CE 1.5 contact hours

ABSTRACT: *The incidence of cervical cancer has declined dramatically due to Papanicolaou smear testing. However, some minority populations continue to suffer with high incidences and/or death rates of cervical cancer, due to lack of screening. This article updates on cervical cancer screening and prevention and discusses cultural impacts on screening. Knowledge deficits disproportionately affect ethnic minority groups and contribute to cancer incidence, whereas lack of healthcare coverage and low socioeconomic status contribute to screening disparities. Although minority women have cultural beliefs and practices that influence screening, recommendation and/or education from a provider often lead to screening.*

KEY WORDS: *cervical cancer, culture, human papillomavirus (HPV), nursing, Papanicolaou test, patient education, screening, the bleeding woman*

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INCREASING CERVICAL CANCER SCREENING IN UNDERSERVED POPULATIONS

Infection with *human papillomavirus,* the known cause of cervical cancer, is prevalent in women and men worldwide. The World Health Organization (WHO) reports cervical cancer as the second most common cancer in women worldwide; in 2008, there were an estimated 529,000 new cases and 274,00 deaths from cervical cancer. Greater than 85% of deaths were in developing countries, where cervical cancer accounts for 13% of all female cancers (WHO, 2010, 2014). In December 2016, the U.S. Centers for Disease Control and Prevention (CDC) reported 79 million Americans were infected with HPV, with approximately 14 million new infections yearly. HPV is so common that most sexually active men and women will get at least one type of HPV at some point in their lives. Around 11,000 women in the U.S. get cervical cancer each year, whereas 17,600 women and 9,300 men are affected by all cancers caused by HPV (CDC, 2016a, 2016c).

Human papillomaviruses (HPVs) are a group of more than 150 related viruses, many of which do not cause harm, as the body eventually eliminates the virus. Carcinogenic types of HPV are the primary, etiologic, infectious agents—especially type 16 and type 18—causing all cases of cervical cancer. HPV also causes genital warts and anal, oropharyngeal, and other rarer cancers such as vaginal, vulvar, and penile cancers (National Cancer Institute [NCI], 2016b). Table 1 lists the known risk factors for cervical cancer. Women with drug and alcohol addiction have significantly higher risk factors for cervical cancer and abnormal Pap smears (Soccio, Brown, Comino, & Friesen, 2015).

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THE BLEEDING WOMAN

The Gospels of Matthew, Mark, and Luke include the account of a woman who had been subject to bleeding for 12 years. She went to physicians and spent all that she had to stop, what Bible scholars assume, was vaginal bleeding. But nothing worked, until she touched Jesus (Matthew 9:20-22; Mark 5:25-34; Luke 8:43-48).

This woman was considered unclean and shunned from society for 12 years because, under Mosaic Law, everything and everyone she touched became ceremonially unclean (Leviticus 15:19-30). She was unable to worship in the synagogue because she could not make atonement for bleeding (Leviticus 15:28-30). We are not told what caused this woman's bleeding, but modern medicine indicates a variety of gynecological conditions, including cervical cancer, can manifest with vaginal bleeding.

The biblical account of the bleeding woman teaches about the power of faith, and the social, cultural, spiritual, and religious aspects of a personal matter: women's health. The bleeding woman encountered religious and cultural determinants that impacted her health. Jesus not only healed her physically, he crossed religious and cultural barriers to speak to a woman in public, even an unclean woman, lovingly saying, "Daughter, your faith has healed you. Go in peace and be freed from your suffering" (Mark 5:34, NIV). This article discusses the etiology and treatment of cervical cancer (see sidebar: Understanding Cervical Cancer), cultural influences on screening, and nursing responses to improve screening for women who experience screening disparities.

CERVICAL CANCER SCREENING & PREVENTION

Cervical cancer used to be one of the most common forms of cancer and a major cause of death affecting women. In the 1950s, the Papanicolaou (Pap) smear was introduced, and the incidence of cervical cancer declined dramatically (CDC, 2016a). Cervical cancer has not been listed among the top 10 cancers in the U.S. for any race for the years 2000–2013.

