Cervical Cancers: An Updated Review for Nursing Intervention Protocols

Huda Mohammed Yahya¹, Thuraya Mahmoud Alhindi², Maha Mohammed Yahya³, Fatimah Abdulla Asiri⁴, Alaa Ahmed Jubarah⁵, Tahani Mohammed Abdullah⁶, Wardh Aoun Alharthi⁷, Abdullah Awad Shujaa Al-Qahtani⁸, Ashwaq Mohammed Albar Shar⁹, Fahad Qasem Mutlaq Alsharari¹⁰, SANA MOHAIMEED ALESSAIMI¹¹

Abstract

Cervical cancer remains a significant global health concern, ranking as the fourth most common cancer among women worldwide. It is primarily caused by the human papillomavirus (HPV), a sexually transmitted infection prevalent among sexually active individuals. Despite advancements in prevention and treatment, disparities in screening, early detection, and access to care persist, particularly among vulnerable populations. Primary prevention through HPV vaccination and secondary prevention via regular screening are critical to reducing the burden of cervical cancer. This review aims to provide an updated overview of cervical cancer, focusing on etiology, risk factors, nursing interventions, and long-term care strategies to improve patient outcomes and reduce disparities. The review synthesizes current literature on cervical cancer, including epidemiological data, risk factors, diagnostic approaches, treatment modalities, and nursing management protocols. Emphasis is placed on evidence-based practices for prevention, screening, and patient-centered care. Cervical cancer is largely preventable through HPV vaccination and regular screening. However, barriers such as lack of awareness, cultural stigma, and bealthcare access disparities binder prevention efforts. Nursing interventions, including patient education, symptom management, and care coordination, play a pivotal role in improving outcomes. Multidisciplinary collaboration and long-term care estential for addressing physical, emotional, and psychosocial needs throughout the cancer journey. Effective management of cervical cancer requires a holarce quality of life for patients. Future efforts should focus on expanding access to vaccination, screening, and culturally sensitive care to reduce the global burden of cervical cancer.

Keywords: Cervical Cancer, HPV, Nursing Interventions, Prevention, Screening, Long-Term Care, Disparities, Patient-Centered Care.

Introduction

Cervical cancer remains one of the most prevalent gynecological malignancies globally, consistently ranking as a significant public health concern. Current epidemiological data indicate that it holds the fourteenth position among all cancers and is the fourth most common cancer affecting women worldwide [1]. Efforts to combat cervical cancer predominantly emphasize primary and secondary prevention strategies [2]. Primary prevention, coupled with systematic screening, is widely regarded as the most effective approach to alleviating the disease burden and reducing associated mortality rates. Targeted education, comprehensive screening programs, and timely interventions are critical in mitigating the impact of cervical cancer. However, significant disparities persist in screening rates, early detection, and access to prompt treatment, particularly among vulnerable populations. These disparities are often more pronounced in low

¹ Ksa, Ministry of Health, Aseer General Hospital

² Ksa, Ministry of Health, Jazan General Hospital.

³ Ksa, Ministry of Health, Aseer General Hospital.

⁴Ksa, Ministry of Health, Aseer General Hospital.

⁵ Ksa, Ministry of Health, Jazan General Hospital

⁶ Ksa, Ministry of Health, Aseer General Hospital

⁷ Ksa, Ministry of Health, Sabtalalaya Hospital

⁸ Ksa, Ministry of Health, Dharma General Hospital

⁹ Ksa, Ministry of Health, Prince Mohammed Bin Nasser Hospital

¹⁰ Ksa, Ministry of Health, Al-Jouf Health Pool

¹¹ Ksa, ministry of health

socioeconomic settings and regions with limited healthcare resources, where ethnic and age-related variations further exacerbate the issue. Research indicates that women with obesity and chronic health conditions are also less likely to undergo regular cervical and breast cancer screenings. A study focusing on ethnic minority women in the United Kingdom identified multiple barriers to screening, including insufficient awareness, fear, embarrassment, cultural stigma, and a low perceived risk of developing the disease [3]. Similarly, a study examining barriers among Haitian women highlighted socioeconomic challenges, language difficulties, and a limited understanding of health-related concepts as significant obstacles to accessing screening services [4]. In the United States, cervical cancer mortality rates are disproportionately higher among African American women, underscoring the need for targeted interventions. Since its introduction in 2006, the human papillomavirus (HPV) vaccination has emerged as a pivotal tool in preventing cervical cancer. Widespread vaccination has the potential to significantly reduce cancer-related deaths, particularly in underdeveloped countries where resources for routine screening are scarce and in populations with elevated mortality rates.

