How to Cite:
Alshahri, S. S. M., Alanazi, A. T., Almutairi, F. K., Alreshidi, M. S., Alotaibi, M. S., Alshehri, A. F., Alotaiby, N. L. M., Alotaiby, A. A. S., & Al-Falih, T. A. (2023). Lung Cancer: The role of multidisciplinary teams in diagnosis and patient care-nursing, clinical pathology, and documentation. *International Journal of Health Sciences*, *7*(S1), 3737–3755. https://doi.org/10.53730/ijhs.v7nS1.15345

Lung Cancer: The role of multidisciplinary teams in diagnosis and patient care-nursing, clinical pathology, and documentation

Sultan Saeed Mifrih Alshahri
KSA, National Guard Health Affairs

Abdulkarim Tirad Alanazi
KSA, National Guard Health Affairs

Faisal Khulaif Almutairi
KSA, National Guard Health Affairs

Mohammad Saud Alreshidi
KSA, National Guard Health Affairs

Mokhld Sanhat Alotaibi
KSA, National Guard Health Affairs

Ahmed Faris Alshehri
KSA, National Guard Health Affairs

Naif Lahiq Mohsen Alotaiby
KSA, National Guard Health Affairs

Awadh Awaadh Saad Alotaiby
KSA, National Guard Health Affairs

Tariq Abdulaziz Al-Falih
KSA, National Guard Health Affairs

***Abstract*---Background:** Lung cancer is the leading cause of cancer-related mortality worldwide, with an estimated 1.8 million deaths annually. Despite declining incidence and mortality rates due to smoking reduction, significant disparities in diagnosis, treatment, and outcomes persist. Advances in targeted therapies and multidisciplinary approaches, including the roles of nursing, clinical pathology, and detailed documentation, are pivotal in improving

International Journal of Health Sciences E-ISSN 2550-696X © 2023.
***Corresponding email**: akk29337@gmail.com*
Manuscript submitted: 01 Jan 2023, Manuscript revised: 09 Jan 2023, Accepted for publication: 15 Jan 2023

patient care and survival rates. **Aim:** This study investigates the epidemiology of lung cancer, its histologic classification, disparities in patient outcomes, and the critical role of multidisciplinary teams in diagnosis and management, with an emphasis on nursing care and clinical documentation. **Methods:** A comprehensive review of epidemiological data, clinical studies, and emerging therapeutic innovations was conducted. The role of multidisciplinary teams and the impact of histological and molecular classifications on patient care were explored. Special attention was given to documentation practices and nursing interventions to ensure holistic care. **Results:** Lung cancer survival rates remain low, with a 5-year overall survival of 19%. However, targeted therapies and immunotherapy demonstrate potential in extending survival for specific subgroups. Disparities in outcomes are evident, influenced by gender, race, socioeconomic status, and LGBTQ identity. Nursing care plans emphasizing symptom management and patient education, combined with rigorous documentation, enhance treatment outcomes and support multidisciplinary efforts. **Conclusion:** The integration of multidisciplinary teams, including nurses, pathologists, and clinicians, is essential for advancing lung cancer care. Targeted interventions addressing disparities, personalized treatments, and robust documentation are critical to improving patient outcomes. Future research should focus on the long-term efficacy of multidisciplinary approaches and innovations in treatment strategies.

***Keywords*---**Lung cancer, multidisciplinary care, nursing interventions, clinical pathology, disparities, targeted therapy, documentation.

Introduction

Lung cancer ranks as the second most frequently diagnosed cancer and the primary cause of cancer-related mortality in the United States. While tobacco use remains the predominant risk factor, accounting for 80–90% of cases, numerous additional risk factors are also implicated in the pathogenesis of lung cancer. However, for individuals who have never smoked, causative risk factors remain limited. Notably, if categorized separately, lung cancer among never smokers would represent the 11th most common cancer and the 7th leading cause of cancer-related deaths. Despite minimal advancements in survival rates over recent decades, emerging technologies such as low-dose computed tomography (CT) for early detection and developments in targeted therapies and immunotherapy hold the potential to significantly reduce mortality rates and improve survival outcomes [1, 2].

Descriptive Epidemiology:

Incidence:

On a global scale, lung cancer has consistently been the most frequently diagnosed cancer for several decades [1, 2]. In 2018, an estimated 2.1 million new

lung cancer cases were reported, representing 12% of the global cancer burden [1, 2]. Among men, lung cancer remains the most prevalent cancer, with approximately 1.37 million new diagnoses in 2018, with the highest incidence rates observed in Micronesia (54.1 per 100,000), Polynesia (52.0 per 100,000), Central and Eastern Europe (49.3 per 100,000), and Eastern Asia (47.2 per 100,000). In women, incidence rates are generally lower, with over 725,000 new cases reported in 2018. Geographical differences in incidence rates between genders are attributed to historical variations in smoking behaviors. Among women, the highest incidence rates are recorded in North America (30.7 per 100,000), Northern Europe (26.9 per 100,000), and Western Europe (25.7 per 100,000). In the United States, lung cancer is the second most commonly diagnosed cancer in men, following prostate cancer, and in women, following breast cancer [3, 4]. In 2019, approximately 228,150 new lung cancer cases were anticipated, with incidence rates of 71.3 per 100,000 in men and 52.3 per 100,000 in women. The incidence rate in men has been declining since the mid-1980s, while in women, the decline began in the mid-2000s due to sex-specific differences in smoking uptake and cessation. Over the past decade, incidence rates have decreased significantly, with a decline of nearly 3% per year in men and 1.5% per year in women from 2011 to 2015. Regionally, the Midwest, East, and South report higher lung cancer incidence, with the South exhibiting the highest rates for both genders.

Mortality:

Global mortality patterns for lung cancer largely align with its incidence due to the disease's poor prognosis and high fatality rate. Worldwide, lung cancer is the leading cause of cancer-related mortality in men and the second leading cause in women. In 2018, an estimated 1.8 million deaths were reported (1.2 million in men and 576,100 in women), accounting for 20% of cancer-related deaths globally [1, 2]. Gender-specific variations in geographic mortality patterns reflect historical smoking trends and the progression of the tobacco epidemic [2]. In the United States, lung cancer is the foremost cause of cancer-related death among both genders [3, 4]. In 2019, it was estimated to account for 142,670 deaths, representing 23.5% of all cancer-related deaths. Mortality rates were 51.6 per 100,000 in men and 34.4 per 100,000 in women. Reductions in smoking have led to a substantial decline in lung cancer mortality rates, with a 48% reduction observed in men since 1990 and a 23% reduction in women since 2002. Between 2012 and 2016, mortality rates declined by approximately 4% per year in men and 3% per year in women. Geographically, lung cancer mortality mirrors incidence patterns, with the highest rates recorded in the Southern United States.