The American Cancer Society (ACS, 2016) estimated new cases of cervical cancer for 2017 will be 12,820, and the estimated deaths for 2017 at 4,210. In certain U.S. populations, cervical cancer incidence and death rates remain high. In 2013, Hispanic women had the highest incidence rate of cervical cancer, followed by African American, White, American Indian/Alaska Native (AI/AN), and Asian/Pacific Islander (A/PI) women (CDC, 2016b). In 2013, African American women were more likely to die of cervical cancer than any other group, followed by Hispanic, White, A/PI, and AI/AN women. The major contributing factor to these disparities is lack of screening (NCI, 2016a; Nuño, Castle, Harris, Estrada, & García, 2011). Clinician recommendation of both mammograms and Pap smears, current health insurance, and a recent visit with a clinician may increase cervical cancer screening coverage (Nuño et al.).

The U.S. Preventive Services Task Force (USPSTF) (2016) updated the cervical cancer screening guidelines in 2012 to reflect the importance of cytology (Pap smear) *and* HPV testing. The USPSTF recommends screening for cervical cancer in women ages 21 to 65, with cytology every 3 years; and for women ages 30 to 65 who want to lengthen the screening interval, screening with a combination of cytology, and HPV testing every 5 years. The Pap smear assesses for abnormal cervical cell changes, whereas the HPV test looks for the presence of the virus. A Pap smear with an HPV test (called *co-testing*) is the preferred way to find early cervical cancers or precancers in women age 30 and older (ACS, 2017).

Healthy People 2020 has a target goal of 93% for all women, aged 21 to 65,

to receive cervical cancer screening based on the most recent guidelines (HealthyPeople.gov, 2017). According to the National Health Interview Survey, in 2013 (a) 82.2% of African American, (b) 82.1% of AI/AN, (c) 77.1% of Hispanic or Latino, and (d) 70.5% of Asian-only women received a Pap test within the last 3 years. White-only (not Hispanic or Latino) had the highest rate of screening at 82.7% (U.S. Department of Health and Human Services [USDHHS], 2016a). Although the immediate thought may be that differences in screening rates is due to lack of healthcare coverage or poverty, research examining specific populations and cultures reveals additional, relevant attributes.

The HPV vaccines target the virus strains associated with cervical cancer, but no vaccine can protect against all HPV infections that cause cancer. The HPV vaccines Gardasil®, Gardasil®9, and Cervarix® are licensed, safe, and effective in preventing HPV infections in females and males ages 9 to 26 years. Gardasil®9 (HPV 9-valent Vaccine, Recombinant) helps protect against nine types of HPV related to cervical, vaginal, vulvar, and anal cancers and genital warts in females, as well as anal cancer and genital warts in males (NCI, 2016c). The Advisory Committee on Immunization Practices, which approves immunization schedules for children and adolescents aged 18 years or younger, states the HPV vaccine may be given to children aged 9–10 years, even in the absence of a high-risk condition. The HPV vaccine is recommended for all adolescents through age 18 years, who have not been adequately vaccinated previously, and up until age 26 (CDC, 2017).

In October 2016, the CDC changed the HPV vaccine recommendation that 11- to 12-year-olds receive two doses at least 6 months apart, rather than the previously recommended three doses. Teens and young adults who start the series later, at ages 15 through 26 years, will continue to need three doses of HPV vaccine to protect against cancer-causing HPV infection (CDC, 2016d). HPV vaccination is not recommended during pregnancy, although there is no evidence that the vaccine poses harm. Women receiving HPV vaccination should continue to be screened for cervical cancer because the vaccine does not treat existing HPV infections or HPV-associated diseases.

CULTURAL IMPACTS ON SCREENING

Culture is the "beliefs, customs, arts, etc. of a particular society, group, place, or time" (Merriam-Webster Online, n.d.). Culture can include traditions, customs, spirituality, and religion. Nearly every culture attaches a premium to a woman's purity, as well as her fertility. Different women adhere to widespread sexual and reproductive health beliefs, practices, and statutes (Gaydos & Page, 2014). These may impact the utilization of preventive measures, including cervical cancer prevention and screening.

The National Cancer Institute states that "complex and interrelated factors contribute to the observed disparities in cancer incidence and death among racial, ethnic, and underserved groups. The most obvious factors are associated with a lack of healthcare coverage and low socioeconomic status (SES)… SES, in particular, appears to play a major role in influencing the prevalence of behavioral risk factors for cancer (for example, tobacco smoking, physical inactivity, obesity, and excessive alcohol intake, and health status), as well as in following cancer screening recommendations." (NCI, 2008.) How might racial and cultural differences contribute to lack of cervical cancer screening?