Etiology

Cervical cancer is predominantly caused by the Human papillomavirus (HPV), a pathogen that is highly prevalent among sexually active individuals. Current scientific literature indicates that the majority of sexually active people will contract HPV at some point in their lives. Over 130 types of HPV have been identified, with approximately 20 of these types being directly associated with cancer development. Among these, HPV 16 and 18 are the most frequently detected strains in cases of invasive cervical cancer. Notably, data on HPV-related cervical dysplasia is primarily derived from female populations, as men are not routinely screened for HPV outside of research contexts. Epidemiological studies reveal that the highest prevalence of high-risk HPV infections occurs among young adults under the age of 25. However, the peak mortality rate from cervical cancer is observed in middle-aged women, typically between 40 and 50 years. Research suggests that HPV-related cervical abnormalities in women younger than 25 years often resolve spontaneously without intervention. Nevertheless, the presence of concurrent genital infections can hinder this natural clearance process, increasing the likelihood of disease progression to cervical cancer. These findings underscore the importance of early detection and intervention, particularly in populations with additional risk factors, to prevent the development of invasive cervical cancer.

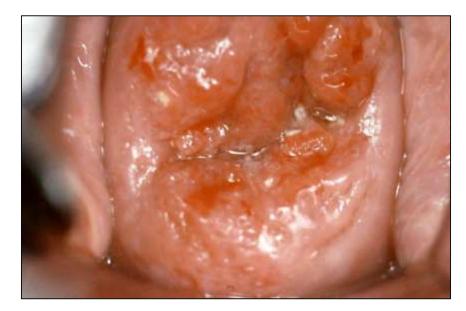


Figure 1: Invasive cervical cancer represents an advanced stage of malignant transformation in cervical epithelial cells, characterized by uncontrolled proliferation and stromal invasion. A colposcopic examination reveals irregular, friable, and ulcerated lesions with abnormal vascular patterns, indicative of neoplastic progression. These findings necessitate histopathological confirmation and prompt oncological intervention to optimize patient outcomes.

Nursing Diagnosis

Cervical cancer and its associated treatments often result in a wide range of physical, emotional, and spiritual challenges for patients. The side effects of common cancer therapies, such as radiation and chemotherapy, can significantly impact a patient's quality of life. These side effects may include nausea, vomiting, pain, dysuria (painful urination), diarrhea, fatigue, neutropenia (low white blood cell count), and other complications. To address these multifaceted issues, nursing diagnoses are essential in guiding patient-centered care and interventions. Examples of relevant nursing diagnoses for individuals with cervical cancer include, but are not limited to:

- Acute Pain: This diagnosis addresses the physical discomfort caused by the disease itself or as a side effect of treatments such as surgery, radiation, or chemotherapy. Effective pain management strategies are crucial to improving the patient's comfort and overall well-being.
- Impaired Urinary Elimination: Cervical cancer and its treatments can lead to urinary complications, including dysuria, frequency, or retention. Monitoring and managing these symptoms are vital to prevent further complications.
- Diarrhea: Chemotherapy and radiation often disrupt gastrointestinal function, leading to diarrhea. Interventions may include dietary modifications, hydration management, and medications to alleviate symptoms.
- Anxiety and Fear: A cancer diagnosis and the uncertainty surrounding treatment outcomes can cause significant emotional distress. Providing emotional support, education, and counseling can help alleviate these feelings.
- Spiritual Distress: Patients may experience existential or spiritual crises as they grapple with their diagnosis. Addressing these concerns through empathetic communication and spiritual care can promote holistic healing.
- Risk for Infection: Neutropenia and other treatment-related side effects increase susceptibility to infections. Preventive measures, such as strict hygiene protocols and monitoring for signs of infection, are critical.
- Risk for Impaired Skin Integrity: Radiation therapy can cause skin irritation or breakdown. Proper skin care and monitoring are essential to prevent complications.
- Risk for Deficient Fluid Volume: Nausea, vomiting, and diarrhea can lead to dehydration. Ensuring adequate fluid intake and electrolyte balance is a key nursing priority.

These nursing diagnoses provide a framework for developing individualized care plans that address the unique needs of cervical cancer patients, ensuring comprehensive and compassionate care throughout their treatment journey.

