Increasing Cervical Cancer Screening

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Abstract

Preventive care is an important part of medicine, especially family medicine. There are many conditions that can be prevented with proper screening such as colon cancer, breast cancer, and cervical cancer. Our QI project this year involves cervical cancer screening and increasing the rate of Pap smears in our current patient population. Screening methods used to find cervical changes that may lead to cervical cancer include the Pap test and human papillomavirus (HPV) testing. Such screening tests may find cancers earlier, when they are more easily treated. Women who have never been screened face the highest risk of developing invasive cervical cancer. The U.S Preventive Services Task Force (USPSTF) recommends screening for cervical cancer with the Pap test alone every 3 years in women aged 21-29 years. In women aged 30-65 years, the USPSTF recommends the Pap test alone every 3 years of HPV testing, with or without Pap co-testing, every 5 years. Through review of our practice's cervical cancer screening in women aged 21-65, it was evident that a large number of patients over the age of 21 had not received a Pap smear and women over the age of 35 had not received a Pap smear with HPV co-testing or majority of patients had not followed up with routine screening. A number of factors have been associated with lower rates of cervical cancer screening, including low income, less education, and a lack of health insurance. Given we are part of a federally qualified health center, many of our patients fall into these categories which explains why the rate of screening is low. To improve and increase screening in our practice, we made small pap cards, similar in size to a credit card which can easily fit in a wallet; these cards were printed in both English and Spanish. The cards include the patient's name, age, last Pap smear date, results of the pap+ HPV testing, and a future date for the next one. We have begun giving these cards to all women that come in and are over the age of 21 and schedule them for a pap before they leave if they are due for one. By using these cards we are hoping to help patients not only remember to come in for their Pap smear and HPV testing but also increase awareness and importance of cervical cancer screening. People are more likely to follow through and remember when having something tangible to remind them and we are hoping the pap cards will do just that. In a few months we will run the data again and hope to at least increase our screening by 10% with hope to increase more over time. Screening can reduce deaths due to cervical cancer and we hope to continue to increase our screening rates.

Objective/Background

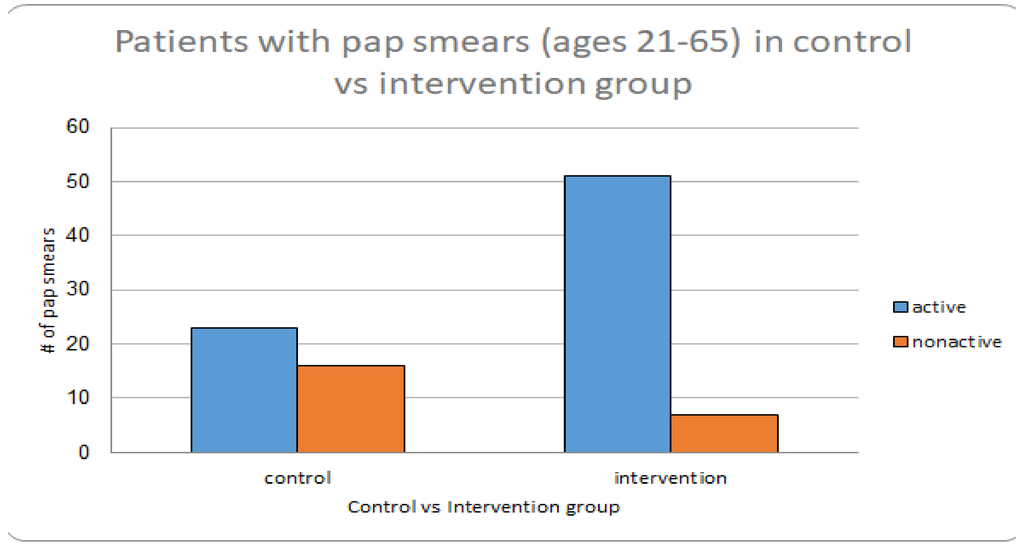
Cervical Cancer is the fourth most common woman cancer worldwide. The main risk factor for developing cervical cancer is being infected by the Human Papillomavirus (HPV). Another risk factor, though less common nowadays, is being exposed to the drug DES (diethylstilbestrol) in utero. During the early stages of cervical cancer, women may be completely asymptomatic and only develop vague symptoms as the disease progresses. Some of these symptoms may include vaginal bleeding, pain with sex, vaginal discharge, or pelvic pain. If timely screening testing is not done, the development of cervical cancer can occur insidiously and may not become apparent until it is too late. Fortunately, the Pap smear and HPV cotesting are highly effective screening tests that can help detect precancerous cellular changes, which ultimately contributes to the prevention of cervical cancer.

