Sinclair Community College, Division of Allied Health Technologies

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

Class #11 Cancer Overview and Breast and cervical cancer
(date)

Course Objectives:
Identify health promotion and disease prevention behavioral strategies as a part of primary health care
Know risk factors and causes of heart disease, stroke, and cancer
Know the warning signs of heart attack, stroke, and cancer
Work with communities and community members to prevent heart disease, stroke, and reduce risk of cancer by encouraging healthy eating, physical activity, tobacco control, and stress reduction at the individual, family, and community level.
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. Define cancer
2. List risk factors for breast and cervical cancer
3. Identify the signs and symptoms of breast cancer
4. Identify the three methods of screening for breast cancer
5. Identify the method of screening for cervical cancer
6. List barriers to screening for breast and cervical cancer and identify ways that CHWs can help to eliminate barriers

Participants:
Instructor(s)
Students

Materials/Resources Needed:
Computer, screen, LCD projector for PowerPoint presentation

Handouts:
- Handout 11-1 Cancer deaths in men and women
- Handout 11-2 2006 new cancers in men & women
- Handout 11-3 Survival by race
- Handout 11-4 Change in survival rates
- Handout 11-5 Risk Factors for Breast Cancer
- Handout 11-6 advantages of mammography
- Handout 11-7 Barriers to Breast and Cervical Cancer Screening
- Handout 11-8 Breast Screening Recommendations
- Handout 11-9 Risk factors for cervical cancer
Class Outline
I. Overview
II. Lesson
  A. What is cancer?
  B. What is the prevalence of cancer in the United States?
  C. Breast Cancer
  D. Cervical Cancer
III. Summary

Plan for the Class:

I. Overview
Cancer is the second leading cause of death in the United States, after heart disease. Cancer can occur in any tissue of the body, but we are going to be primarily talking in this course about the most common cancers that affect men and women, and the ones that can be most easily treated if detected early. We will discuss barriers to screening for cancers, and talk about ways that community health workers can educate and encourage community members to take an active role in preventing and/or detecting cancer early.

II. Lesson
A. What is cancer?
Cancer happens when cells in the body grow and divide uncontrollably. Cancer can affect the tissues in any part of the body. A malignant tumor (i.e., cancer) can invade the tissues around it and can also spread to other, distant parts of the body through the blood stream in a process known as metastasis. Benign tumors, on the other hand, do not invade or metastasize.

B. What is the prevalence of cancer in the United States?
*Note: Instructor may use all or part of ACS Cancer Statistics presentation for this part of the lecture.*

Cancer is the second leading cause of death in the United States, behind heart disease. Between 1950 and 2003, death rates from diseases such as cardiovascular, cerebrovascular, and pneumonia and flu decreased markedly, while the death rate from cancer fell only slightly. (slide 3 of presentation)

Handout 11-1: Cancer deaths in men and women
In both men and women, the most common fatal cancer is lung and bronchial cancer. Number 2 and 3 fatal cancers in men are colon and
rectum and prostate. In women, breast cancer is the second most common fatal cancer, and cancer of the colon and rectum is third.

There are racial disparities in death rates from cancer. African Americans have the highest rate of cancer deaths. Cancer death rates are higher in men than women in all groups. (slide 9 of presentation)

**Handout 11-2: 2006 estimates of new cancer cases in men and women**
In 2006, the American Cancer Society estimated that 31% of all new cancer cases in women will be breast cancer, while 33% of all new cancer cases in men will be prostate cancer. (slide 13 of presentation)

**Handout 11-3: Five year survival rates by race and Handout 11-4: Changes in five year survival rates**
African Americans have poorer survival rates than whites for nearly all cancers. This is due to a number of factors. Cancers are less likely to be detected at an early stage in African Americans. Other factors such as unequal access to medical care and a higher prevalence of coexisting medical conditions and other risk factors may also contribute to the lower survival rates.

Five year survival rates for nearly all cancers have improved since the mid 1970s, due to an increased ability to detect cancer earlier and advances in treatment. Some people may resist cancer screening because they fear of learning of a “death sentence.” Therefore, in dealing with clients, it is important for community health workers to emphasize that for nearly all cancers, early detection of the cancer before it has had a chance to grow and metastasize greatly improves survival.

Now we’ll talk more specifically about two cancers that affect mainly women – breast and cervical cancer.

**C. Breast cancer**
In 2006, approximately 210,648 new cases of breast cancer will be detected. (From handout 2: 679,510 new cancer cases in women; 31% of these will be breast cancer.

**1. Risk factors**
**Handout 11-5: Risk factors for breast cancer**
*Go over hand out with students.*

In addition to these risk factors, other factors to consider are:
- Race – White women are more likely to get breast cancer than women of color. However, women of color are less likely to get screened for cancer regularly, and African American women are more likely to die of breast cancer than white
women because the disease tends to be diagnosed at a later point in the disease process.

- Income level – Poor women, whatever their race, are more likely to die of breast cancer than women with higher incomes because they have less access to regular health care, including screening for breast cancer.