Risk Factors

Cervical cancer and its precursor, human papillomavirus (HPV) infection, are influenced by a variety of risk factors that increase susceptibility to the disease. Key risk factors include early age at first sexual intercourse, having multiple sexual partners, smoking, co-infection with other sexually transmitted infections such as herpes simplex virus (HSV) or human immunodeficiency virus (HIV), and prolonged use of oral contraceptives. HPV, the primary causative agent of cervical cancer, is transmitted through skin-to-skin contact, including sexual intercourse, hand-to-genital contact, and oral sex [5][6]. Globally, cervical

cancer remains a significant public health issue, with approximately 250,000 women dying from the disease annually. In the United States, around 4,000 women succumb to cervical cancer each year, with African American, Hispanic, and women in low-resource areas experiencing disproportionately higher mortality rates due to disparities in access to evidence-based care [7][8]. Women who have not undergone cervical cancer screening within the last five years or who fail to maintain consistent follow-up care after the identification of precancerous lesions are at a significantly higher risk of mortality. Additionally, trends indicate that women at the highest risk of cervical cancer mortality are often less likely to receive the HPV vaccination, which is a critical preventive measure. In the United States and other developed nations, screening and diagnostic efforts primarily focus on the early detection of high-risk HPV lesions through HPV testing and Pap smears. While HPV testing is not recommended for women under 30 years of age, low-risk women are advised to begin Pap test screenings at age 21 and continue until age 65, as per the United States Preventive Services Task Force guidelines. Updated recommendations suggest extending the interval between screenings to 3–5 years, depending on prior test results and the use of co-testing methods that combine Pap smears and HPV testing [9][10]. These strategies aim to balance early detection with minimizing unnecessary interventions, thereby optimizing cervical cancer prevention and management.

Assessment and Evaluation Strategies

The assessment of patients with cervical cancer requires a comprehensive and systematic approach, as the disease is often asymptomatic in its early stages. A detailed history and physical examination are critical components of the evaluation process. The sexual history should be thoroughly explored, including the age at first intercourse, the presence of postcoital bleeding, and any reports of pain during intercourse. Additionally, it is essential to gather information on previous sexually transmitted infections (STIs), the number of lifetime sexual partners, prior HPV infections, history of human immunodeficiency virus (HIV), tobacco use, and whether the patient has received the HPV vaccination. The interview should also focus on menstrual patterns, noting any irregularities such as abnormal bleeding, persistent vaginal discharge, irritation, or known cervical lesions. During the physical examination, a complete evaluation of the external and internal genitalia is necessary. In patients with cervical cancer, findings may include a friable cervix that bleeds easily, visible lesions or erosions on the cervix, and bleeding upon examination. In more advanced cases, the adnexa (the region adjacent to the uterus, including the fallopian tubes and ovaries) may feel fixed or immobile, indicating potential spread of the disease. These clinical findings, combined with a thorough patient history, provide critical insights for diagnosing cervical cancer and guiding further diagnostic testing and treatment planning. Early and accurate assessment is vital to improving outcomes and ensuring timely intervention for patients with cervical cancer.

Evaluation Techniques

The evaluation of cervical cancer risk and the implementation of screening protocols are guided by evidence-based recommendations from the United States Preventive Services Task Force (USPSTF). According to these guidelines, Pap smear screening should commence at the age of 21, regardless of sexual activity or other risk factors. For women aged 30 and older, HPV testing is recommended in conjunction with Pap smear cytology to enhance the accuracy of detecting precancerous or cancerous changes. Women with a history of normal screening results and those at low risk for cervical cancer are advised to undergo Pap testing every three years. For women over 30, co-testing with both Pap smear and HPV testing can extend the screening interval to every five years, provided prior results have been consistently normal. Women who have maintained low-risk status and have a history of normal screenings may discontinue cervical cancer screening at the age of 65, as the likelihood of developing new precancerous lesions decreases significantly in this age group. Additionally, women who have undergone a total abdominal hysterectomy, including the removal of the cervix for benign (non-cancerous) conditions, do not require further cervical cancer screening, as they are no longer at risk for cervical malignancy [10]. These guidelines aim to balance the benefits of early detection with the potential harms of over-screening, ensuring that resources are allocated effectively while minimizing unnecessary interventions for low-risk populations. Adherence to these recommendations is critical for optimizing cervical cancer prevention and reducing morbidity and mortality associated with the disease.