Based on 2016-2018 data, approximately 0.6 percent of women will be diagnosed with cervical cancer in their lifetime. Based on 2014-2018 cases and deaths, the rate of new cases of cervical cancer was 7.5 per 100,000 women per year and the death rate was 2.2 per 100,000 women per year. Interestingly, new cases of cervical cancer have decreased by more than fifty percent from 1975 -2010. As the data suggests, the incidence of cervical cancer has steadily declined over the past 30 years. Even more encouraging is the fact that a diagnosis of cervical cancer is not an automatic death sentence as is evident by the 66.3% 5-year relative survival rate as of the SEER 2011-2017 data. With routine timely high quality Pap and HPV tests in women 21-65 years old, we can hopefully continue to see a further decline in the incidence of cervical cancer as well as increase the rate of cervical cancer screening in women ages 21 - 65 years old by 10% over a three month period in our practice.

Method

Through our patient records we selected patients ages 21-65 years of age and checked their records to see if they had a pap smear within the last 3 years. Of the patients selected the ones without one on file were called to see if they had received one from another clinic if not we had them come in within the next two weeks for a pap smear, with HPV testing if appropriate. Each patient who was in the office for a pap smear was given a card that had a place to put the date, location, Pap smear result, with HPV testing or not and date of next pap smear due. The card also had guidelines for current cervical cancer screening from the American College of Obstetricians and Gynecologists. This card was also given too all other women coming in for appointments that were between ages 21-65 to increase pap smear rates as well as educate patients on importance of cervical cancer screening.

Results



*active: females between 21-65 who have been seen within last 3 years and are due for pap smear

*nonnative: females between 21-65 who have not been seen within 3 last years for pap smears and are due for pap smear

Conclusion: interventions including pap cards, active chart checking, and active follow-up appointments have contributed to an increase in number of pap smears in the intervention group

Discussion

The introduction of pap cards significantly increased the rate of pap smear screening in the population studied in Freehold Family Health Center. Although lack of education, low income, and lack of health insurance can hinder patients from receiving pap smear in a timely manner, possessing a tangible reminder of the needed screening is helpful. This intervention helps the patient, provider and staff to help prepare the patient with financial resources such as applying for Cancer Education and Early Detection (aka CEED) or guidance to planned parenthood services to help cover the cost of performing the pap smear. Assessing if pap smear is due at the annual visit as well as checking the pap card along with the patient, will provide an opportunity for the patient to ask questions and learn about the significance of this life preserving screening procedure. Short term assessment of pap cards and pap smear compliance showed effectiveness of this intervention in increasing cervical cancer screening in our facility. One of the factors we identified that hindered the accurate measurement of cervical cancer screening rate at our practice is the difficulty of obtaining external pap smear results done in another facility including planned parenthood, GYN clinics or prior PCPs. Our team plans to closely work with the front desk staff to ensure follow up of pap smear reports performed elsewhere. Our goal is to improve the cervical screening rate by 50% in the next year with possible extension of distribution of pap cards to our sister health centers.

Conclusion

Our Quality Improvement project outlines how simple changes, such as the introduction of Pap Cards at medical offices can contribute to improved patient follow up, increased rates of cervical cancer screening and ultimately, decrease the mortality associated with cervical cancer in our society. This simple change in the workflow of our office led to a substantial increase in the amount of due pap smears performed. This study was done over a short period of time, however the rates are likely to be much higher when they are reevaluated in the future, attesting to the long term benefits of these Pap Cards in improving patient cancer screening numbers. The Pap Card can serve to be a simple and cost effective reminder for patients and their providers regarding their cervical cancer screening status. This shouldn't need to end at just cervical cancer screening either. Reminder cards such as these can be utilized in various other medical realms as well. Similar modalities are already used with Intrauterine Devices, which come with cards outlining date of insertion and date of anticipated removal. There are no limits to where these cards can be used in healthcare, particularly in regards to cancer screenings.

The limitations of this study include the short time frame in which subjects were monitored and the small sample size utilized. By reanalyzing the numbers at a future date, by following up on a larger number of participants, one can get a more accurate idea of the effectiveness of these cards. In addition, collecting information from the other sister offices in the community can also aid in improving sample sizes. By expanding the breadth of this study, one can determine the true effectiveness of these Pap Cards in the community as a whole. All in all, the introduction of Pap Cards at our office greatly improved the rates of cervical cancer screening for our patients. If implemented on a wider scale, a small change such as this can have a tremendous impact on patient screening numbers, detection of premalignant/malignant lesions (with subsequent timely treatment) and ultimately, in the overall health and wellbeing of our patients.

References

https://www.acog.org/womens-health/faqs/cervical-cancer-screening
https://www.uptodate.com/contents/screening-for-cervical-cancer-in-resource-rich-settings
https://www.cancer.gov/news-events/cancer-currents-blog/2020/cervical-cancer-screening-hpv-test-guideline