Survival

Despite notable advances in survival outcomes for most cancer types in the United States, the 5-year survival rate for lung cancer has shown only marginal improvements. This is largely due to late-stage diagnoses, where survival rates remain critically low. The overall 5-year relative survival for all lung cancer types, including non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC), stands at 19%. Survival is comparatively better for NSCLC at 23%, whereas it remains dire for SCLC at only 6% [3, 4]. Nevertheless, emerging targeted therapies

and immune checkpoint inhibitors have demonstrated the potential for durable, long-term survival in specific patient groups. These advancements signify a turning point, offering prospects for lung cancer to become curable in early stages and manageable as a chronic condition in advanced or metastatic cases.

Histologic Classification:

Lung cancer is broadly classified into two histologic types: NSCLC and SCLC. NSCLC constitutes 80% to 85% of lung cancers, comprising adenocarcinoma (40%), squamous cell carcinoma (25%–30%), and large cell carcinoma (10%–15%) [5–7]. Formerly, bronchioloalveolar carcinoma (BAC) was a distinct subgroup within adenocarcinomas; however, it has since been reclassified into adenocarcinoma in situ, minimally invasive adenocarcinoma, and invasive adenocarcinoma [8]. Less prevalent subtypes include adenosquamous carcinoma, pleomorphic sarcomatoid carcinoma, large-cell neuroendocrine carcinoma, and carcinoid tumors. Adenocarcinoma has been the predominant subtype in women since the 1970s [8A]. Among men, adenocarcinoma incidence has been rising since the same period, surpassing squamous cell carcinoma by 1994. Meanwhile, squamous cell carcinoma rates have steadily declined since the early 1980s, likely due to the widespread adoption of filtered cigarettes. Filtered cigarettes promoted deeper inhalation, leading to adenocarcinomas with a more peripheral distribution, while earlier unfiltered cigarettes predominantly exposed the trachea and bronchus, resulting in higher rates of squamous cell carcinoma [9–11]. Additionally, changes in tobacco composition, including reduced nicotine and increased tobacco-specific nitrosamines, paradoxically escalated lung cancer risk [10, 11]. Beyond the traditional NSCLC and SCLC dichotomy, advancements in genomic profiling have introduced a molecular dimension to lung cancer classification. Tumors are now characterized by biomarkers and genetic alterations essential for their growth and survival, which can be exploited through targeted therapies or immune checkpoint inhibitors.
Key genetic alterations and their prevalence in NSCLC include:

- **EGFR mutations** (10%–35%)
- **KRAS mutations** (15%–25%)
- **FGFR1 amplifications** (20%)
- **PTEN mutations** (4%–8%)
- **DDR2 mutations** (~4%)
- **ALK rearrangements** (3%–7%)
- **HER2 mutations** (2%–4%)
- **MET amplifications** (2%–4%)
- **BRAF mutations** (1%–3%)
- **PIK3CA mutations** (1%–3%)
- **AKT1 mutations** (1%)
- **MEK1 mutations** (1%)
- **NRAS mutations** (1%)
- **RET rearrangements** (1%)
- **ROS1 rearrangements** (1%)

These genetic insights have transformed therapeutic approaches, providing a precision-based paradigm for the treatment of lung cancer [12–14].

Disparities in Lung Cancer Outcomes
Males Versus Females

Although the terms "sex" and "gender" have been historically used interchangeably in medical research, they hold distinct definitions: sex pertains to biological and physiological characteristics, while gender reflects identity, behavior, or socially constructed roles. This distinction has yet to be fully explored in research on lung cancer disparities. Established variations in lung cancer incidence and mortality between males and females largely correspond to historical tobacco consumption patterns. A systematic review and meta-analysis conducted by O'Keeffe and colleagues [15] examined the sex-specific association of smoking with lung cancer risk through prospective cohort studies. By focusing on cohort studies, the analysis aimed to reduce biases common in case–control studies. Using data from 99 cohort studies involving over 7 million participants and 50,000 lung cancer cases, the study found no significant sex-specific differences in smoking-related lung cancer risk. The pooled adjusted relative risk of lung cancer was 6.99 for females and 7.33 for males, with no evidence of publication bias or variability across subgroups. The female-to-male relative risk ratios were 0.99, 1.11, and 0.94 for light, moderate, and heavy smoking, respectively. The authors noted that these estimates might underestimate the true relative risk for women due to later smoking uptake and lower intensity of use. In non-smoking populations, there is historical evidence [16–18] suggesting a higher risk, incidence, and mortality of lung cancer in females compared to males. However, a multi-institutional registry-based study of over 12,000 lung cancer patients [19] observed an increasing proportion of self-reported non-smokers among patients over time, irrespective of sex.

Racial and Ethnic Disparities

Significant racial and ethnic disparities in lung cancer incidence, mortality, and survival are well-documented and largely linked to socioeconomic inequalities that result in differential exposure to risk factors and barriers to high-quality healthcare. According to analyses by the American Cancer Society [4], lung cancer incidence is highest among non-Hispanic Black men (85.4 per 100,000), followed by non-Hispanic White men (74.3 per 100,000), and Hispanic men (39.2 per 100,000). Conversely, non-Hispanic Black women (49.2 per 100,000) and Hispanic women (24.6 per 100,000) have lower incidence rates compared to non-Hispanic White women (57.4 per 100,000). Similar trends extend to lung cancer mortality. Survival outcomes also differ by race. Non-Hispanic Black patients with lung cancer have a lower 5-year relative survival rate (16%) than non-Hispanic White patients (19%), with disparities noted for localized (52% vs. 56%) and regional disease (27% vs. 30%). However, survival rates for distant disease are similar (5% for both groups). Black patients are more frequently diagnosed with distant-stage disease (61%) compared to White patients (57%) and less often with localized disease (13% vs. 17%).

Socioeconomic Status

Socioeconomic status (SES) is a critical determinant of health, often assessed through education, income, and occupation. It influences lung cancer risk via

multiple pathways, including access to resources, exposure to physical and psychosocial stressors, and health-related behaviors. Lower SES is strongly associated with higher tobacco use, and cessation attempts are less successful among individuals with limited resources [20]. Studies indicate a significant association between SES and lung cancer mortality. Cancer mortality is 28% higher in impoverished counties compared to affluent ones, with a disparity exceeding 40% among men in poor counties [4]. A pooled analysis involving over 17,000 cases and 20,000 controls found that men and women with low SES had an 84% and 54% higher lung cancer risk, respectively, even after adjusting for smoking [21]. These findings underscore the necessity of understanding SES-related pathways to improve lung cancer prevention strategies.