Treatment and Mangement

The medical management of cervical cancer and its precursor lesions involves a tailored approach based on the patient's age, the severity of the lesions, and the stage of the disease. For pre-cancerous lesions in women younger than 25 years, a conservative approach is typically adopted, as the majority of abnormal findings in this age group are low-grade cervical dysplasia, which often resolves spontaneously without intervention. Persistent or high-risk abnormalities, however, require further evaluation through colposcopy, a procedure that allows for detailed visualization of the cervix. Depending on the findings, management strategies vary. Low-risk lesions may be monitored with more frequent follow-ups, while high-risk lesions are treated based on their size, location, and staging. For pre-cancerous lesions that are limited in size and depth, minimally invasive treatments such as cryotherapy (freezing of abnormal tissue) or excision may be employed. More extensive lesions, particularly those involving the endocervical canal, may require more advanced procedures such as conization (removal of a cone-shaped section of the cervix), laser therapy, or Loop Electrosurgical Excision Procedure (LEEP). LEEP is often preferred for its ability to provide better visualization of the squamocolumnar junction and its associated benefits, including reduced bleeding and the ability to be performed in an outpatient setting [11].

When cervical cancer is diagnosed, the next critical step is staging, which determines the extent of the disease and guides subsequent treatment. Staging is based on a combination of physical examination findings, tissue biopsy results, imaging studies, and reported symptoms. The grade of the cancer is determined by the size and depth of the tumor, as well as evidence of metastasis to other organs. Curative treatment options for cervical cancer include surgery, such as radical hysterectomy, chemotherapy, radiation therapy, or a combination of these modalities. The choice of treatment is highly individualized, considering the stage of the cancer and the patient's personal preferences, including the desire to preserve fertility [12]. This patient-centered approach ensures that care plans are optimized to achieve the best possible outcomes while addressing the unique needs and goals of each individual.

Nursing Management

Nursing management plays a pivotal role in the comprehensive care of cervical cancer patients, with oncology nurses serving as essential members of the healthcare team. These professionals provide critical support, education, and access to resources, ensuring that patients receive holistic and patient-centered care. Nurses are involved in various clinical settings, including gynecological oncology, radiation oncology, medical oncology, infusion centers, and inpatient or procedural visits. In each of these environments, nurses are uniquely positioned to educate patients about the importance of adhering to treatment schedules, managing anticipated side effects, and understanding the overall treatment process. Additionally, they play a key role in promoting primary and secondary prevention strategies, such as advocating for HPV vaccinations and emphasizing the importance of regular cancer screenings to detect abnormalities early. A significant aspect of nursing management involves monitoring and interpreting laboratory results, particularly those related to white and red blood cell counts. Cervical cancer patients undergoing chemotherapy are at risk for neutropenia (low white blood cell count) and anemia (low red blood cell count), especially if they experience bleeding. Nurses must promptly identify and report abnormal findings to the healthcare team to mitigate complications. For patients receiving radiation therapy, nurses provide essential guidance on skincare to prevent or manage radiation-induced skin irritation or damage. Furthermore, nurses must remain vigilant in monitoring for common treatment side effects, such as nausea, vomiting, and diarrhea, which can lead to dehydration or electrolyte imbalances. Regular assessment of vital signs and laboratory values is crucial to identifying these issues early and implementing appropriate interventions. Beyond physical care, oncology nurses also address the emotional and psychological needs of cervical cancer patients. They offer emotional support, help patients navigate the complexities of their diagnosis and treatment, and connect them with resources such as counseling services or support groups. By fostering open communication and providing compassionate care, nurses empower patients to actively participate in their treatment plans and improve their overall quality of life. In summary, nursing management in cervical

cancer care is multifaceted, encompassing clinical monitoring, patient education, emotional support, and advocacy, all of which are essential to achieving optimal patient outcomes.

Seeking Help

Patients with cervical cancer or those undergoing treatment should be educated on recognizing signs and symptoms that warrant immediate medical attention. They should be advised to seek help promptly if they experience heavy bleeding, as this could indicate complications such as hemorrhage or disease progression. Feelings of dizziness or fainting may signal anemia, dehydration, or other systemic issues requiring urgent evaluation. Uncontrolled pain, despite prescribed medications, should also prompt immediate medical consultation, as it may indicate treatment-related complications or disease advancement. Additionally, the onset of fevers could suggest an infection, particularly in patients with neutropenia due to chemotherapy, necessitating urgent intervention to prevent sepsis. New swelling in the extremities may indicate deep vein thrombosis (DVT) or lymphedema, both of which require timely management to prevent further complications. Educating patients on these warning signs empowers them to take proactive steps in their care, ensuring timely intervention and reducing the risk of severe outcomes.