African American Women. The African American (AA) population's respect for elders, spirituality, and mistrust of the healthcare system are some of the influencing factors for Pap testing (Ackerson, 2010). Avoiding routine preventive care may be linked to a trauma history (sexual, physical, or medical). In studies examining the difference between AA women who routinely obtain Pap testing and those who do not, major factors were: Routine testers were influenced on the importance of routine care by their mothers; nonroutine testers reported having *hope* that they would not get cervical cancer. Finally, the routine testers were encouraged to screen and given information regarding the importance of the Pap smear by their provider, whereas nonroutine testers reported being told to obtain the Pap smear but not why (Ackerson).

HIV-infected AA women are significantly less likely to obtain recommended

Table 1:
Risk Factors for Cervical Cancer

Human papillomavirus infection (#1 risk factor)
Immunosuppression
Human immunodeficiency virus infection
Sexual activity at an early age (16 years or younger)
Sexual activity with a greater number of partners
Having a partner who has had many partners
Lack of circumcision (for men and their partners)
High parity (three or more children), especially in the presence of HPV infection
Long-term use of oral contraceptives (>5 years)
Cigarette smoke exposure
Diethylstilbestrol exposure
Lack of Pap smear and HPV screening

Sources: ACS (2017) and NCI (2016b, 2017).


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cervical cancer screenings than HIV-uninfected women (Williams, Moneyham, Kempf, Chamot, & Scarinci, 2015). Twenty AA women participated in a study that examined sociocultural and structural factors associated with cervical cancer screening among HIV-infected African Americans in Alabama. Researchers noted the most common positive perceptions, enablers, and nurturers that contributed to cervical cancer screening included internal motivation and awareness of the importance of HIV-infected women having Pap smears, due to their weakened immune system. Negative perceptions, enablers, and nurturers included lack of knowledge about cervical cancer and screening, and lack of perceived susceptibility to cervical cancer. Healthcare providers recognize that frequently changing guidelines about screening, disease onset, risk factors, symptoms, and treatment can be confusing for minority women to interpret (Nardi, Sandhu, & Selix, 2016).

The biblical account of the bleeding woman teaches about the power of faith, and the social, cultural, spiritual, and religious aspects of a personal matter: women's health.

Asian/Pacific Islander Women. Studies have found that a strikingly small proportion of A/PI women reported receiving breast and cervical cancer information from their healthcare provider (Dang, Lee, & Tran, 2010; Gregg, Nguyen-Truong, Wang, & Kobus, 2011). Although it was found that A/PI women had strongly held cultural beliefs and personal care practices that caused them to be less concerned with Pap tests, the strongest predictor included having a physician recommend Pap testing. A total of 1,808 women from Cambodian, Laotian, Thai, and Tongan communities acknowledged sexual risk factors as risk factors for cervical cancer but were less likely to recognize cigarette smoking and the use of birth control pills as risk factors (Dang et al.). Gregg, Nguyen-Truong, et al. (2011) reported that when Vietnamese American women did not understand medical care could *prevent* disease, they still prioritized their personal care practices in preventing disease. Although they were less familiar with the Pap smear, these women believed that gynecological exams in general were effective and necessary for disease detection. When access to gynecological care was cumbersome, their faith in their preventive behaviors helped lessen concerns over lack of care.

Hispanic and Latino Women. Hispanic women's use of folk healers and traditional health belief practices may contribute to a delay in Pap testing (Menard et al., 2010). An example is the culturally mediated feminine hygiene practice *twalet deba* that includes the use of herbs, leaves,

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UNDERSTANDING CERVICAL CANCER

The cervix, a cylindrical, fibrous organ about 3 to 4 cm in length, acts as the opening to the uterus. The *portio* is the part of the cervix that is visible on vaginal inspection. The opening of the cervix is the *external os*, which begins the endocervical canal leading to the *internal os* that transitions to the uterus. Two types of epithelial cells line the cervix: squamous cells at the outer aspect, and columnar, glandular cells along the inner canal. The transition between squamous cells and columnar cells is the *squamo-columnar junction*. Most precancerous and cancerous changes arise in this zone.