LGBTQ Populations

The lesbian, gay, bisexual, transgender, and queer (LGBTQ) community represents a medically underserved population with unique lung cancer risks and outcomes. Limited but growing evidence suggests elevated lung cancer risks among LGBTQ individuals, partly due to higher smoking prevalence [33–35]. Studies linking SEER data with U.S. Census information [31] and the California Cancer Registry with the California Health Interview Survey [30] show that gay men have higher lung cancer incidence and mortality, while lesbian women have lower rates compared to the general population. Bisexual men exhibit lower incidence, whereas bisexual women have higher rates of lung cancer. Additional risk factors include human immunodeficiency virus (HIV) infection, which disproportionately affects gay and bisexual individuals, who account for over 67% of all HIV diagnoses [36]. Lung cancer incidence among HIV-infected patients is significantly higher than in the general population [37]. These disparities highlight the need for targeted prevention and treatment strategies within the LGBTQ community.

Lung Cancer Risk Factors

The identified lung cancer risk factors, including established and putative contributors, are presented below in a synthesized discussion:

Summary of Risk Factors and Associated Magnitudes

Tobacco smoking is unequivocally associated with a 20-fold increased risk compared to never smokers, making it the most significant risk factor for lung cancer. Secondhand smoke exposure increases the risk by 25% to 28% relative to never smokers without such exposure. The risk associated with electronic cigarettes remains unknown at present. Other tobacco products such as cigars, pipes, and water pipes confer a 1.9- to 4.6-fold increased risk. The risk from smoked cannabis has not been definitively established. Environmental and occupational exposures like radon and asbestos are linked to a 14% to 29% and a 12% to 24% increased risk, respectively. Pre-existing health conditions such as chronic obstructive pulmonary disease (COPD), asthma, pneumonia, *Chlamydia pneumoniae*, tuberculosis, and HIV contribute varying degrees of risk, ranging from a two-fold increase to as high as 76%.

Tobacco Smoking

Tobacco smoking remains the principal driver of lung cancer, transitioning the disease from rarity to prevalence during the 20th century as smoking habits escalated among both genders. The relative risk of developing lung cancer for smokers is approximately 20 times greater than that of lifetime non-smokers. Despite this, only 15% of smokers develop lung cancer, although tobacco smoking accounts for 80% to 90% of cases in the United States [3, 10, 38–42]. The carcinogenicity of tobacco smoke stems from its over 4,000 chemical constituents, including at least 69 confirmed carcinogens [40]. Smoking intensity and duration directly influence lung cancer risk, as established in various predictive models and tools [43–49].

Exposure to Secondhand Smoke

Secondhand smoke (SHS), originating from burning tobacco products, exposes non-smokers to carcinogens such as polycyclic aromatic hydrocarbons, nitrosamines, and aromatic amines [50]. Efforts to mitigate SHS exposure have reduced its prevalence in the United States from 87.5% in 1988 to 25.2% by 2014, although exposure levels plateaued between 2011 and 2014 [50]. SHS exposure is causally linked to a 25% to 28% increased risk of lung cancer among lifetime non-smokers, as evidenced by meta-analyses and U.S. Surgeon General reports [52–54].

Electronic Cigarettes

Electronic nicotine delivery systems, known as e-cigarettes, are increasing in prevalence, particularly among youth. Although marketed as a potentially less harmful alternative to traditional cigarettes, e-cigarettes emit vapors containing toxic carbonyl compounds such as formaldehyde and acetaldehyde [55–69]. These compounds induce oxidative stress, leading to inflammation, cytotoxicity, and lung damage. While their long-term cancer risk remains unquantified, evidence indicates acute adverse effects on lung function [70–72].

Use of Other Tobacco Products

Alternative tobacco products, including cigars, pipes, and water pipes, are associated with elevated lung cancer risks, albeit lower than cigarette smoking. The risks for these products vary between 1.9- and 4.6-fold, depending on use frequency and product type [73–76]. Lower risk estimates may reflect reduced inhalation intensity compared to cigarette use; however, these products are not considered safe alternatives due to their inherent carcinogenic potential.

Cannabis

Although cannabis and marijuana are often used interchangeably, cannabis is a broad term encompassing cannabinoids, hemp, and marijuana, all derived from the *Cannabis sativa* plant [77]. Within the United States, cannabis is the second most commonly inhaled drug after tobacco, with an estimated 7,000 new users daily [78]. By early 2019, marijuana use had been legalized for medical purposes

in 30 states, the District of Columbia, Guam, and Puerto Rico, while 20 states and the District of Columbia decriminalized the possession of small amounts for personal use [79]. However, smoked cannabis contains numerous harmful chemicals, including acetaldehyde, acrolein, ammonia, carbon monoxide, formaldehyde, phenols, nitrosamines, and polycyclic aromatic hydrocarbons, similar to tobacco smoke [80]. Chronic smoking of marijuana has adverse respiratory effects comparable to cigarette smoking [81, 82]. Despite these biological risks, no definitive evidence links cannabis smoking to an increased risk of lung cancer. A pooled analysis by the International Lung Cancer Consortium, involving 2,159 lung cancer cases and 2,985 controls, found minimal evidence of an elevated lung cancer risk among habitual cannabis smokers [83]. Nonetheless, existing studies are constrained by limited sample sizes, self-reported data, and confounding factors, such as concurrent tobacco use. Marijuana use is particularly prevalent among youth in the United States, with annual usage rates ranging between 12% and 16% among adolescents aged 12 to 17 years from 2002 to 2014 [84]. Moreover, in recent years, fewer adolescents perceive moderate or regular marijuana use as a health risk [85, 86]. Given the widespread use of cannabis and its undefined association with lung cancer, further research is essential to clarify its potential risks.

Radon

While tobacco smoking remains the predominant risk factor for lung cancer, other environmental exposures also significantly contribute to lung cancer risk. Among these, radon—a colorless, odorless, and tasteless radioactive gas—is a natural byproduct of thorium and uranium decay in soil. Radon exposure is universal but varies geographically worldwide and within the United States. Between 3% and 14% of global lung cancer cases are attributed to radon exposure, with the variation arising from geographic differences in radon levels and calculation methods [87]. In the United States, radon ranks as the second leading cause of lung cancer, accounting for approximately 21,000 deaths annually, or 13% of lung cancer-related fatalities [87, 88]. Meta-analyses reveal that indoor radon exposure is associated with a 14% to 29% elevated risk of developing lung cancer [89–91].