Coordination Care

Coordination of care is a critical component in the management of cervical cancer, requiring a multidisciplinary approach to address the complex physical, emotional, and social needs of patients. Nurses play a central role in facilitating collaboration among various healthcare professionals, including primary gynecologists, oncologists, pharmacists, radiation therapists, social workers, chaplains, and other specialists. This interdisciplinary teamwork ensures that patients receive comprehensive and holistic care throughout their treatment journey and into survivorship. By fostering communication and collaboration among team members, nurses help streamline care delivery, reduce redundancies, and ensure that all aspects of the patient's health are addressed. Nurse navigators oncology, in particular, are instrumental in enhancing patient satisfaction and overcoming systemic barriers to care. These specialized nurses guide patients through the often-complex healthcare system, helping them understand their diagnosis, treatment options, and follow-up care. They assist in scheduling appointments, coordinating tests, and ensuring timely access to treatments, thereby reducing delays and improving outcomes. Additionally, nurse navigators provide emotional support, connect patients with resources such as financial assistance programs or support groups, and advocate for their needs within the healthcare system. Research has shown that the involvement of oncology nurse navigators can significantly improve patient satisfaction, reduce anxiety, and enhance adherence to treatment plans [13]. Ultimately, effective coordination of care ensures that cervical cancer patients receive personalized, timely, and efficient care, addressing not only their medical needs but also their emotional, social, and spiritual well-being. This collaborative approach is essential for optimizing patient outcomes and improving the overall quality of life during and after cancer treatment.

Enhancing Healthcare Outcomes

Health teaching and health promotion are essential components of cervical cancer prevention and early detection. Traditional patient education methods, such as one-on-one counseling and printed materials, alongside innovative approaches like digital platforms and social media campaigns, can significantly increase awareness about cervical cancer, the importance of prevention, and the need for regular screening [14][15]. However, studies indicate that clinicians often fail to recommend or discuss HPV vaccination with patients, and vaccine hesitancy remains a significant barrier among women and parents due to fears about safety and efficacy. To address this, healthcare providers and nurses must take a proactive role in educating high-risk populations about the benefits of HPV vaccination, thereby increasing awareness, prevention, and screening rates among those most vulnerable to cervical cancer [16]. Effective health promotion strategies must also consider cultural sensitivity and health literacy levels to ensure that information is accessible and relatable to diverse populations. This includes using appropriate language, visual aids, and culturally relevant messaging to reach individuals with low health literacy. Additionally, targeted efforts should focus on educating women who are not yet sexually active, as this group represents a key demographic for primary prevention through HPV vaccination. Expanding education beyond the clinical setting through community

outreach programs, partnerships with local organizations, and public health campaigns can further amplify the reach of cervical cancer prevention messages [17][18]. By addressing barriers to education and vaccination, healthcare providers can empower individuals to take proactive steps toward reducing their risk of cervical cancer, ultimately contributing to improved health outcomes and reduced disparities.

Discharging Plan

Discharge planning for cervical cancer patients is a critical aspect of care, particularly since many treatments, such as chemotherapy and radiation therapy, are administered on an outpatient basis. Patients undergoing active treatment must be thoroughly educated about potential side effects and the specific symptoms that warrant immediate medical attention. For example, those receiving chemotherapy should be informed about the risk of infection due to neutropenia and instructed on how to recognize early signs, such as fever or chills, and when to contact their healthcare provider. Additionally, patients should be equipped with strategies to manage common side effects like nausea, including the use of prescribed antiemetics and dietary modifications. Similarly, patients receiving radiation therapy need guidance on managing expected side effects, such as dysuria, diarrhea, skin irritation, and fatigue, to minimize discomfort and prevent complications. Once treatment is completed, a clear and comprehensive follow-up plan must be communicated to the patient to ensure ongoing monitoring and early detection of any recurrence or long-term effects. This plan typically includes regular physical examinations, imaging studies, and laboratory tests as needed. Transitioning to survivorship can be a vulnerable period for patients, as they may experience anxiety, depression, or uncertainty about the future. Nurses play a vital role in providing emotional support, connecting patients with survivorship resources, and facilitating access to counseling or support groups. By addressing both the physical and emotional needs of patients during discharge planning, healthcare providers can help ensure a smoother transition to survivorship and improve long-term outcomes [19].