Dysplasia is the precancerous condition that can become invasive cancer—cervical intraepithelial neoplasia or adenocarcinoma *in situ*, although the process can be quite slow. Studies reveal that 30% to 70% of women with untreated *in situ* cervical cancer will develop invasive carcinoma over 10 to 12 years. In about 10% of patients, lesions can progress from *in situ* to invasive in less than a year. As cervical cancer becomes invasive, the tumor breaks through the basement membrane and invades the cervical stroma. Extension of the tumor in the cervix may ultimately manifest as ulceration, an outgrowing tumor beyond the epithelium (exophytic), or extensive infiltration of underlying tissue, including the bladder or rectum (NCI, 2017).

In early stages, cervical cancer may not cause noticeable signs or symptoms, but a woman can experience vaginal bleeding, unusual vaginal discharge, pelvic pain, dyspareunia (painful intercourse), and post-coital bleeding. Diagnosis is made through history and physical, pelvic examination, cervical cytology (Pap smear), HPV DNA testing, endocervical curettage, colposcopy, and cervical biopsy (NCI, 2017).

Treatment for cervical cancer depends on staging and involvement. Prognosis is related to tumor size and volume, and the spread pattern. Treatments range from conization to hysterectomy or trachelectomy (uterus and ovaries not removed), with or without pelvic lymphadenectomy; to radiation; to chemotherapy; to palliative care in advanced cancer (NCI, 2017). **– *JCN***

and commercial products to ensure cleanliness and tightening/drying of the vagina. *Botanicas* serve as important sources of spiritual advice and healthcare for some Latin American and Caribbean immigrants in the U.S. Further research on intravaginal hygiene practices in Haiti, with 416 women for cervical self-sampling, provided cervical samples analyzed for the presence of high-risk HPV infection (Seay et al., 2017). Nearly all women (97.1%) performed *twalet deba,* and approximately 11% of the women tested positive for high-risk HPV. Pigeon pea and lime juice were associated with high-risk HPV and may contribute to risk for HPV infection in this population. Results suggest that less toxic *twalet deba* alternatives may reduce the risk for HPV leading to cancer.

A study of a group of Mexican immigrants found that they believed the Pap test was a screen for sexually transmitted infections. Thus, Pap tests were avoided if doing so would be stigmatizing or an implicit acknowledgment of their or their partner's infidelity (Gregg, Centurion, Aguillon, Maldonado, & Celaya-Alston, 2011). Researchers have found that male partners highly influence women's female hygiene practices and were a barrier to cervical cancer screening (Gregg, Centurion, et al., 2011; Menard et al., 2010). Ironically, a physician's recommendation for a Pap smear was among the most important determinant of Hispanic women's use of cervical cancer screening (Nuño et al., 2011).

Language-appropriate education may impact cervical cancer screening. Obulaney, Gilliland, and Cassells (2016) described an evidence-based initiative that assessed the impact of language-appropriate cervical cancer and HPV prevention education on knowledge level and HPV vaccine uptake among mothers and their daughters. Forty-one mother/daughter dyads from a low-cost, faith-based clinic for the uninsured in southeastern Texas participated. A nurse practitioner led the cervical cancer prevention educational sessions, where Spanish was the primary language for the participating mothers. Results indicate the educational intervention increased HPV prevention via HPV vaccine administration. Hispanic women may feel embarrassed to discuss their health concerns through a translator and see different providers each time they seek care, further complicating the ability to establish a quality relationship with one provider (Nardi et al., 2016).


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Around 11,000 women in the U.S. get cervical cancer each year, whereas 17,600 women and 9,300 men are affected by all cancers caused by HPV.

American Indian/Alaska Native Women. Almost 20 years ago, the AI/AN population's strong cultural beliefs and aversion to medical care were found to contribute to low screening for cervical cancer (Solomon & Gottlieb, 1999). The researchers found inhibitions to Pap testing of: (1) not seeking medical care unless ill; (2) present-time orientation; and (3) reluctance to talk about cancer for fear of bringing a similar misfortune on oneself. In addition, cultural reluctance to access Western medicine for nonacute health problems, transportation difficulties, lack of childcare, negative perception of health providers, long waits for appointments, poor patient–provider communication, provider time pressures, and an underfunded health system were commonly cited as barriers to cancer screening by AI/AN women (Watson et al., 2014). Federal programs, such as the Indian Health Service and the CDC's National Breast and Cervical Cancer Early Detection Program for underserved women have improved screening for AI/AN women. The American Indian Cancer Foundation (2017) created a Cervical Cancer Awareness Month social media toolkit and interviewed survivors to learn from their experiences and honor their stories. *Turquoise Tuesday*, Cervical Cancer Awareness Day on January 24th, serves to educate and destigmatize cervical cancer.