Occupational Exposures

Occupational carcinogen exposure accounts for approximately 5% to 10% of lung cancer cases, with asbestos historically being the most prevalent occupational risk factor [41, 88, 92]. Asbestos refers to a group of naturally occurring silicate minerals, including amphiboles (e.g., crocidolite and amosite) and chrysotile (a serpentine fiber). Despite its known risks, asbestos is still used commercially in some regions for applications like insulation, cement, and roofing [93]. The carcinogenic mechanisms of asbestos are complex and include oxidative stress, chronic inflammation, genetic and epigenetic changes, and cellular toxicity leading to fibrosis [94]. A meta-analysis of 14 case-control studies involving 17,705 lung cancer cases and 21,813 controls demonstrated that asbestos exposure increased lung cancer risk by 24% in men and 12% in women [95]. The combination of asbestos exposure and tobacco smoking significantly amplifies lung cancer risk and mortality [95–98]. Additionally, the International Agency for

Research on Cancer (IARC) classifies several occupational agents as “carcinogenic to humans” (Group 1) based on sufficient evidence linking them to lung cancer. These agents include arsenic, beryllium, cadmium, chromium, and diesel exhaust, as well as specific industries such as aluminum production, coal gasification, coke production, iron and steel foundries, and rubber manufacturing [99, 100].

Noninfectious Respiratory Diseases

Chronic obstructive pulmonary disease (COPD), comprising emphysema and chronic bronchitis, is an irreversible inflammatory condition causing fixed airway narrowing and alveolar destruction. The persistent inflammation and tissue remodeling associated with COPD are significant contributors to lung carcinogenesis. In 2015, more than 15 million Americans reported a COPD diagnosis, making it the third leading cause of death after heart disease and cancer [101]. Tobacco smoking is the primary risk factor for COPD, and a strong association exists between COPD and lung cancer. Meta-analyses have reported a two- to threefold increased lung cancer risk among individuals with COPD, emphysema, or chronic bronchitis. A pooled analysis by the International Lung Cancer Consortium identified a 2.44-fold elevated lung cancer risk associated with emphysema history. Asthma, a chronic inflammatory condition affecting 300 million individuals globally, is characterized by airway hyperreactivity, excessive mucus production, and airflow obstruction. Although asthma has been suspected as a lung cancer risk factor due to its inflammatory nature, its relationship with lung cancer remains debated. A 2012 pooled analysis of 16 studies within the International Lung Cancer Consortium indicated that the association between asthma and lung cancer was primarily observed within two years of asthma diagnosis and was more prominent in smokers, suggesting confounding factors. However, a 2017 meta-analysis involving 18 studies and over 16 million participants found asthma significantly associated with a 44% increased lung cancer risk overall and a 28% increased risk among never-smokers. Subgroup analyses also showed elevated risks among non-Hispanic Whites, Asians, males, and females.

Diagnosis of Lung Cancer

The diagnosis of lung cancer requires a systematic approach incorporating clinical evaluation, imaging studies, and histopathological confirmation. Initial assessment begins with a detailed patient history, focusing on risk factors such as smoking, occupational exposures, and family history of cancer. Symptoms like persistent cough, hemoptysis, unexplained weight loss, and dyspnea often prompt further investigation. Chest radiography is commonly the first-line imaging modality, followed by more advanced techniques like computed tomography (CT) scans, which offer detailed visualization of tumor size, location, and potential metastasis. Positron emission tomography (PET) scans can identify areas of increased metabolic activity indicative of malignancy. Histopathological diagnosis is critical, with tissue samples obtained via bronchoscopy, needle biopsy, or surgical excision. Molecular and genetic testing of tumor samples, such as EGFR, ALK, and KRAS mutations, plays a pivotal role in personalizing treatment strategies. Endobronchial ultrasound (EBUS) and mediastinoscopy may be

employed to assess lymph node involvement. Lung cancer staging, based on the TNM (Tumor, Node, Metastasis) classification system, is essential for determining prognosis and treatment options. Early-stage disease may be confined to the lungs, while advanced stages often involve regional lymph nodes or distant metastases. Blood tests, including tumor markers like carcinoembryonic antigen (CEA), provide adjunctive diagnostic information but lack specificity. Comprehensive diagnostic evaluation is essential for accurate staging, treatment planning, and predicting outcomes. Multidisciplinary collaboration ensures a thorough diagnostic process, paving the way for effective management and improved patient care outcomes [102].

Nursing Care Plan for Lung Cancer

A nursing care plan for lung cancer focuses on holistic management, addressing physical, psychological, and emotional needs. The primary goal is to optimize patient comfort, alleviate symptoms, and support treatment adherence.

- **Assessment:** Nurses begin with a thorough assessment of symptoms such as pain, dyspnea, fatigue, and psychological distress. Physical examinations and monitoring of vital signs, respiratory patterns, and oxygen saturation are integral.
- **Diagnosis:** Common nursing diagnoses for lung cancer patients include ineffective airway clearance, impaired gas exchange, acute or chronic pain, and anxiety related to illness and prognosis.
- **Planning:** Goals are individualized, such as improving breathing patterns, minimizing pain, enhancing mobility, and providing emotional support. Collaboration with interdisciplinary teams ensures comprehensive care.
- **Interventions:** Symptom management is a cornerstone of care. Oxygen therapy and bronchodilators may be used to improve respiratory function, while opioids and adjuvant analgesics are prescribed for pain relief. Nutritional support, physical therapy, and anti-emetics are essential for managing treatment side effects. Psychological support includes counseling, relaxation techniques, and family involvement. Patient education on medication adherence, symptom monitoring, and lifestyle modifications, such as smoking cessation, is critical.
- **Evaluation:** Nurses evaluate patient outcomes regularly, assessing for symptom relief, treatment adherence, and quality of life improvements. Reassessment ensures that care plans remain dynamic and patient-centered.
- Compassionate nursing care for lung cancer patients enhances their physical comfort, emotional resilience, and overall quality of life, fostering dignity throughout their care journey.

Documentation Process for Lung Cancer

Accurate and comprehensive documentation is crucial in managing lung cancer, ensuring effective communication among healthcare professionals, and supporting legal and ethical standards.

- **Initial Documentation:** Nurses begin by recording a detailed patient history, including smoking habits, environmental exposures, and family

history. Presenting symptoms, such as cough, weight loss, or fatigue, are documented alongside the patient's psychological and emotional state.