Other Related Issues

Cervical cancer ranks as the fourth most common cancer among women globally and is primarily caused by the human papillomavirus (HPV), a sexually transmitted infection that affects the majority of adults at some point in their lives. Given its strong association with HPV, primary and secondary prevention strategies, such as widespread HPV vaccination and regular cervical cancer screening, are critical in reducing the incidence and mortality of this disease. Treatment for cervical cancer typically involves a combination of surgery, radiation therapy, and chemotherapy, depending on the stage and severity of the cancer. In its early stages, cervical cancer is often asymptomatic, but as the disease progresses, common symptoms include abnormal vaginal bleeding, postcoital bleeding, and pain during sexual intercourse. During treatment, patients may experience a range of side effects, including nausea, vomiting, dysuria, diarrhea, neutropenia, and skin irritation, which can significantly impact their quality of life. Nurses play a vital role in managing these symptoms, providing patient education, and coordinating care to ensure that patients receive comprehensive support throughout their cancer journey. This includes addressing physical, emotional, and psychosocial needs, as well as facilitating access to resources for survivorship care. By emphasizing prevention, early detection, and holistic patient-centered care, healthcare providers can improve outcomes for individuals affected by cervical cancer and reduce the global burden of this disease [19].

Nursing Long-Term Care Plan

A long-term care plan for patients with cervical cancer is essential to ensure comprehensive support throughout their journey, from diagnosis and treatment to survivorship and palliative care, if necessary. This plan must address the physical, emotional, social, and psychological needs of the patient, while also promoting continuity of care and improving quality of life. Nurses play a central role in developing and implementing this plan, working collaboratively with the healthcare team to provide holistic and patientcentered care.

Physical Care and Symptom Management

Long-term physical care focuses on managing the side effects of treatment and monitoring for recurrence or complications. Patients who have undergone surgery, radiation, or chemotherapy may experience chronic pain, fatigue, lymphedema, or gastrointestinal issues. Nurses should educate patients on self-care strategies, such as skin care for radiation-induced irritation, dietary modifications to manage diarrhea or nausea, and exercises to reduce lymphedema risk. Regular follow-up appointments, including pelvic exams, imaging, and HPV testing, are critical to detect recurrence early. Nurses must also monitor for late effects of treatment, such as bone density loss or hormonal changes, and coordinate appropriate interventions.

Emotional and Psychological Support

A cervical cancer diagnosis and its treatment can lead to significant emotional distress, including anxiety, depression, and fear of recurrence. Nurses should provide ongoing emotional support, facilitate access to counseling services, and encourage participation in support groups. For patients experiencing body image issues or sexual dysfunction due to treatment, nurses can offer resources for sexual health counseling and rehabilitation. Open communication and empathetic listening are key to helping patients navigate these challenges.

Health Promotion and Education

Long-term care includes educating patients about the importance of maintaining a healthy lifestyle to reduce the risk of recurrence and improve overall well-being. This includes promoting a balanced diet, regular physical activity, smoking cessation, and adherence to follow-up screenings. Nurses should also reinforce the importance of HPV vaccination for eligible patients and their families to prevent future cases of cervical cancer.

Coordination of Care

Nurses must ensure seamless coordination among healthcare providers, including oncologists, primary care physicians, mental health professionals, and specialists. This includes facilitating timely referrals, managing transitions between care settings, and ensuring that patients have access to necessary resources, such as financial assistance or transportation services.

Survivorship and Palliative Care

For survivors, a long-term care plan should include a survivorship care plan that outlines follow-up schedules, potential late effects, and strategies for maintaining health. For patients with advanced or recurrent disease, palliative care should be integrated to manage symptoms, provide comfort, and support end-of-life decision-making. By addressing these components, nurses can help cervical cancer patients achieve optimal long-term outcomes, enhance their quality of life, and navigate the complexities of their care journey with confidence and support [19].

