

Education and Reminders to Increase Cervical Cancer Screening: An Evidence-Based Project

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Background & Significance

Cervical cancer is the second most common cancer among women worldwide. Regular screening can find abnormalities early and prevent morbidity and mortality, but screening rates remain low in the U.S., at just 80.4%, and in Indiana, at 68.3% (ISDH, 2018). Women of minority race and ethnicity or low socioeconomic status have lower rates of CCS and higher mortality from cervical cancer than their higher-income, white, non-Hispanic counterparts. This project has great potential to improve screening rates and therefore decrease cervical cancer cases in an at-risk population. Patient outcomes can be improved by decreasing the proportion found at an advanced stage and increasing the proportion found at an early, more treatable stage. At the project site, screening rates are 45%, lower than regional, state, and national rates, so the patients served by this health center will benefit greatly from the education and reminders to increase CCS uptake.

Purpose

The purpose of this EBP project in progress is to increase cervical cancer screening (CCS) rates in the underserved population at a federally qualified health center (FQHC) with six clinic locations in Northwest Indiana; the primary site is a clinic in Porter County.

Review of the Literature

❖ **Key Terms:** cervical screening, cervical smears, vaginal smears, Pap smear or Papanicolaou smear, uptake or participate, and improve or increase

❖ **Limiters:** 2015 to 2020, English language, female gender, scholarly/peer-reviewed

❖ **Inclusion Criteria:** Interventions to increase CCS; evaluated outcome of screening rates

❖ **Exclusion Criteria:** Studies in low or middle-income countries, only discussed barriers to screening

Database Searched	Articles Yielded	Articles Accepted
Joanna Briggs Institute	9	1
Cochrane Library	3	0
Trip database	26	0
CINAHL	143	8
Medline with Full Text	177	3

Evidence Appraisal

Level: Joanna Briggs Institute Levels of Evidence

Appraisal: Joanna Briggs Institute Critical Appraisal Tools (Joanna Briggs Institute, 2014)

Evidence Level	Articles	Design of Evidence	Quality
Level 1	9	Systematic review (5) Randomized controlled trial (4)	High (2), good (3) High (2), Good (2)
Level 3	3	Cohort study	High (2), Good (1)

Evidence-Based Recommendations

- ❖ Language-specific, mailed education improves CCS uptake (Jayasekara, 2020)
- ❖ Reminders by phone and email also increased uptake (Muller et al., 2009)
- ❖ Multimodal interventions improved screening rates more than single ones (Duffy et al., 2017)

Method/procedures

Participants will include female patients due for CCS, who will be identified from patient charts at the project site. The participants will include women ages 21 to 64, who have not completed a Pap in the past three years or those ages 30 to 64 who have not had a Pap plus HPV in the past five years. Patients without a current email address on file will be excluded from the email interventions. In mid-September, patients of all six clinics will be sent an educational email on CCS, Pap and HPV testing as well as an appointment reminder. Two weeks after the initial email, patients who have not scheduled an appointment will receive a reminder email. Two weeks after the reminder email, phone calls will be made to patients whose usual provider is at the primary site who have not made an appointment, which will be a pilot site. Other patients of that clinic will receive another email reminder. For patients who have identified Spanish as their preferred language, emails and phone calls will be in Spanish.

Major Outcomes

Data on CCS completed *will be collected from patient charts every two weeks for five months* after the initial email is sent. Differences from the pre-intervention group will be assessed using descriptive statistics. A historical group of patients from one year ago will be compared with this patient group using Chi-square; data will be analyzed with SPSS software. The primary outcome of this project will be an increase in CCS uptake in women due for screening receiving care at the primary site. A secondary outcome will be CCS uptake in women receiving care at the other five locations of the FQHC. Patient responses to a post-visit survey about relevance of education, ease of making the appointment, and the healthcare visit will also be analyzed and reported as frequencies.

Conclusions & Implications

The interventions are anticipated to increase CCS uptake at the FQHC. If the project increases CCS rates, the recommendation will be to continue the phone call and email interventions on an annual basis at all six clinics. The project will be completed in April 2021.

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