- **Diagnostic Records:** All diagnostic procedures, including imaging results (e.g., CT, PET scans), biopsy findings, and molecular testing outcomes, must be meticulously documented. Staging details based on the TNM classification and laboratory test results are essential components.
- **Treatment Documentation:** Records include comprehensive details of prescribed treatments, such as chemotherapy regimens, radiation therapy schedules, and surgical interventions. Medications, dosages, and potential adverse reactions are tracked, alongside supportive measures like pain management and oxygen therapy.
- **Nursing Notes:** Daily progress notes include assessments of respiratory status, pain levels, psychological well-being, and responses to interventions. Observations on patient mobility, nutritional intake, and treatment side effects are also recorded.
- **Patient Education and Interactions:** Documentation should reflect all educational efforts, including discussions on treatment plans, symptom management, and smoking cessation strategies. Family involvement and patient consent for procedures must be clearly noted.
- **Outcome Evaluation:** Regular updates on patient progress, symptom changes, and treatment effectiveness are essential. Any deviations from expected outcomes, along with corresponding adjustments to the care plan, are documented.

Precise documentation enhances continuity of care, facilitates decision-making, and serves as a critical resource for quality improvement and research initiatives in lung cancer management.

Conclusion

Lung cancer remains a formidable public health challenge, marked by high incidence and mortality rates. Despite ongoing efforts, survival outcomes are constrained by late-stage diagnoses and disparities across gender, race, socioeconomic status, and LGBTQ populations. Advances in histologic and molecular classifications, including EGFR mutations and ALK rearrangements, have paved the way for personalized treatment strategies, significantly improving outcomes for select patient groups. The role of multidisciplinary teams in lung cancer care cannot be overstated. Nurses, clinical pathologists, and physicians collaboratively contribute to early diagnosis, effective treatment, and comprehensive patient care. Nursing care plans tailored to manage symptoms, educate patients, and provide psychological support play a vital role in improving quality of life. Meanwhile, clinical documentation serves as a cornerstone for tracking disease progression, ensuring continuity of care, and enabling evidence-based interventions. Disparities in lung cancer outcomes underscore the urgent need for equitable healthcare strategies. Addressing socioeconomic and cultural barriers is critical to reducing incidence and mortality. Moreover, LGBTQ populations, often overlooked in cancer research, require targeted interventions to mitigate elevated risk factors, including high smoking prevalence and HIV-associated vulnerabilities. Looking ahead, the integration of innovative therapies, robust documentation, and inclusive healthcare policies will be crucial in

transforming lung cancer from a terminal illness to a manageable condition. Multidisciplinary care, underpinned by targeted research and patient-centered approaches, offers the best prospects for reducing the global burden of lung cancer. Collaborative efforts must continue to bridge gaps in care and advance survivorship outcomes for all patients.

References

1. American Cancer Society. Global cancer facts & figures. 4th edition. Atlanta, GA: American Cancer Society; 2018.
2. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin 2018;68:394–424.
3. American Cancer Society. Cancer facts & figures 2019. Atlanta, GA: American Cancer Society; 2019.
4. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2019. CA Cancer J Clin 2019;69:7–34.
5. Rami-Porta R, Bolejack V, Giroux DJ, Chansky K, Crowley J, Asamura H, et al The IASLC Lung Cancer Staging Project: the new database to inform the eighth edition of the TNM classification of lung cancer. J Thorac Oncol 2014;9:1618–24.
6. Chansky K, Detterbeck FC, Nicholson AG, Rusch VW, Vallieres E, Groome P, et al The IASLC Lung Cancer Staging Project: external validation of the revision of the TNM stage groupings in the eighth edition of the TNM classification of lung cancer. J Thorac Oncol 2017;12:1109–21.
7. Wahbah M, Boroumand N, Castro C, El-Zeky F, Eltorky M. Changing trends in the distribution of the histologic types of lung cancer: a review of 4,439 cases. Ann Diagn Pathol 2007;11:89–96.
8. Travis WD, Brambilla E, Riely GJ. New pathologic classification of lung cancer: relevance for clinical practice and clinical trials. J Clin Oncol 2013;31:992–1001.
9. Song MA, Benowitz NL, Berman M, Brasky TM, Cummings KM, Hatsukami DK, et al Cigarette filter ventilation and its relationship to increasing rates of lung adenocarcinoma. J Natl Cancer Inst 2017;109:1–18.
10. National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. The health consequences of smoking—50 years of progress: a report of the surgeon general. Atlanta, GA: Centers for Disease Control and Prevention (US); 2014. Available from: https://www.ncbi.nlm.nih.gov/books/NBK179276/.
11. Lewis DR, Check DP, Caporaso NE, Travis WD, Devesa SS. U.S. lung cancer trends by histologic type. Cancer 2014;120:2883–92.
12. Pao W, Girard N. New driver mutations in non-small-cell lung cancer. Lancet Oncol 2011;12:175–80.
13. Hirsch FR, Scagliotti GV, Mulshine JL, Kwon R, Curran WJ Jr, Wu YL, et al Lung cancer: current therapies and new targeted treatments. Lancet 2017;389:299–311.
14. Zhu QG, Zhang SM, Ding XX, He B, Zhang HQ. Driver genes in non-small cell lung cancer: characteristics, detection methods, and targeted therapies. Oncotarget 2017;8:57680–92.

