

Sinclair Community College, Division of Allied Health Technologies

Health Promotion for Community Health Workers – Cardiovascular disease, stroke, and cancer

Class #9 Heart Failure

(date)

Course Objectives:

Know risk factors and causes of heart disease, stroke, and cancer

Know the warning signs of heart attack, stroke, and cancer

Know the most common treatments for diseases of the heart and blood vessels, heart attack and stroke, and contributing conditions like high blood pressure, high blood cholesterol, and diabetes.

Show people how to take greater control over their health

Class/Learning Objectives: By the end of this session, students will be able to:

1. Explain the cause of heart failure
2. Describe the signs for heart failure
3. Describe tests used for diagnosing heart failure
4. Explain how heart failure is treated
5. Describe the signs of stress
6. Describe how smoking affects the heart

Participants:

Instructor(s)

Students

Materials/Resources Needed:

Flipchart, markers, tape, blackboard, chalk and eraser

Nutrition labels (cans and food packages with nutrition labels)

Example of salt substitutes and spices/herbs

Handouts:

- 9-1 Signs of Heart Failure
- 9-2 Tests for Diagnosing Heart Failure
- 9-3 Medicine for Heart Failure
- 9-4 Medicine and Heart Failure
- 9-5 Walking
- 9-6 Stress and Your Heart
- 9-7 Smoking and Heart Failure
- 9-8 What can CHWs do to Help People Who are at Risk for Heart Failure?
- 9-9 Caring for Your Own Health and Your Heart

Class Outline

- I. Overview
- II. Lesson
 - A. What is Heart Failure?
 - B. What Causes Heart Failure?
 - C. What are the Warning Signs?
 - D. How is Heart Failure Diagnosed?
 - E. How is Heart Failure Treated?
 - F. Taking Your Medicine
 - G. Diet and Fluids
 - H. Remaining Active with Heart Failure
 - I. Stress
 - J. Smoking
- III. Summary

Plan for the Class:

I. Overview

There are 2 to 3 million Americans living with heart failure today.

In fact, it's one of the most common reasons people 65 and older go into the hospital.

But heart failure can be prevented and, when necessary, it can be treated.

For those who do not have heart failure, Community Health Workers can teach them it takes years for heart failure to develop and making changes in their lifestyle can prevent it.

Community Health Workers can help people learn to live more comfortable by teaching the importance of getting good medical care, and following their doctors' advice.

Help people in the community know the signs of heart failure.

III. Lesson

A. What is Heart Failure?

Remember our discussion on how the heart works?

The heart pumps blood carrying oxygen and nutrients to all parts of the body.

When heart failure is present, the heart does not pump blood as well as it should.

Blood moves slower through the body. Less oxygen is delivered to the body and the brain.

Fluid may build up in the lungs and other organs or tissues in the body.

B. What Causes Heart Failure?

Heart Failure can have many causes, but the most common causes are:

- Narrowing or blockage of the vessels that supply blood to the heart muscle (coronary artery disease)
- Heart attack causes scar tissue that weakens the heart and keeps it from working as well
- High blood pressure thickening the heart muscle so that it does not pump as well and must work harder
- Heart valves that are damaged causing blood to move through the heart in the wrong direction, resulting in a larger heart that does not pump as well
- Disease of the heart muscle itself (cardiomyopathy)
- Defects of the heart from birth (congenital heart defects)
- Infection of the heart valves (endocarditis)
- Infection of the heart muscle (myocarditis)

C. What are the Signs?

The most common sign of heart failure is shortness of breath, which means a feeling of not getting enough air.

Heart failure causes shortness of breath because there is too much fluid in the lungs and not enough oxygen in the blood.

Typical signs of heart failure are:

- Shortness of breath with activity or when lying flat.
- Swollen feet, ankles, legs, or stomach.
- Weakness or tiring very easily.
- Difficulty in thinking or keeping your train of thought.
- Frequent, dry cough, especially when lying down.
- Dizziness or fainting.
- Pink or bloody mucus from the lungs.
- The need to urinate many times at night.
- Coughing or wheezing when active.

Handout 9-1: Signs of Heart Failure

Ask the CHWs about their experience with people who have heart failure. What did they notice? Do they remember how these people felt?

Review Handout 9-1. Emphasizing how important it is to know the signs of heart failure. If someone you know has one or more signs, they must see a doctor as soon as possible

D. How is Heart Failure Diagnosed?

The Doctor will ask about medical history, do a physical examination, and may want to do some of the following tests:

- Chest x-rays: to see the condition of the heart and lungs.
- Electrocardiogram (ECG): to check the condition of the heart in a simple way.
- Blood test: to evaluate various health indicators.
- Echocardiography: to check the function of the heart in more detail.
- MUGA scan (Multigated Acquisition): to measure the pumping ability of the heart.
- Coronary catheterization (Angiogram): to examine the coronary arteries.

Handout 9-2: Tests for Diagnosing Heart Failure

Review Handout 9-2 with the CHWs. Community Health Workers may use this handout to ease the fears of someone who has been diagnosed with heart failure and must have one or more of these tests.

E. How is Heart Failure Treated?

Heart failure cannot be completely cured, but it can be treated and treatment can keep people feeling good and leading productive lives, often for many years.

To treat heart failure, a doctor usually prescribes medicine and will recommend rest, but lifestyle changes are also needed such as eating a proper diet – one that is low in sodium and salt, and regular, mild exercise.

There are medicines that can treat mild or moderate heart failure, but in extreme cases surgery or a heart transplant might be considered, if available.

F. Taking Your Medicine?

Heart failure is usually treated with one or more medicines prescribed by a doctor.

Sometimes one medicine may be used to start with and another added later. Or, two or more medicines may be given to start.