Appalachian Women. White Appalachian women experience a disproportionately higher risk for developing cervical cancer than other U.S. White women (NCI, 2008, 2016a). Screening efforts are needed, as the perception of being at higher risk for cervical cancer and having greater distress about cancer were both associated with greater worry about cancer among Appalachian women (Kelly et al., 2015). Interventions are needed to decrease worry and increase communication of objective risk and need for screening. Self-testing for HPV may alleviate barriers to cervical cancer screening. Thirty-one Appalachian Kentucky women, who were overdue for cervical cancer screening, participated in a research study, indicating self-collection of a specimen for HPV testing was highly acceptable (Vanderpool, Jones, Stradtman, Smith, & Crosby, 2014).

IMPROVING CERVICAL CANCER SCREENING

Clinical judgment and reasoning should be used to identify underlying features of various practices beneficial and harmful to a woman's health. Clinical judgment in women's health, particularly in diverse populations, is multifaceted. According to Tanner (2006), clinical judgment is complex

Web Resources

- National Cancer Institute Health Disparities Resources—https://www.cancer.gov/about-nci/organization/crchd/about-health-disparities/resources
- Centers for Disease Control and Prevention—https://www.cdc.gov/cancer/cervical

but required in clinical situations that are morally ambiguous and often compounded with value conflicts among individuals with competing interests (e.g., provider and client). Good clinical judgments in nursing practice require understanding risk factors, disease processes, and diagnostics, in addition to understanding the client's definition of wellness and illness and their strengths and coping resources (Tanner). Regardless of how different a woman's health beliefs or practice may seem to us, we can respect and incorporate her beliefs into the provision of health education and services, to the soundest extent possible, while presenting accurate health information.

Tanner (2006) found in her research that clinical judgment is more influenced by what the nurse brings to the situation than the objective data about the situation. In other words, a nurse's beliefs and values influence decision making in nurse–client encounters. Nurses can potentially inhibit the uptake of services and ultimately impact the health outcomes of individuals and populations. Clients potentially can view healthcare providers as stumbling blocks for denying or trying to disprove strongly held beliefs. This can contribute to negative experiences and/or perpetuate mistrust of the healthcare system.

Knowledge deficits disproportionately affect racial and ethnic minority groups and contribute to cancer incidence, whereas lack of healthcare coverage and low socioeconomic status contribute to disparities in cancer screening. Thus, healthcare providers must not overlook culturally competent communication and patient/provider relationships and education in trying to improve health. In 2010, the National Health Interview Survey found that only 43.4% to 56.9% of all women were counseled about Pap tests. The lowest percentage was in Asian woman and the highest in White non-Hispanic women (USDHHS, 2016b). Studies reveal that although AA, A/PI, Hispanic, and AI/AN women have cultural beliefs and practices that influence screening, recommendation and/or education from a provider often lead to screening. This underscores the importance of education, in addition to an assessment of gynecological hygiene practices.

Cervical cancer rates reflect a larger problem of unequal access to healthcare. Specific recommendations for increasing screening include: reaching medically underserved groups through culturally sensitive, trained care providers; increasing the number of female healthcare providers, particularly those of the same race or ethnicity; and removing cultural and economic barriers to break down resistance to screening for cervical and other cancers (NCI, 2005).

Nurses can help improve women's access to care. Learn about resources for women's health in your community so you can refer women for Pap smears and HPV screening. As of 2017, under the Affordable Care Act, insurance providers are required to cover at least one well-woman visit per year at no cost to the patient, and must also cover some screenings and types of counseling (Office of Disease Prevention and Health Promotion, 2017b).

Assess for health beliefs and practices, and listen carefully. Assessment of gynecological concerns must be handled with great sensitivity, privacy, and preservation of dignity. Teach patients that early sexual encounters and multiple partners increase the risk for HPV infections and associated cancers. Education about cervical cancer screening and prevention can be life-saving. An open and respectful approach, while educating and recommending health promotion practices, can potentially decrease rates of HPV infection and increase cervical cancer screening.