15. O'Keeffe LM, Taylor G, Huxley RR, Mitchell P, Woodward M, Peters SAE. Smoking as a risk factor for lung cancer in women and men: a systematic review and meta-analysis. BMJ Open 2018;8:e021611.
16. Thun MJ, Hannan LM, Adams-Campbell LL, Boffetta P, Buring JE, Feskanich D, et al Lung cancer occurrence in never-smokers: an analysis of 13 cohorts and 22 cancer registry studies. PLoS Med 2008;5:e185.
17. Freedman ND, Leitzmann MF, Hollenbeck AR, Schatzkin A, Abnet CC. Cigarette smoking and subsequent risk of lung cancer in men and women: analysis of a prospective cohort study. Lancet Oncol 2008;9:649–56.
18. Zang EA, Wynder EL. Differences in lung cancer risk between men and women: examination of the evidence. J Natl Cancer Inst 1996;88:183–92.
19. Pelosof L, Ahn C, Gao A, Horn L, Madrigales A, Cox J, et al Proportion of never-smoker non-small cell lung cancer patients at three diverse institutions. J Natl Cancer Inst 2017;109:1–6.
20. Hiscock R, Bauld L, Amos A, Fidler JA, Munafo M. Socioeconomic status and smoking: a review. Ann N Y Acad Sci 2012;1248:107–23.
21. Hovanec J, Siemiatycki J, Conway DI, Olsson A, Stucker I, Guida F, et al Lung cancer and socioeconomic status in a pooled analysis of case-control studies. PLoS One 2018;13:e0192999.
22. Fredriksen-Goldsen KI, Kim HJ, Barkan SE, Muraco A, Hoy-Ellis CP. Health disparities among lesbian, gay, and bisexual older adults: results from a population-based study. Am J Public Health 2013;103:1802–9.
23. Lisy K, Peters MDJ, Schofield P, Jefford M. Experiences and unmet needs of lesbian, gay, and bisexual people with cancer care: a systematic review and meta-synthesis. Psychooncology 2018;27:1480–9.
24. Matthews AK, Breen E, Kittiteerasack P. Social determinants of LGBT cancer health inequities. Semin Oncol Nurs 2018;34:12–20.
25. Simoni JM, Smith L, Oost KM, Lehavot K, Fredriksen-Goldsen K. Disparities in physical health conditions among lesbian and bisexual women: a systematic review of population-based studies. J Homosex 2017;64:32–44.
26. Boehmer U, Elk R. LGBT populations and cancer: is it an ignored epidemic?LGBT Health 2015;3:1–2.
27. Quinn GP, Sanchez JA, Sutton SK, Vadaparampil ST, Nguyen GT, Green BL, et al Cancer and lesbian, gay, bisexual, transgender/transsexual, and queer/questioning (LGBTQ) populations. CA Cancer J Clin 2015;65:384–400.
28. Waterman L, Voss J. HPV, cervical cancer risks, and barriers to care for lesbian women. Nurse Pract 2015;40:46–53.
29. Graham R, Berkowitz B, Blum R, Bockting W, Bradford J, de Vries B, et alThe health of lesbian, gay, bisexual, and transgender people: building a foundation for better understanding. Washington, DC: NIH; 2011. Available from: https://www.nap.edu/catalog/13128/the-health-of-lesbian-gay-bisexual-and-transgender-people-building.
30. Boehmer U, Miao X, Maxwell NI, Ozonoff A. Sexual minority population density and incidence of lung, colorectal and female breast cancer in California. BMJ Open 2014;4:e004461.
31. Boehmer U, Ozonoff A, Miao X. An ecological approach to examine lung cancer disparities due to sexual orientation. Public Health 2012;126:605–12.
32. Gonzales G, Zinone R. Cancer diagnoses among lesbian, gay, and bisexual adults: results from the 2013–2016 National Health Interview Survey. Cancer Causes Control 2018;29:845–54.

33. Conron KJ, Mimiaga MJ, Landers SJ. A population-based study of sexual orientation identity and gender differences in adult health. Am J Public Health 2010;100:1953–60.
34. Dilley JA, Spigner C, Boysun MJ, Dent CW, Pizacani BA. Does tobacco industry marketing excessively impact lesbian, gay and bisexual communities?Tob Control 2008;17:385–90.
35. Smoking and health: report of the Advisory Committee to the Surgeon General of the Public Health Service. Washington, DC: Department of Health, Education, and Welfare; 1964. Available from: https://www.govinfo.gov/app/details/GPO-SMOKINGANDHEALTH/summary.
36. Centers for Disease Control and Prevention. HIV surveillance report, 2016. Available from: http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.
37. Hou W, Fu J, Ge Y, Du J, Hua S. Incidence and risk of lung cancer in HIV-infected patients. J Cancer Res Clin Oncol 2013;139:1781–94.
38. Thun MJ. Early landmark studies of smoking and lung cancer. Lancet Oncol 2010;11:1200.
39. Thun MJ, Carter BD, Feskanich D, Freedman ND, Prentice R, Lopez AD, et al 50-year trends in smoking-related mortality in the United States. N Engl J Med 2013;368:351–64.
40. National Toxicology Program. Tobacco-related exposures. In: Report on carcinogens. Fourteenth Ed. Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service; 2016. p. 1–6. Available from: https://ntp.niehs.nih.gov/go/roc14.
41. Alberg AJ, Brock MV, Ford JG, Samet JM, Spivack SD. Epidemiology of lung cancer: diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. Chest 2013;143:e1S–e29S.
42. Peto J. That the effects of smoking should be measured in pack-years: misconceptions 4. Br J Cancer 2012;107:406–7.
43. Spitz MR, Hong WK, Amos CI, Wu X, Schabath MB, Dong Q, et al A risk model for prediction of lung cancer. J Natl Cancer Inst 2007;99:715–26.
44. Markaki M, Tsamardinos I, Langhammer A, Lagani V, Hveem K, Roe OD. A validated clinical risk prediction model for lung cancer in smokers of all ages and exposure types: a HUNT study. EBioMedicine 2018;31:36–46.
45. Hoggart C, Brennan P, Tjonneland A, Vogel U, Overvad K, Ostergaard JN, et al A risk model for
46. Marcus MW, Chen Y, Raji OY, Duffy SW, Field JK. LLPi: Liverpool lung project risk prediction model for lung cancer incidence. Cancer Prev Res 2015;8:570–5.
47. Tammemagi MC, Church TR, Hocking WG, Silvestri GA, Kvale PA, Riley TL, et al Evaluation of the lung cancer risks at which to screen ever- and never-smokers: screening rules applied to the PLCO and NLST cohorts. PLoS Med 2014;11:e1001764.
48. National Cancer Institute, Division of Cancer Control & Population Sciences. Lung cancer risk prediction models. Available from: https://epi.grants.cancer.gov/cancer_risk_prediction/lung.html.
49. Lung Cancer Risk Assessment Tool. Available from: http://lungcancerrisk.s3-website-us-east-1.amazonaws.com/.