Conclusion

Cervical cancer continues to pose a significant public health challenge globally, particularly in low-resource settings and among vulnerable populations. This review underscores the critical role of prevention, early detection, and comprehensive nursing care in addressing the burden of cervical cancer. The primary causative agent, HPV, highlights the importance of vaccination as a cornerstone of primary prevention. Despite the availability of effective vaccines, vaccine hesitancy and disparities in access remain significant barriers, particularly among high-risk populations. Secondary prevention through regular screening, including Pap smears and HPV testing, is equally vital in detecting precancerous lesions and early-stage cancers, thereby reducing mortality rates. Nursing interventions are central to the effective management of cervical cancer, encompassing patient education, symptom management, and emotional support. Nurses play a key role in educating patients about the importance of HPV vaccination, adherence to screening guidelines, and lifestyle modifications to reduce risk factors such as smoking and poor diet. During treatment, nurses are essential in managing side effects, coordinating care, and providing psychosocial

support to address the emotional and psychological challenges associated with a cancer diagnosis. Longterm care plans are crucial for ensuring continuity of care and improving quality of life for cervical cancer survivors. These plans should address physical symptoms, such as chronic pain and lymphedema, as well as emotional and psychological needs, including anxiety, depression, and fear of recurrence. Nurses must also facilitate access to survivorship resources, such as counseling and support groups, to help patients navigate the challenges of life after cancer. Disparities in cervical cancer outcomes, particularly among African American, Hispanic, and low-income women, highlight the need for targeted interventions to improve access to care. Culturally sensitive education and community outreach programs are essential to overcoming barriers such as lack of awareness, cultural stigma, and low health literacy. By addressing these disparities and promoting equitable access to prevention and treatment, healthcare providers can reduce the global burden of cervical cancer. In conclusion, a multidisciplinary approach that integrates prevention, early detection, and patient-centered care is essential for improving cervical cancer outcomes. Nurses, as advocates and caregivers, are pivotal in ensuring that patients receive holistic, compassionate, and equitable care throughout their cancer journey. Future efforts must focus on expanding access to vaccination, screening, and culturally sensitive interventions to achieve meaningful progress in the fight against cervical cancer.

References

Brisson M, Drolet M. Global elimination of cervical cancer as a public health problem. Lancet Oncol. 2019 Mar;20(3):319-321.

- Pimple SA, Mishra GA. Global strategies for cervical cancer prevention and screening. Minerva Ginecol. 2019 Aug;71(4):313-320.
- Cervical Cancer Screening Every 5 Years OK. Cancer Discov. 2018 Oct;8(10):1204.
- Farghaly H, Bourgeois D, Houser PM, Padmanabhan V, Lage JM, Hoda RS. Routine vaginal Pap test is not useful in women status-post hysterectomy for benign disease. Diagn Cytopathol. 2006 Sep;34(9):640-3.
- Foran C, Brennan A. Prevention and early detection of cervical cancer in the UK. 2015 May 28-Jun 10Br J Nurs. 24(10):S22-4, S26, S28-9.
- Pierre-Victor D, Stephens DP, Omondi A, Clarke R, Jean-Baptiste N, Madhivanan P. Barriers to HPV Vaccination Among Unvaccinated, Haitian American College Women. Health Equity. 2018;2(1):90-97.
- Manini I, Montomoli E. Epidemiology and prevention of Human Papillomavirus. Ann Ig. 2018 Jul-Aug;30(4 Supple 1):28-32.
- Ghosh I, Mandal R, Kundu P, Biswas J. Association of Genital Infections Other Than Human Papillomavirus with Pre-Invasive and Invasive Cervical Neoplasia. J Clin Diagn Res. 2016 Feb;10(2):XE01-XE06.
- Habtemariam LW, Zewde ET, Simegn GL. Cervix Type and Cervical Cancer Classification System Using Deep Learning Techniques. Med Devices (Auckl). 2022;15:163-176.
- Kuhn L, Denny L. The time is now to implement HPV testing for primary screening in low resource settings. Prev Med. 2017 May;98:42-44.
- Rauh-Hain JA, Melamed A, Schaps D, Bregar AJ, Spencer R, Schorge JO, Rice LW, Del Carmen MG. Racial and ethnic disparities over time in the treatment and mortality of women with gynecological malignancies. Gynecol Oncol. 2018 Apr;149(1):4-11.
- Wang X, Huang X, Zhang Y. Involvement of Human Papillomaviruses in Cervical Cancer. Front Microbiol. 2018;9:2896.
- Romero-Masters JC, Lambert PF, Munger K. Molecular Mechanisms of MmuPV1 E6 and E7 and Implications for Human Disease. Viruses. 2022 Sep 28;14(10)
- Choi PW, Liu TL, Wong CW, Liu SK, Lum YL, Ming WK. The Dysregulation of MicroRNAs in the Development of Cervical Pre-Cancer-An Update. Int J Mol Sci. 2022 Jun 27;23(13)
- Nowakowski A, Cybulski M, Buda I, Janosz I, Olszak-Wąsik K, Bodzek P, Śliwczyński A, Teter Z, Olejek A, Baranowski W. Cervical Cancer Histology, Staging and Survival before and after Implementation of Organised Cervical Screening Programme in Poland. PLoS One. 2016;11(5):e0155849.
- Lax S. Histopathology of cervical precursor lesions and cancer. Acta Dermatovenerol Alp Pannonica Adriat. 2011 Sep;20(3):125-33
- Jenkins D. Histopathology and cytopathology of cervical cancer. Dis Markers. 2007;23(4):199-212.
- Zhang S, Xu H, Zhang L, Qiao Y. Cervical cancer: Epidemiology, risk factors and screening. Chin J Cancer Res. 2020 Dec 31;32(6):720-728.
- Fowler, J. R., Maani, E. V., Dunton, C. J., Gasalberti, D. P., Jack, B. W., & Miller, J. L. (2023). Cervical Cancer (Nursing). In StatPearls [Internet]. StatPearls Publishing.