Ackerson, K. (2010). Personal influences that affect motivation in Pap smear testing among African American women. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 39*(2), 136–146. doi:10.1111/j.1552-6909.2010.01104.x

American Cancer Society. (2016). *Cancer statistics center: Cervix*. Retrieved from https://cancerstatisticscenter.cancer.org/?_ga=1.250258702.966193222.1456861697#/cancer-site/Cervix

American Cancer Society. (2017). *HPV and HPV testing.* Retrieved from https://www.cancer.org/cancer/cancer-causes/infectious-agents/hpv/hpv-and-hpv-testing.html

American Indian Cancer Foundation. (2017). *Cervical cancer screening*. Retrieved from http://www.americanindiancancer.org/cervical

Centers for Disease Control and Prevention. (2016a). *Cervical cancer statistics*. Retrieved from http://www.cdc.gov/cancer/cervical/statistics/index.htm

Centers for Disease Control and Prevention. (2016b). *Cervical cancer rates by race and ethnicity.* Retrieved from http://www.cdc.gov/cancer/cervical/statistics/race.htm

Centers for Disease Control and Prevention. (2016c). *Genital HPV infection—Fact sheet*. Retrieved from https://www.cdc.gov/std/hpv/stdfact-hpv.htm

Centers for Disease Control and Prevention. (2016d). *CDC recommends only two HPV shots for younger adolescents*. Retrieved from https://www.cdc.gov/media/releases/2016/p1020-hpv-shots.html

Centers for Disease Control and Prevention. (2017). *Recommended immunization schedule for children and adolescents aged 18 years or younger, United States, 2017*. Retrieved from https://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

Dang, J., Lee, J., & Tran, J. H. (2010). Knowledge, attitudes, and beliefs regarding breast and cervical cancer screening among Cambodian, Laotian, Thai, and Tongan women. *Journal of Cancer Education, 25*(4), 595–601. doi:10.1007/s13187-010-0082-1

Gaydos, L., & Page, P. (2014). Religion and reproductive health. In E. Idler (Ed.), *Religion as a social determinant of public health* (pp. 179–202). New York, NY: Oxford University Press.

Gregg, J., Centurion, T., Aguillon, R., Maldonado, J., & Celaya-Alston, R. (2011). Beliefs about the Pap smear among Mexican immigrants. *Journal of Immigrant and Minority Health, 13*(5), 899–905. doi:10.1007/s10903-009-9301-4

Gregg, J., Nguyen-Truong, C. K., Wang, P. R., & Kobus, A. (2011). Prioritizing prevention: Culture, context, and cervical cancer screening among Vietnamese American women. *Journal of Immigrant and Minority Health, 13*(6), 1084–1089. doi:10.1007/s10903-011-9493-2

HealthyPeople.gov. (2016). Cervical cancer screening (Clinical Guide Recommendation). Retrieved from https://www.healthypeople.gov/2020/tools-resources/evidence-based-resource/screening-cervical-cancer-us-preventive-services-task

Kelly, K. M., Schoenberg, N., Wilson, T. D., Atkins, E., Dickinson, S., & Paskett, E. (2015). Cervical cancer worry and screening among Appalachian women. *The Journal of Primary Prevention, 36*(2), 79–92. doi:10.1007/s10935-014-0379-7

Menard, J., Kobetz, E., Diem, J., Lifleur, M., Blanco, J., & Barton, B. (2010). The sociocultural context of gynecological health among Haitian immigrant women in Florida: Applying ethnographic methods to public health inquiry. *Ethnicity & Health, 15*(3), 253–267. doi:10.1080/13557851003671761

Merriam-Webster Online. (n.d.). *Culture [Def.5]*. Retrieved from http://www.merriam-webster.com/dictionary/culture

Nardi, C., Sandhu, P., & Selix, N. (2016). Cervical cancer screening among minorities in the United States. *The Journal for Nurse Practitioners, 12*(10), 675–682. doi:10.1016/j.nurpra.2016.08.036682.

