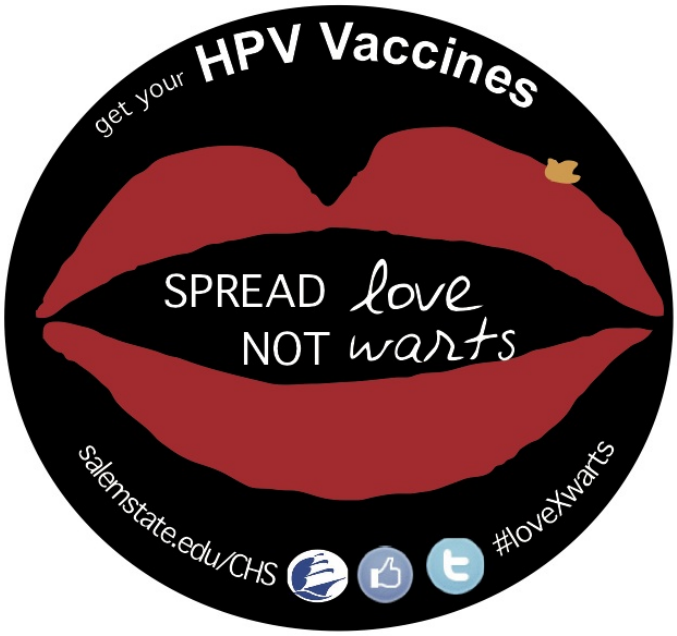

Actual winning design created by an SSU student for a the Spread Love not Warts Campaign contest held Spring 2014.

Spread Love not Warts: An HPV vaccination program at Salem State University Student Health Services.

Introduction:

Salem State University, established in 1854 as Salem Normal School, is a comprehensive, publicly supported institution of higher learning located approximately 15 miles north of Boston, and is one of the largest state universities in the Commonwealth of Massachusetts.

The office of counseling and health services at Salem State is responsible for carrying out the mission of the overall institution while creating and supporting a campus environment to remove health barriers and promote student academic and personal success. With a focus on health promotion, the health services office is committed to addressing common health issues facing the student population and providing a foundation for lifelong wellness.

Reproductive health issues are one of the most common health issues facing the college age population and can have long term health implications. Human Papillomavirus (HPV) has been identified as the most common sexually transmitted infections globally. Despite the ability of a safe and highly effective vaccine against the most significant strains of HPV, immunization rates remain poor and there is a national effort to increase vaccination rates in the population.

The office of student health services will address suboptimal HPV vaccine rates by developing a campus wide promotion project to increase student HPV vaccination rates. This program is based on evidence based best practices shown to be effective in increasing vaccine rates in this population and setting.

Statement of Purpose:

HPV is the most prevalent sexually transmitted infection (STI) and a cause of significant morbidity and mortality for both men and women (CDC, 2013). There are an estimated 14 million new cases of HPV acquired annually in the United States (U.S.) alone which translates into an estimated $5-8 billion spent on the treatment and prevention of HPV and related disease (CDC, 2013; Chesson, et al., 2012; Insinga, Dasbach, & Elbasha, 2005; Hu & Goldie, 2008). HPV is spread through sexual activity that involves skin-skin contact. Research suggests that nearly every sexually active person will contract at least one strain of HPV infection in their lifetime (CDC, 2013). HPV infection is responsible for genital warts, cancer in women, a primary cause of anal cancers in both men and women, and the leading cause of head, neck and

throat cancers (CDC, 2012; Tota et al, 2011; Chaturvedi, 2010). There are more than 33,000 cases of HPV related cancers in the U.S. each year (CDC, 2012).

A three dose quadrivalent vaccine has been shown to be highly effective in preventing the most serious HPV infections. (Adams, Jasani, & Fiander, 2007; Markowitz, et al., 2013)). Safety of the vaccine has been well established (CDC, 2013; Intlekofer, et al., 2012). Despite data to support vaccine efficacy and safety, patient uptake of the vaccine in the U.S. has been poor. In a recent CDC report, only 20.7 % of females and 0.6% of males aged 19-26 reported having received at least one dose of the vaccine (CDC, 2010). Health people 2020 have established a national goal of 80% vaccination rates for Americans (United States Health and Human Services, 2013). In a surveillance of students at Salem State University during the spring 2014 semester, current HPV vaccine rates on our campus are consistent with current, suboptimal, national standards. On average, >50% of students who visited the student health center had never received even 1 dose of HPV vaccination, and only about 35% reported having completed the three dose series. Broken down by gender, fewer than 7% of male students seen in the student health center had completed the HPV vaccine series and 80% reported having never received any HPV vaccine.

Ideally, the HPV vaccine is given prior to sexual debut and is recommended for males and females ages 11-12 (CDC, 2013). The Advisory Committee on Immunization Practices (ACIP) and CDC support the use of the quadrivalent vaccine for “catch up doses” for non, or under, vaccinated females up to age 26. Similar recommendations suggest the vaccine should be provided to males up to age 21, and can be administered up to age 26 in high risk populations (Markowitz, et al, 2007).

Reproductive health issues are one of the most common health issues facing college students. HPV has been identified as the most common sexually transmitted infection worldwide. It also remains the only sexually transmitted infection where an effective vaccine exists. Rates of HPV vaccine remain poor and there is a strong effort in the health care community to increase vaccination rates in the population to decrease morbidity and mortality associated with the virus.