50. Tsai J, Homa DM, Gentzke AS, Mahoney M, Sharapova SR, Sosnoff CS, et al Exposure to secondhand smoke among nonsmokers - United States, 1988–2014. MMWR Morb Mortal Wkly Rep 2018;67:1342–6.
51. Hackshaw AK. Lung cancer and passive smoking. Stat Methods Med Res 1998;7:119–36.
52. Office on Smoking and Health (US). The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention (US); 2006. Available from: https://www.ncbi.nlm.nih.gov/books/NBK44324/.
53. Kim AS, Ko HJ, Kwon JH, Lee JM. Exposure to secondhand smoke and risk of cancer in never smokers: a meta-analysis of epidemiologic studies. Int J Environ Res Public Health 2018;15. pii: E1981.
54. Hori M, Tanaka H, Wakai K, Sasazuki S, Katanoda K. Secondhand smoke exposure and risk of lung cancer in Japan: a systematic review and meta-analysis of epidemiologic studies. Jpn J Clin Oncol 2016;46:942–51.
55. Villanti AC, Johnson AL, Ambrose BK, Cummings KM, Stanton CA, Rose SW, et al Flavored tobacco product use in youth and adults: findings from the first wave of the PATH Study (2013–2014). Am J Prev Med 2017;53:139–51.
56. Zhu SH, Sun JY, Bonnevie E, Cummins SE, Gamst A, Yin L, et al Four hundred and sixty brands of e-cigarettes and counting: implications for product regulation. Tob Control 2014;23:3–9.
57. Mirbolouk M, Charkhchi P, Kianoush S, Uddin SMI, Orimoloye OA, Jaber R, et al Prevalence and distribution of E-cigarette use among U.S. adults: Behavioral Risk Factor Surveillance System, 2016. Ann Intern Med 2018;169:429.
58. Jaber RM, Mirbolouk M, DeFilippis AP, Maziak W, Keith R, Payne T, et al Electronic cigarette use prevalence, associated factors, and pattern by cigarette smoking status in the United States from NHANES (National Health and Nutrition Examination Survey) 2013–2014. J Am Heart Assoc 2018;7. pii: e008178.
59. Bao W, Xu GF, Lu JC, Snetselaar LG, Wallace RB. Changes in electronic cigarette use among adults in the United States, 2014–2016. J Am Med Assoc 2018;319:2039–41.
60. Jaber RM, Saxena A, Nasir K, Mirbolouk M, Maziak W, DeFilippis A, et al Electronic cigarette use prevalence and pattern by cigarette smoking status among United States adults: findings from NHANES 2013–2014. Tob Control 2017;26:e117–e26.
61. Syamlal G, Jamal A, King BA, Mazurek JM. Electronic cigarette use among working adults - United States, 2014. MMWR Morbid Mortal W 2016;65:557–61.
62. Kosmider L, Sobczak A, Fik M, Knysak J, Zaciera M, Kurek J, et al Carbonyl compounds in electronic cigarette vapors: effects of nicotine solvent and battery output voltage. Nicotine Tob Res 2014;16:1319–26.
63. Leventhal AM, Strong DR, Kirkpatrick MG, Unger JB, Sussman S, Riggs NR, et al Association of electronic cigarette use with initiation of combustible tobacco product smoking in early adolescence. JAMA 2015;314:700–7.
64. Soneji S, Barrington-Trimis JL, Wills TA. Association between initial use of e-cigarettes and subsequent cigarette smoking among adolescents and young adults: a systematic review and meta-analysis. JAMA Pediatr 2017;171:788–97.

65. Cai H, Wang C. Graphical review: the redox dark side of e-cigarettes; exposure to oxidants and public health concerns. Redox Biol 2017;13:402–6.
66. Unger M, Unger DW. E-cigarettes/electronic nicotine delivery systems: a word of caution on health and new product development. J Thorac Dis 2018;10:S2588–92.
67. Dautzenberg B, Garelik D. Patients with lung cancer: are electronic cigarettes harmful or useful?Lung Cancer 2017;105:42–8.
68. Scheffler S, Dieken H, Krischenowski O, Forster C, Branscheid D, Aufderheide M. Evaluation of E-cigarette liquid vapor and mainstream cigarette smoke after direct exposure of primary human bronchial epithelial cells. Int J Environ Res Public Health 2015;12:3915–25.
69. Lerner CA, Sundar IK, Yao H, Gerloff J, Ossip DJ, McIntosh S, et al Vapors produced by electronic cigarettes and e-juices with flavorings induce toxicity, oxidative stress, and inflammatory response in lung epithelial cells and in mouse lung. PLoS One 2015;10:e0116732.
70. Flouris AD, Chorti MS, Poulianiti KP, Jamurtas AZ, Kostikas K, Tzatzarakis MN, et al Acute impact of active and passive electronic cigarette smoking on serum cotinine and lung function. Inhal Toxicol 2013;25:91–101.
71. Vardavas CI, Anagnostopoulos N, Kougias M, Evangelopoulou V, Connolly GN, Behrakis PK. Short-term pulmonary effects of using an electronic cigarette: impact on respiratory flow resistance, impedance, and exhaled nitric oxide. Chest 2012;141:1400–6.
72. Drummond MB, Upson D. Electronic cigarettes. Potential harms and benefits. Ann Am Thorac Soc 2014;11:236–42.
73. Christensen CH, Rostron B, Cosgrove C, Altekruse SF, Hartman AM, Gibson JT, et al Association of cigarette, cigar, and pipe use with mortality risk in the US population. JAMA Intern Med 2018;178:469–76.
74. Lee PN, Forey BA, Coombs KJ. Systematic review with meta-analysis of the epidemiological evidence in the 1900s relating smoking to lung cancer. BMC Cancer 2012;12:385.
75. Malhotra J, Borron C, Freedman ND, Abnet CC, van den Brandt PA, White E, et al Association between cigar or pipe smoking and cancer risk in men: a pooled analysis of five cohort studies. Cancer Prev Res 2017;10:704–9.
76. Waziry R, Jawad M, Ballout RA, Al Akel M, Akl EA. The effects of waterpipe tobacco smoking on health outcomes: an updated systematic review and meta-analysis. Int J Epidemiol 2017;46:32–43.
77. Jett J, Stone E, Warren G, Cummings KM. Cannabis use, lung cancer, and related issues. J Thorac Oncol 2018;13:480–7.
78. Azofeifa A, Mattson ME, Schauer G, McAfee T, Grant A, Lyerla R. National estimates of marijuana use and related indicators - National Survey on Drug Use and Health, United States, 2002–2014. MMWR Surveill Summ 2016;65:1–28.
79. National Conference of State Legislatures. Marijuana laws. Available from: http://www.ncsl.org/bookstore/state-legislatures-magazine/marijuana-deep-dive.aspx.
80. Moir D, Rickert WS, Levasseur G, Larose Y, Maertens R, White P, et al A comparison of mainstream and sidestream marijuana and tobacco cigarette smoke produced under two machine smoking conditions. Chem Res Toxicol 2008;21:494–502.