National Cancer Institute. (2005). *Excess cervical cancer mortality: A marker for low access to health care in poor communities*. Retrieved from http://www.cancer.gov/about-nci/organization/crchd/about-health-disparities/resources/excess-cervical-cancer-mortality.pdf

National Cancer Institute. (2008). *Cancer health disparities.* Retrieved from https://www.cancer.gov/about-nci/organization/crchd/cancer-health-disparities-fact-sheet#q2

National Cancer Institute. (2016a). *Cancer disparities*. Retrieved from https://www.cancer.gov/about-cancer/understanding/disparities

National Cancer Institute. (2016b). *Cervical cancer prevention*. Retrieved from https://www.cancer.gov/types/cervical/hp/cervical-prevention-pdq

National Cancer Institute. (2016c). *Human papillomavirus (HPV) vaccines.* Retrieved from https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-vaccine-fact-sheet

National Cancer Institute. (2017). *Cervical cancer treatment (PDQ®)—Health professional version*. Retrieved from https://www.cancer.gov/types/cervical/hp/cervical-treatment-pdq

Nuño, T., Castle, P. E., Harris, R., Estrada, A., & García, F. (2011). Breast and cervical cancer screening utilization among Hispanic women living near the United States-Mexico border. *Journal of Women's Health, 20*(5), 685–693. doi:10.1089/jwh.2010.2205

Obulaney, P. A., Gilliland, I., & Cassells, H. (2016). Increasing cervical cancer and Human Papillomavirus prevention knowledge and HPV vaccine uptake through mother/daughter education. *Journal of Community Health Nursing, 33*(1), 54–67. doi:10.1080/07370016.2016.1120595

Office of Disease Prevention and Health Promotion. (2017b). *Get your well-woman visit every year.* Retrieved from https://healthfinder.gov/HealthTopics/Category/everyday-healthy-living/sexual-health/get-your-well-woman-visit-every-year#the-basics_1

Seay, J. S., Mandigo, M., Kish, J., Menard, J., Marsh, S., & Kobetz, E. (2017). Intravaginal practices are associated with greater odds of high-risk HPV infection in Haitian women. *Ethnicity & Health, 22*(3), 257–265. doi:10.1080/13557858.2016.1246423

Soccio, J., Brown, M., Comino, E., & Friesen, E. (2015). Pap smear screening, pap smear abnormalities and psychosocial risk factors among women in a residential alcohol and drug rehabilitation facility. *Journal of Advanced Nursing, 71*(12), 2858–2866. doi:10.1111/jan.12745

Solomon, T. G., & Gottlieb, N. H. (1999). Measures of American Indian traditionality and its relationship to cervical cancer screening. *Health Care for Women International, 20*(5), 493–504. doi:10.1080/073993399245584

Tanner, C. A. (2006). Thinking like a nurse: A research-based model of clinical judgment in nursing. *Journal of Nursing Education, 45*(6), 204–211.

U.S. Department of Health and Human Services. (2016a). *Cancer C-15 increase the proportion of women who receive a cervical cancer screening based on the most recent guidelines*. Retrieved from https://www.healthypeople.gov/2020/data-search/Search-the-Data?nid=4053

U.S. Department of Health and Human Services. (2016b). *Cancer C-18.2 increase the proportion of women who were counseled by their providers about Pap tests*. Retrieved from https://www.healthypeople.gov/2020/data-search/Search-the-Data?nid=4058

U.S. Preventive Services Task Force. (2016). *Final update summary: Cervical cancer: Screening.* Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-screening

Vanderpool, R. C., Jones, M. G., Stradtman, L. R., Smith, J. S., & Crosby, R. A. (2014). Self-collecting a cervico-vaginal specimen for cervical cancer screening: An exploratory study of acceptability among medically underserved women in rural Appalachia. *Gynecologic Oncology, 132*(Suppl. 1), S21–S25. doi:10.1016/j.ygyno.2013.10.008

Watson, M., Benard, V., Thomas, C., Brayboy, A., Paisano, R., & Becker, T. (2014). Cervical cancer incidence and mortality among American Indian and Alaska Native women, 1999-2009. *American Journal of Public Health, 104*(Suppl. 3), S415–S422. doi:10.2105/AJPH.2013.301681

Williams, M., Moneyham, L., Kempf, M. C., Chamot, E., & Scarinci, I. (2015). Structural and sociocultural factors associated with cervical cancer screening among HIV-infected African American women in Alabama. *AIDS Patient Care and STDs, 29*(1), 13–19. doi:10.1089/apc.2014.0063

World Health Organization. (2010). *Human pappilomavirus (HPV)*. Retrieved from http://www.who.int/immunization/topics/hpv/en/

World Health Organization. (2014). Human papillomavirus vaccines: WHO position paper, October 2014. *Weekly Epidemiological Record, 89*(43), 465–492. Retrieved from http://www.who.int/wer/2014/wer8943.pdf?ua=1

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