Handout 9-3: Medicine for Heart Failure

CHWs can use this handout to talk with someone who is taking medicine for heart failure about the importance of taking the medicine as the doctor advises. A chart of medicines commonly prescribed for heart failure is included..

It's easy to become confused about when to take medicine if there are a number of prescriptions to be taken at different times during the day. But it is very important to take your medicines as prescribed.

Activity: Take Your Medicine!

Can you think of what people might do as a reminder to take their medicine? (Write answers on newsprint.)

Answers could include:

- *Take pills at same time everyday, for example, after breakfast, before bed, when you get home from work.*
- *Write down each time you take your pill.*
- *Put your medicine in a weekly pill box. They can be found at most drugstores and are not expensive. Put the pill box where you'll be sure to see it everyday.*
- *Put "sticky" notes in places you'll be sure to see, such as the bathroom mirror, refrigerator, kitchen cabinet, TV, or car steering wheel.*
- *Ask a friend to call and remind you.*
- *Ask your children or grandchildren to call and remind you. (Children love to help and this is a good way to stay in touch.)*

Remember to get your prescription refilled on time!

Handout 9-4: Medicine and Heart Failure

Review Handout 9-4 with the CHWs. Medication is an important part of treating heart failure. Community Health Workers can help people understand the importance of always taking medicine as recommended by the doctor.

G. Diet and Fluids

Let's look at the things people with heart failure can do for themselves:

Diet is an important part of treating any heart condition.

For people with heart failure it is especially important to control the amount of salt and sodium in the diet.

The words salt and sodium are sometimes used as though they mean the same thing, but they are not the same. Sodium is found naturally in most foods. Salt is a substance used to help preserve foods or adjust their flavor.

Both salt and sodium can cause body to retain fluids. Excess water or fluid in your body adds weight and makes your heart work harder.

Salt is very high in fast foods, deli meats, and many processed or packaged foods.

It is important to follow your doctor's advice on fluid intake, or how much to drink each day.

If you have heart failure, you should weight at the same time very morning after going to the toilet and before eating breakfast.

If you've gained 3 pounds or more in 3 days or less, call your doctor.

This is probably caused by retaining fluids more than usual and your treatment plan may need to be changed. This can be as simple as increasing or changing your medicines, so **Call the Doctor!**

H. Remain Active with Heart Failure?

Learn to balance rest with activity.

Daily activity can help the heart get stronger.

Activity improves symptoms, reduces stress and boosts energy levels.

Regular activity may lead to other health advantages, including weight loss, lower blood pressure and cholesterol levels – all of which are especially important if heart failure is present.

For people who aren't used to being active or are having difficulty, a cardiac rehabilitation program at a local hospital or clinic can help. A cardiac rehab program lets people start exercising slowly with nurses and therapists there to help. Many people find it easier to stick with a program and will then remain active when the cardiac rehab program ends.

Handout 9-5: Walking

Walking is an excellent activity. It's easy, safe and doesn't cost anything. Walking with a friend can be fun and good for both of you!

I. Stress

Stress can cause changes in your body and your emotions. Stress is your response to changes in your life.

Stress can raise blood pressure and make you heart beat faster. It can also cause your heart to beat irregularly.

Some stress is good for you. Stress can help you meet the demands of daily life, but stress that lasts a long time can cause health problems

such as high blood pressure, nervousness, depression, or stomach ulcers.

Some signs of stress are feeling tense or having muscle tightness, an upset stomach depression and being easily distracted. If these feeling last longer than a few weeks, you should talk to your doctor about it.

These signs of depression should be reported to your doctor:

- Not tending to your appearance, cleanliness, diet, or exercise.
- Loss of interest in people or activities.
- Constantly thinking or worrying about your condition.
- Trouble getting to sleep or sleeping too much or not enough.
- Using medicine or alcohol to help you sleep.
- Having thoughts of harming yourself.

Handout 9-6: Stress and Your Heart

CHWs can use the handouts to discuss the problem of stress with their peers.

J. Smoking

Smoking, or being around a lot of secondhand smoke (other people smoking), can affect your heart and blood vessels.

The nicotine in cigarette smoke causes your heart to beat faster, raises your blood pressure, and increases the amount of blood flowing in your heart.

At the same time, nicotine causes blood vessels in your whole body to become smaller

When your heart muscle is weak from heart failure, cigarette smoke stimulates your heart to work too hard and it can't meet the demands.

A weak heart pumps less blood than normal making less oxygen available to the brain and other organs. Smoking lowers the oxygen level even more. This may cause dizziness, lightheadedness, or tiredness.

Handout 9-7: Smoking and Heart Failure

Later we will talk about smoking and how it affects the heart and how to quit. Handout 9-7 focuses on coping without cigarettes during a hospital stay.

IV. Summary

What are some of the ways to support people who have heart failure?

Handout 9-8: What can CHWs do to Help People Who are at Risk for Heart Failure

Review Handout 9-8 with the CHWs. Ask for suggestions and give cues to help them remember the importance of teaching and reminding people to keep their blood pressure and cholesterol under control, regularly checking their blood pressure and cholesterol, keeping medical appointment, and knowing the warning signs. What can CHWs do to help people who are at risk for heart failure or who already have heart failure?

Let's review what we've learned today.

What is heart failure?

What causes heart failure?

What are the signs of heart failure?

How is heart failure diagnosed?

How is heart failure treated?

Handout 9-9: Caring for Your Own Health and Your Heart

End this chapter by reviewing Handout 9-9. It's important that people know the things they can do for their own health. They'll live longer and feel better too.

Resources:

Heart Failure Society of America. www.abouthf.org

American Heart Association. www.americanheart.org