Locally, the rates of HPV vaccine among SSU students remain less than ideal and far below goals set by the Healthy People 2020 objectives. The office of student health services will address suboptimal HPV vaccine rates by developing a campus wide promotion project to increase student HPV vaccination rates. This outreach project will incorporate evidence based strategies that have been identified as successful in increasing HPV vaccination rates in similar populations and settings. The office currently utilizes an electronic health record (EHR) and several technical supports that will enhance efforts to identify vaccine need for individual students as well as track program success through overall vaccine tracking data.

Ensuring the academic and personal success is at the heart of the mission for Salem State. This project seeks to ensure, through primary prevention strategies, that students will increase their protection against one of the most common threats they face. Reduction in overall mortality and morbidity related to HPV is central to this project.

Overarching Program Goal:

To reduce the risk for mortality and morbidity associated with HPV disease in Salem State University (SSU) students by increasing HPV vaccine rates in the priority population of males and females ages 18-26.

Behavioral Goals & Objectives:

Goal 1. Recognize HPV vaccination as a key health priority in health services at Salem State University (SSU) Health Services.

Objective. 1.1 During the intervention, SSU health providers will identify opportunities for vaccination at 80% of total patient encounters using immunization review in the electronic health record (EHR).

Objective. 1.2 During the intervention SSU health providers will provide strong recommendation for HPV vaccination, using counseling tools created by CDC, at 80% of total patient encounters for under vaccinated students.

Goal 2. Utilize patient recall and reminder systems to increase completion of 3 dose HPV vaccine series.

Objective. 2.1 During the intervention, SSU providers will activate patient reminder systems in the EHR for subsequent vaccinations at the time of vaccination in 85% of patient visits.

Goal 3. To develop a campus wide media campaign to increase awareness and education of HPV vaccine in the student community using multiple media channels.

Objective 3.1 After the intervention, patient feedback surveys will report 40% of students agree that multi-channel interventions were "somewhat-very important" in their decision to accept HPV vaccine.

Program Design:

Research has shown that college students are more motivated towards HPV vaccination due to concerns relating to STI's rather than avoiding the risk of HPV related cancer (Krieger & Sarge, 2013). Consequently, the name of the campaign will be *Spread Love not Warts.*

The program and intervention will run through the fall semester 2014 and includes internal health communication between providers and students to encourage HPV vaccine uptake as well as campus wide health education strategies. These efforts seek to prevent missed opportunities to vaccinate, as well as provide a strong recommendation to students encouraging vaccine uptake. A social norming campaign using the Spread Love not Wart slogan will be used in multi-media print, social media and outreach programs on campus. The program will launch in a Spread Love not Warts concert to be held during the annual September Block party. The program incorporates the Theory of Planned Behavior (TPB) as a theoretical model and utilizes concepts of the model in the intervention design. TPB suggests that behavior is driven by intentions which are directly related to the individual's attitude, subjective norms, and perceived behavioral control. The program targets this triad of constructs and seeks to target key components involved in behavioral outcomes, in this case consent of HPV vaccine.

Grant monies will be used towards increasing student awareness and engagement for the campaign through direct on-campus marketing and concert promotion costs. Salem State will be providing additional funding to support the Spread Love not Warts program in addition to NECHA funds

Budget Expenditures	NECHA funding	Salem State University
Marketing and promotions		
Print media	$500	
Buttons	$200	
T-shirts	$900	
Concert costs		
Band costs	$800	$2200
Food	$100	$100
Advertising		$200
TOTAL	$2500	$2500

Evaluation:

Chart audits using the EHR will track provider engagement for the campaign. EMR reports will track provider acknowledgement of HPV vaccine history (preventing missed opportunities to vaccinate), clinician provision of a strong HPV vaccine recommendation at each visit, and scheduling of follow up appointments at the clinical visit to ensure activation of future visit reminder systems for patients. Direct patient feedback using an anonymous survey will be collected from vaccine acceptors and decliners to rating motivating factors both towards vaccination or for decline.

Please describe how the institution will sustain the project after the grant:
Our hope is that Spread Love not Warts will become a recognized campaign on our campus and students will remain engaged through social media and on-going efforts in health services to increase campus awareness of HPV vaccination. We seek to use this campaign to change the culture of our campus community to one that strongly supports HPV vaccination. Developing a strong foundation ensures students will recognize the brand and be familiar with the program. Student volunteers can assist in maintaining social media channels as well as assist in campus outreach efforts. Clinical providers will support a commitment to identifying HPV vaccination as a key health objective in the student health services beyond the Spread Love not Warts campaign.

Discuss how other campuses could replicate program/instrument:
Student Health Centers across the country could implement similar HPV vaccination campaigns. The interventions used in this program require resources common to most college campuses and health centers. The Spread Love not Warts campaign serves to become a model for success on other campuses seeking to achieve increases in student HPV vaccination rates. We will be happy to share implementation and evaluation tools with other institutions as requested.

Relevance to College Health:

College health centers have a responsibility to follow national health objectives and goals as set by Healthy People 2020, CDC, and others. College students often find themselves at a developmental stage where they are making health decisions for the first time. Providing evidence based tools and support can facilitate decision making especially in regards to prevention efforts, such as vaccination. This evidence based program will target a significant health disparity common to young adults, suboptimal HPV vaccination rates. This intervention can be easily replicated at other universities and aid in the development of similar programs in college health centers.

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