatments
        ii. Patient’s ability to take care of themselves
        iii. Patient’s ability to make important decisions about their treatment
        iv. Patient’s energy and motivation to follow through with lifestyle changes
5. Reducing barriers:
    a. Include family in the heart failure education
        i. Include whoever does the grocery shopping, meal preparation, cooking
        ii. Include whoever is responsible for medication management

Teaching in Writing

1. Discharge instructions should be provided in writing
    a. Written instructions are in addition to patient teaching
2. Gaps in the discharge teaching process:
    a. Data shows that patient’s inability to self-care will increase the heart failure cycle
3. Failure to understand (and follow) instructions causes decompensation and hospital readmissions