

# MUSC Presidential Scholars Program

## Assessment of Cancer Knowledge: Promoting Wellness and Prevention

### An Educational Empowerment Model

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#### BACKGROUND AND OBJECTIVES

According to the American Cancer society cancer causes about 13% of all deaths. Research suggests that there are four specific cancer types which disproportionately affect the state of South Carolina: lung, breast, cervical and prostate. There are a variety of common risk factors for all of these cancers. These may include age, family history, obesity, tobacco use, and alcohol use. Though scientists and physicians are continuing to make medical strides in the treatment and diagnosis of cancer, it becomes increasingly important to promote overall cancer awareness and prevention models. A local low-country community was assessed regarding awareness and prevention of the four aforementioned cancer types in the form of a 15 question survey. The target population displayed reasonable variation in age, gender and educational background.

#### GOALS

This project aims to: **AIPPE**

**ASSESS** knowledge of lung, breast, cervical, and prostate cancer awareness and prevention.

**INFORM** the population.

**PROVIDE** community resources.

**PROMOTE** cancer awareness.

**ENCOURAGE** individuals to practice preventive measures which may contribute to decreases in cancer incidence.

#### SELECTED COMMUNITY RESOURCES

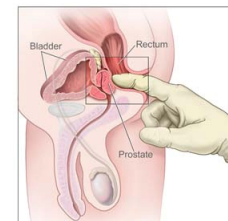
The following resources may be contacted for cancer related questions and concerns:

Harvest Free Medical Clinic  
1670 Dry Dock Ave  
North Charleston, SC 29405  
(843) 225-7572

American Cancer Society: Reach to Recovery Program  
5900 Core Road, Suite 504  
North Charleston, SC 29406  
(843) 744-1922

Franklin C. Fetter Family Health Center  
51 Nassau Street  
Charleston, SC 29403  
(843) 722-4112

Hollings Cancer Center - MUSC  
86 Jonathan Lucas Street  
Charleston, SC 29425  
(843) 792-0700

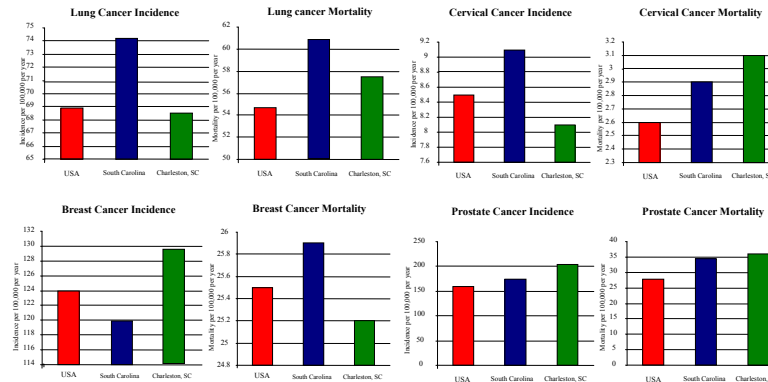


#### SURVEY INSTRUMENT

The following True/False Survey Was Used to Assess Knowledge

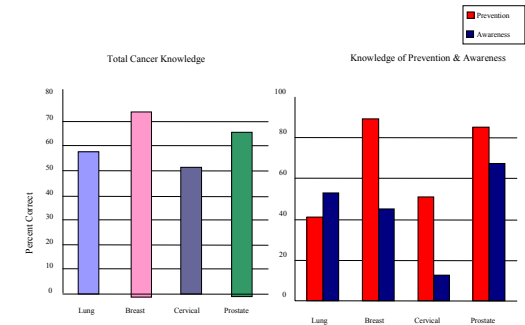
- The mammogram is still the best way to detect breast cancer.
- Women should discuss personal risk factors with their doctor to determine when and how often they should receive mammograms.
- White women are more likely to be diagnosed with breast cancer but African-American women are more likely to die from breast cancer.
- The HPV vaccine protects women against all forms of HPV and completely prevents cervical cancer.
- The best way to screen for cervical cancer is to have an annual Pap smear.
- Tobacco smoking is the primary cause of lung cancer.
- Lung cancer incidence and mortality is higher in men than in women.
- Lung cancer is the primary cause of cancer related deaths.
- There are no treatments for lung cancer once it is developed.
- Air pollution has a weak association in the development of lung cancer.
- Prostate cancer is dramatically higher in African-American males than in White males.
- The PSA (prostate specific antigen) is a blood test used to screen for prostate cancer.
- Prostate cancer has a strong genetic component, meaning that men with a close blood relative with prostate cancer have a higher risk of developing prostate cancer themselves.
- Obese men are more likely to develop prostate cancer than men of a healthy weight.
- Individuals with high dietary intake of fruits and vegetables have a lower risk of developing cancer.

#### RELEVANT CANCER STATISTICS: NATIONAL AND LOCAL



\* data collected from [www.cancer.gov/factsheets/cancer-factsheets](http://www.cancer.gov/factsheets/cancer-factsheets)  
mortality based on 2000-2004 data, incidence based on 2001-2004 data

#### RESULTS: COMMUNITY SURVEY



#### CONCLUSIONS AND RECOMMENDED ACTIONS

- Lung Cancer**
  - Lung cancer mortality in both Charleston and South Carolina are higher than the national average.
  - Our community scored the second lowest on questions regarding lung cancer; of this, they knew the least about preventative measures.
- Breast Cancer**
  - The incidence of breast cancer in Charleston is higher than the national average, and more importantly, it is strikingly higher than the incidence for South Carolina.
  - However, breast cancer mortality for Charleston is drastically lower than both South Carolina and the nation.
  - This data correlates with the fact that our community scored the highest in breast cancer knowledge, reflecting Charleston's lower mortality rate.
- Cervical Cancer**
  - The incidence of cervical cancer in Charleston is lower than the national average; but mortality is higher.
  - This is reflected by our community's lack of awareness of cervical cancer, as it was the lowest of any of our four cancer groups.
- Prostate Cancer**
  - Charleston's incidence and mortality rates for prostate cancer were approximately 30% higher than that for the nation.
  - Encouragingly, our community's overall knowledge of prevention and awareness was amongst the highest of all cancers surveyed.

#### RECOMMENDED ACTIONS

- Although the knowledge of certain cancers was higher than others, everyone stands to benefit from further education in early detection and prevention of all cancer groups.
  - Lung: smoking cessation
  - Breast: mammography every year after age 40 and monthly self examinations
  - Cervical: safe sex practices & Gardasil vaccine
  - Prostate: regular prostate examinations and PSA measurements for those with a family history or after age 40
- Additional studies are needed to further evaluate the discrepancies in knowledge for different demographics groups including age, race, gender & socioeconomic.
- Having elucidated the areas of decreased knowledge, we can now better target our educational model to bring about positive results.