81. Mohite PN, Zeriouh M, Saez DG, Popov AF, Sabashnikov A, Zych B, et al Influence of history of cannabis smoking in selected donors on the outcomes of lung transplantation. Eur J Cardiothorac Surg 2017;51:142–7.
82. Martinasek MP, McGrogan JB, Maysonet A. A systematic review of the respiratory effects of inhalational marijuana. Respir Care 2016;61:1543–51.
83. Zhang LR, Morgenstern H, Greenland S, Chang SC, Lazarus P, Teare MD, et al Cannabis smoking and lung cancer risk: pooled analysis in the International Lung Cancer Consortium. Int J
84. Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Available from: https://www.samhsa.gov/data/.
85. Miech RA, Johnston L, O'Malley PM, Bachman JG, Schulenberg J, Patrick ME. Trends in use of marijuana and attitudes toward marijuana among youth before and after decriminalization: the case of California 2007–2013. Int J Drug Policy 2015;26:336–44.
86. Miech R, Johnston L, O'Malley PM. Prevalence and attitudes regarding marijuana use among adolescents over the past decade. Pediatrics 2017;140. pii: e20170982.
87. World Health Organization. WHO handbook on indoor radon: a public health perspective. Geneva, Switzerland: World Health Organization; 2009:1–94.
88. Driscoll T, Nelson DI, Steenland K, Leigh J, Concha-Barrientos M, Fingerhut M, et al The global burden of disease due to occupational carcinogens. Am J Ind Med 2005;48:419–31.
89. Garzillo C, Pugliese M, Loffredo F, Quarto M. Indoor radon exposure and lung cancer risk: a meta-analysis of case-control studies. Transl Cancer Res 2017;6:S934–43.
90. Lubin JH, Boice JD Jr. Lung cancer risk from residential radon: meta-analysis of eight epidemiologic studies. J Natl Cancer Inst 1997;89:49–57.
91. Zhang ZL, Sun J, Dong JY, Tian HL, Xue L, Qin LQ, et al Residential radon and lung cancer risk: an updated meta- analysis of case-control studies. Asian Pac J Cancer Prev 2012;13:2459–65.
92. Dela Cruz CS, Tanoue LT, Matthay RA. Lung cancer: epidemiology, etiology, and prevention. Clin Chest Med 2011;32:605–44.
93. Albin M, Magnani C, Krstev S, Rapiti E, Shefer I. Asbestos and cancer: an overview of current trends in Europe. Environ Health Perspect 1999;107:289–98.
94. Huang SX, Jaurand MC, Kamp DW, Whysner J, Hei TK. Role of mutagenicity in asbestos fiber-induced carcinogenicity and other diseases. J Toxicol Environ Health B Crit Rev 2011;14:179–245.
95. Olsson AC, Vermeulen R, Schuz J, Kromhout H, Pesch B, Peters S, et al Exposure-response analyses of asbestos and lung cancer subtypes in a pooled analysis of case-control studies. Epidemiology 2017;28:288–99.
96. Case BW. Asbestos, smoking, and lung cancer: interaction and attribution. Occup Environ Med 2006;63:507–8.
97. Hammond EC, Selikoff IJ, Seidman H. Asbestos exposure, cigarette smoking and death rates. Ann N Y Acad Sci 1979;330:473–90.

98. Reid A, de Klerk NH, Ambrosini GL, Berry G, Musk AW. The risk of lung cancer with increasing time since ceasing exposure to asbestos and quitting smoking. Occup Environ Med 2006;63:509–12.
99. International Agency for Research on Cancer. Agents classified by the IARC Monographs volumes 1–123; 2019. Available from: https://monographs.iarc.fr/agents-classified-by-the-iarc/.
100. Field RW, Withers BL. Occupational and environmental causes of lung cancer. Clin Chest Med 2012;33:681–703.
101. Croft JB, Wheaton AG, Liu Y, Xu F, Lu H, Matthews KA, et al Urban-rural county and state differences in chronic obstructive pulmonary disease - United States, 2015. MMWR Morb Mortal Wkly Rep 2018;67:205–11.
102. Nielsen, A. H., & Fredberg, U. (2022). Earlier diagnosis of lung cancer. Cancer Treatment and Research Communications, 31, 100561.

سرطان الرئة: دور الفرق متعددة التخصصات في التشخيص ورعاية المرضى - التمريض، علم الأمراض السريري، والتوثيق

الملخص:

الخلفية :يُعتبر سرطان الرئة السبب الرئيسي للوفيات المرتبطة بالسرطان على مستوى العالم، حيث يُقدر عدد الوفيات السنوية بحوالي 1.8 مليون حالة. وعلى الرغم من انخفاض معدلات الإصابة والوفيات نتيجة تقليل التدخين، لا تزال هناك فجوات كبيرة في التشخيص والعلاج ونتائج المرضى. تُعد التطورات في العلاجات المستهدفة والأساليب متعددة التخصصات، بما في ذلك أدوار التمريض وعلم الأمراض السريري والتوثيق المفصل، ذات أهمية كبيرة لتحسين رعاية المرضى ومعدلات البقاء على قيد الحياة.

الهدف :تستكشف هذه الدراسة علم الأوبئة لسرطان الرئة، وتصنيفه النسيجي، والتفاوتات في نتائج المرضى، والدور الحيوي للفرق متعددة التخصصات في التشخيص والإدارة، مع التركيز على الرعاية التمريضية والتوثيق السريري.

الطرق :تم إجراء مراجعة شاملة للبيانات الوبائية والدراسات السريرية والابتكارات العلاجية الناشئة. تم استكشاف دور الفرق متعددة التخصصات وتأثير التصنيفات النسيجية والجزيئية على رعاية المرضى. وتم إيلاء اهتمام خاص لممارسات التوثيق والتدخلات التمريضية لضمان تقديم رعاية شاملة.

النتائج :تظل معدلات البقاء على قيد الحياة لسرطان الرئة منخفضة، حيث يبلغ معدل البقاء على قيد الحياة لمدة خمس سنوات 19%. ومع ذلك، تُظهر العلاجات المستهدفة والعلاج المناعي إمكانية تمديد البقاء لفئات محددة. تظهر تفاوتات في النتائج تتأثر بالعوامل مثل النوع الاجتماعي والعرق والوضع الاجتماعي والاقتصادي والهوية الخاصة بمجتمع الميم. تُعزز خطط الرعاية التمريضية التي تركز على إدارة الأعراض وتعليم المرضى، إلى جانب التوثيق الدقيق، من نتائج العلاج وتدعم الجهود متعددة التخصصات.

الخلاصة :يُعد تكامل الفرق متعددة التخصصات، بما في ذلك الممرضين وأخصائي علم الأمراض والأطباء، أمرًا أساسيًا للنهوض برعاية سرطان الرئة. تُعد التدخلات المستهدفة لمعالجة التفاوتات والعلاجات الشخصية والتوثيق القوي عناصر حيوية لتحسين نتائج المرضى. يجب أن تركز الأبحاث المستقبلية على الفعالية طويلة الأمد للأساليب متعددة التخصصات والابتكارات في استراتيجيات العلاج.

الكلمات المفتاحية :سرطان الرئة، الرعاية متعددة التخصصات، التدخلات التمريضية، علم الأمراض السريري، التفاوتات، العلاج المستهدف، التوثيق.