سرطانات عنق الرحم: مراجعة محدثة لبروتوكولات التدخل التمريضي

المستخلص:

الخلفية : لا يزال سرطان عنق الرحم يمثل تحديًا صحيًا عالميًا كبيرًا، حيث يحتل المرتبة الرابعة بين أكثر السرطانات شيوعًا بين النساء في جميع أنحاء العالم. يُعزى السبب الرئيسي لهذا السرطان إلى فيروس الورم الحليمي البشري(HPV) ، وهو عدوى منقولة جنسيًا شائعة بين الأفراد النشطين جنسيًا. على الرغم من التقدم في الوقاية والعلاج، لا تزال هناك فجوات في الفحص، والاكتشاف المبكر، وإمكانية الحصول على الرعاية، خاصة بين الفئات السكانية الأكثر عرضة للخطر. تُعد الوقاية الأولية من خلال لقاح فيروس الورم الحليمي البشري والوقاية الثانوية عبر الفحص المنتظم من العوامل الأساسية للحد من عبء سرطان عنق الرحم.

الهدف :تهدف هذه المراجعة إلى تقديم نظرة شاملة ومحدثة حول سرطان عنق الرحم، مع التركيز على المسببات، وعوامل الخطر، والتدخلات التمريضية، واستراتيجيات الرعاية طويلة الأمد لتحسين نتائج المرضى وتقليل الفجوات الصحية.

المنهجية :تستعرض هذه المراجعة أحدث الأدبيات المتعلقة بسرطان عنق الرحم، بما في ذلك البيانات الوبائية، وعوامل الخطر، وأساليب التشخيص، وخيارات العلاج، وبروتوكولات الإدارة التمريضية. يتم التركيز على الممارسات المستندة إلى الأدلة في مجالات الوقاية، والفحص، والرعاية المتمحورة حول المريض.

النتائج بيمكن الوقاية من سرطان عنق الرحم إلى حد كبير من خلال التطعيم ضد فيروس الورم الحليمي البشري والفحص المنتظم. ومع ذلك، فإن العوائق مثل نقص الوعي، والوصمة الثقافية، والتفاوت في الحصول على الرعاية الصحية تحد من جهود الوقاية. تلعب التدخلات التمريضية، بما في ذلك تثقيف المرضى، وإدارة الأعراض، والتنسيق في تقديم الرعاية، دورًا حاسمًا في تحسين النتائج. يعد التعاون متعدد التخصصات ووضع خطط رعاية طويلة الأمد أمرًا ضروريًا لتلبية الاحتياجات الجسدية والعاطفية والنفسية الا للمرضى خلال رحلة العلاج من السرطان.

الخاتمة :يتطلب التعامل الفعّال مع سرطان عنق الرحم نهجًا شاملاً يدمج الوقاية، والاكتشاف المبكر، والرعاية المتمحورة حول المريض. يلعب الممرضون دورًا أساسيًا في تقديم التثقيف، والدعم، والمناصرة للحد من التفاوتات وتعزيز جودة حياة المرضى. ينبغي أن تركز الجهود المستقبلية على توسيع نطاق الوصول إلى التطعيم، والفحص، والرعاية الحساسة ثقافيًا للحد من العبء العالمي لسرطان عنق الرحم.

الكلمات المفتاحية :سرطان عنق الرحم، فيروس الورم الحليمي البشري، التدخلات التمريضية، الوقاية، الفحص، الرعاية طويلة الأمد، التفاوتات الصحية، الرعاية المتمحورة حول المريض.