2. Symptoms of breast cancer
In the early stages of breast cancer, symptoms may not appear. As the cancer grows, it can cause changes that can be felt or seen with an x-ray called a mammogram. Many times the cancer does not cause pain. Here are some things to look for that may indicate breast cancer:

- A lump or thickening of the skin in the breast or armpit area
- Nipple discharge
- Inversion of the nipple
- Change in the shape or size of the breast
- Change in the appearance of the skin or nipple, such as roughness, scaliness, or dimpling

3. Ways to detect breast cancer
There are three ways that breast cancer is detected: mammography, clinical breast examination, and breast self-examination. The chances of finding breast cancer early are increased if all three of these methods are used.

**Activity:** Ask for a show of hands for how many students perform breast self examination. How many have had a clinical breast exam in the past year? How many have ever had a mammogram?

**Mammography:** Is the process of taking an x-ray of breast tissue. Usually two x-rays of each breast are taken, from above and from the side. During mammography, the breast tissue is compressed, which may be slightly uncomfortable but is rarely painful. Mammography can detect cancer in its earliest stages, up to 2 years before a lump can be felt.

**Clinical breast examination (CBE):** Is done by a health care professional as part of a general physical exam or as a separate breast exam. The breast tissue and the underarm area is examined with the pads of the fingers, looking for lumps or thickening. CBE is important because up to 10% of breast tumors are not seen on mammogram.

**Breast self-examination (BSE):** Women should perform a breast self-examination monthly, starting at age 20. A good time to do this is right after the menstrual period, as breast tissue is less sensitive then and there are less likely to be lumps
caused by hormonal changes. BSE should be done in addition to, not instead of, mammography and CBE.

BSE should include standing, looking, and feeling for lumps or thickening or any of the other symptoms of breast cancer.

**Handout 11-6: Advantages of mammography.**

4. **Barriers to screening**
   *Activity: Choose someone to be a recorder. Ask the class to name as many barriers to breast cancer screening as they can, while the recorder writes the barriers on a flip chart. Once the barriers are all recorded, ask the class to categorize the barriers (i.e., what are related to income, lack of knowledge, personal beliefs, structure of the health care system).**

**Handout 11–7: Barriers to breast cancer and cervical cancer screening.** Distribute the handout and go over it with the class to see if there are any additional barriers that the class did not name.

5. **Screening recommendations**
   *Handout 11-8: Breast cancer screening recommendations* Distribute handout.

The National Breast and Cervical Cancer Early Detection Program recommends these guidelines for screening for breast cancer:

**Women age 50 and older:**
- Should perform breast self-examination every month
- Should have a clinical breast examination every year
- Should have a mammogram every year

**Women age 40 to 49:**
- Should perform breast self-examination every month
- Should have a clinical breast examination every year
- Should have a mammogram as advised by their health care provider

**Women younger than 40:**
- Should perform breast self-examination every month, starting at age 20
- Should have a clinical breast examination every three years or as advised by their health care provider
- Routine mammography is not recommended

**D. Cervical cancer**
Although cervical cancer does not appear on the list of the estimated top 10 most frequently occurring new cancers (Handout ca – 2), it is important to educate women about it and to encourage screening, because this type of cancer is so readily detected and has an over 95% cure rate when detected and treated early.

Cervical cancer affects the cervix, or opening of the uterus. Cervical cancer develops predictably, over a long period of time. Long before cancer cells appear, symptoms of abnormal cell growth (dysplasia) can be detected. This dysplasia can be treated, thus preventing cervical cancer from developing.

1. Risk factors

   **Handout 11-9: Risk factors for cervical cancer**

   Go over hand out with students.

   Early sexual activity and sexual activity with more than one partner increases a woman’s risk for cervical dysplasia and cancer, probably because it increases the chance that a woman will become infected with human papilloma virus (HPV), which has been shown to cause cervical cancer. HPV is the virus that causes genital warts, but in many cases, no warts are visible and there are no other symptoms of the infection.

   Cigarette smoking increases the risk of developing many cancers, including cervical cancer. As with breast cancer, women of color, those with lower education, and any woman who lacks access to preventive health care services are at increased risk for cervical cancer.

   The Pap test is the screening method used to detect abnormal cell growth in the cervix. Women past puberty should have a Pap test yearly, or as advised by a health care professional. Older women especially should be screened every year, because:

   - Nearly 1 in 4 new cases of cervical cancer occurs in women older than age 65.
   - Nearly 5 in 10 women who die from cervical cancer are over age 65.
   - A large proportion of women, particularly older African-American women and middle-aged poor women, have not had regular Pap tests.

   **Handout 11 – 10: Pap Test**

   A Pap test is done during a gynecologic exam. A wooden spatula and/or a small brush is used to scrape cells from the surface of the cervix. These cells are sent to a lab and examined for inflammation, abnormal cells, and cancerous cells. The Pap test has reduced cervical cancer deaths by 70 percent over the last 40 years.
2. Barriers to screening

See Handout 11 – 7.

III. Summary
Cancer is the second leading cause of death in the United States. For most cancers, the earlier the cancer is detected, the more easily and successfully it can be treated.

Effective screening methods exist for both breast and cervical cancer. However, there are barriers to women getting these screenings that community health workers may need to assist women to overcome.

Handout 11 – 11: Resources for Cancer Information

Resources: