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НАУЧНЫЕ ОБЗОРЫ

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RESULTS OF THE SURVEY ON AWARENESS OF MEDICAL STUDENTS ABOUT LUNG CANCER

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Annotation. *In the past 2 years, lung cancer research and clinical care have advanced significantly. Advancements in the field have improved outcomes and promise to lead to further reductions in deaths from lung cancer, the leading cause of cancer death worldwide. These advances include identification of new molecular targets for personalized targeted therapy, validation of molecular signatures of lung cancer risk in smokers, progress in lung tumor immunotherapy, and implementation of population-based lung cancer screening with chest computed tomography in the United States. In this review, we highlight recent research in these areas and challenges for the future.*

Keywords: *biomarkers; chest computed tomography screening; lung cancer; lung immunotherapy; targeted therapy.*

РЕЗУЛЬТАТЫ ОПРОСА ОБ ОСВЕДОМЛЕННОСТИ СТУДЕНТОВ МЕДИЦИНСКИХ ВУЗОВ О РАКЕ ЛЕГКИХ

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Аннотация. *За последние 2 года исследования рака легких и клиническая помощь значительно продвинулись вперед. Достижения в этой области улучшили результаты и обещают привести к дальнейшему снижению смертности от рака легких, основной причины смерти от рака во всем мире. Эти достижения включают идентификацию новых молекулярных мишеней для персонализированной таргетной терапии, подтверждение молекулярных сигнатур риска рака легких у курильщиков, прогресс в иммунотерапии опухолей легких и внедрение популяционного скрининга рака легких с помощью компьютерной томографии грудной клетки в Соединенных Штатах. В этом обзоре мы освещаем недавние исследования в этих областях и задачи на будущее.*

Ключевые слова: *биомаркеры; скрининговая компьютерная томография органов грудной клетки; рак легких; иммунотерапия легких; таргетная терапия.*

TIBBIYOT OLIY O'QUV YURLARI TALABALARINING O'PKA SARATONI HAQIDAGI XABARDORLIGI HAQIDAGI SO'ROVNOMA NATIJALARI

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***Annotatsiya.** So'nggi 2 yil ichida o'pka saratoni bo'yicha tadqiqotlar va klinik yordam sezilarli darajada rivojlandi. Sohadagi yutuqlar natijalarni yaxshiladi va butun dunyo bo'ylab saraton o'limining asosiy sababi bo'lgan o'pka saratonidan o'limni yanada kamaytirishga va'da bermoqda. Ushbu yutuqlarga shaxsiylashtirilgan maqsadli terapiya uchun yangi molekulyar maqsadlarni aniqlash, chekuvchilarda o'pka saratoni xavfining molekulyar belgilarini tekshirish, o'pka shishi immunoterapiyasida muvaffaqiyatlar va Qo'shma Shtatlarda ko'krak qafasi kompyuter tomografiyasi bilan aholiga asoslangan o'pka saratoni skriningini amalga oshirish kiradi. Ushbu sharhda biz ushbu sohalaridagi so'nggi tadqiqotlar va kelajakdagi muammolarni ta'kidlaymiz.*

***Kalit so'zlar:** Biomarkerlar; ko'krak qafasining kompyuter tomografiyasini tekshirish; o'pka saratoni; o'pka immunoterapiyasi; maqsadli terapiya.*

Introduction. Lung cancer has been transformed from a rare disease into a global problem and public health issue. The etiologic factors of lung cancer become more complex along with industrialization, urbanization, and environmental pollution around the world. Currently, the control of lung cancer has attracted worldwide attention. Studies on the epidemiologic characteristics of lung cancer and its relative risk factors have played an important role in the tertiary prevention of lung cancer and in exploring new ways of diagnosis and treatment. This article reviews the current evolution of the epidemiology of lung cancer.[1]

Historically, the prognosis for individuals diagnosed with lung cancer has been bleak. However, the past 10 years have seen important advances in treatment and diagnosis which have translated into the first improvements seen in lung cancer survival. This review highlights the major advances in treatments with curative intent, systemic targeted therapies, palliative care and early diagnosis in lung cancer. We discuss the pivotal research that underpins these new technologies/strategies and their current position in clinical practice.[2]

Lung cancer is the world's leading cause of cancer death. Screening for lung cancer by low-dose computed tomography improves mortality. Various modalities exist for diagnosis and staging. Treatment is determined by

subtype and stage of cancer; there are several personalized therapies that did not exist just a few years ago. Caring for the patient with lung cancer is a complex task. This review provides a broad outline of this disease, helping clinicians identify such patients and familiarizing them with lung cancer care options, so they are better equipped to guide their patients along this challenging journey.[3]

Lung cancer presents a major public health issue and an enormous burden on society in China, because of its increasing incidence and high mortality. Several distinct gene profiles were associated with lung cancer in China: high EGFR mutation rate, low KRAS mutation rate and more comorbidity of HBV infection. Thus, local Chinese Society of Clinical Oncology Guidelines with more consideration of drug accessibility, regional development differences were highly recommended for clinical practice. For treatment, targeted therapy has achieved fruitful progress. Immunotherapy in China was a little bit lag behind previously and now there is a surge of immunotherapeutic drugs under investigation. For future, more preventive strategies and more trials considering characteristics of Chinese lung cancer are needed.[4]

Lung cancer is a complex disease composed of diverse histological and molecular types with clinical relevance. The advent of large-scale molecular profiling has been helpful to identify novel molecular targets that can

be applied to the treatment of particular lung cancer patients and has helped to reshape the pathological classification of lung cancer. Novel directions include the immunotherapy revolution, which has opened the door for new opportunities for cancer therapy and is also re-defining the classification of multiple tumors, including lung cancer. In the present chapter, we will review the main current basis of the pathological diagnosis and classification of lung cancer incorporating the histopathological and molecular dimensions of the disease.[5]

Lung cancer is the leading cause of cancer-related death in the United States, with an average five-year survival rate of 15 percent. Smoking remains the predominant risk factor for lung cancer. Lung cancers are categorized as small cell carcinoma or non-small cell carcinoma (e.g., adenocarcinoma, squamous cell carcinoma, large cell carcinoma). These categories are used for treatment decisions and determining prognosis. Signs and symptoms may vary depending on tumor type and extent of metastases. The diagnostic evaluation of patients with suspected lung cancer includes tissue diagnosis; a complete staging work-up, including evaluation of metastases; and a functional patient evaluation. Histologic diagnosis may be obtained with sputum cytology, thoracentesis, accessible lymph node biopsy, bronchoscopy, transthoracic needle aspiration, video-assisted thoracoscopy, or thoracotomy. Initial evaluation for metastatic disease relies on patient history and physical examination, laboratory tests, chest computed tomography, positron emission tomography, and tissue confirmation of mediastinal involvement. Further evaluation for metastases depends on the clinical presentation. Treatment and prognosis are closely tied to the type and stage of the tumor identified. For stages I through IIIA non-small cell carcinoma, surgical resection is preferred. Advanced non-small cell carcinoma is treated with a multimodality approach that may include radiotherapy, chemotherapy, and palliative care. Chemotherapy (combined with radiotherapy for limited disease) is the mainstay of treatment for small cell carcinoma. No major organization recommends screening for early detection of lung cancer, although screening has interested researchers and physicians.

Smoking cessation remains the critical component of preventive primary care.[6,9]

The understanding of genetic alterations that drive non-small cell lung cancer (NSCLC) is evolving. As many of these molecularly-defined subtypes are potentially actionable, new strategies in molecular diagnostics and targeted therapies in NSCLC to detect and treat them are being explored. At the International Association for Study of Lung Cancer 19th World Conference, several abstracts and oral presentations related to this topic. In this report, we discuss some of these updates.[7]

Lung cancer is the most common cause of cancer-related death worldwide, less than 7% of patients survive 10 years following diagnosis across all stages of lung cancer. Late stage of diagnosis and lack of effective and personalized medicine reflect the need for a better understanding of the mechanisms that underlie lung cancer progression. Quantitative proteomics provides the relative different protein abundance in normal and cancer patients which offers the information for molecular interactions, signaling pathways, and biomarker identification. Here we introduce both theoretical and practical applications in the use of quantitative proteomics approaches, with principles of current technologies and methodologies including gel-based, label free, stable isotope labeling as well as targeted proteomics. Predictive markers of drug resistance, candidate biomarkers for diagnosis, and prognostic markers in lung cancer have also been discovered and analyzed by quantitative proteomic analysis. Moreover, construction of protein networks enables to provide an opportunity to interpret disease pathway and improve our understanding in cancer therapeutic strategies, allowing the discovery of molecular markers and new therapeutic targets for lung cancer.[8]

Material and method. The survey is being made through google form and to know people's opinion it was shared through social media. I have chosen INDIA and UZBEKISTAN as india being world's second-most populous country and one of its fastest-growing economies india experiences both challenges and opportunities in context of health india.

It is important because it educates people about the serious risk of cancer.

India is likely to witness an over seven-fold rise in lung cancer cases by 2025 com-

pared to the situation a decade ago, researchers from the Indian Council of Medical Research (ICMR) reported, prevalent the lack of a population-level screening tool to identify such peoples.

In terms of cancer prevalence in Uzbekistan, breast cancer (11.9%) is followed by stomach cancer (10.8%), and lung cancer (9%), and in terms of mortality, stomach can-

cer (12.9%) is followed by lung cancer (11.9%) and breast cancer (11%)

Results.

The survey that I conducted through internet in online google form. Most of the people who attended my survey was young people nearly 64.5% who are college or higher students. The pie chart below shows the results of the survey.

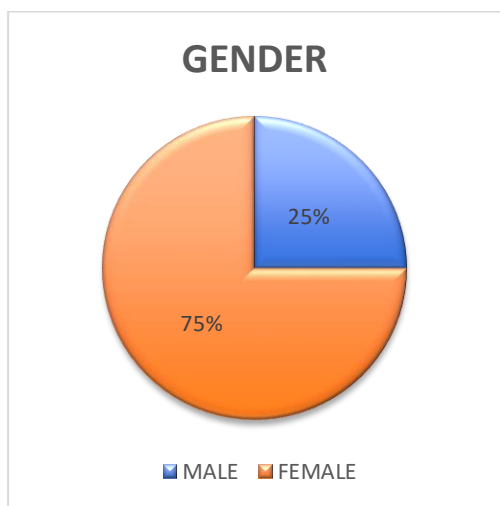


Diagram №1. What Is Your Gender?

Among the total population participated, 75% of the people responded are Female. 25% of the people responded are Male.

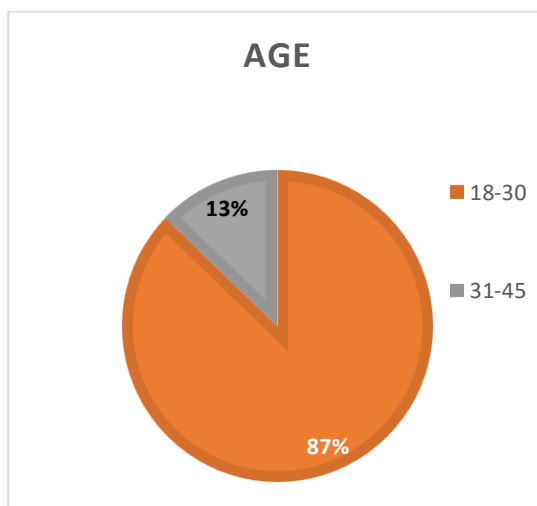


Diagram №2. What is the age of participants?

People responded under the age group 18-30 is 87% People responded under the age group 31-45 is 13% And no Individuals in the age group 31-45 and above 45 responded to it.

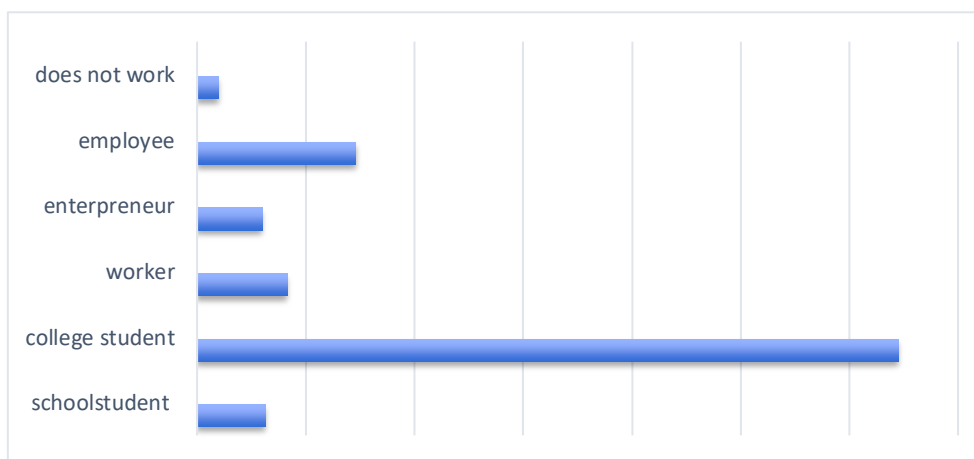


Diagram №3. At present you are?

The responses recorded as,
 School student being 6.30%
 College or high school student being 64.50%
 Worker is of being 8.3%
 Employee is of being 14.60%
 Entrepreneur is of being 6%
 Does not work is of being 2%

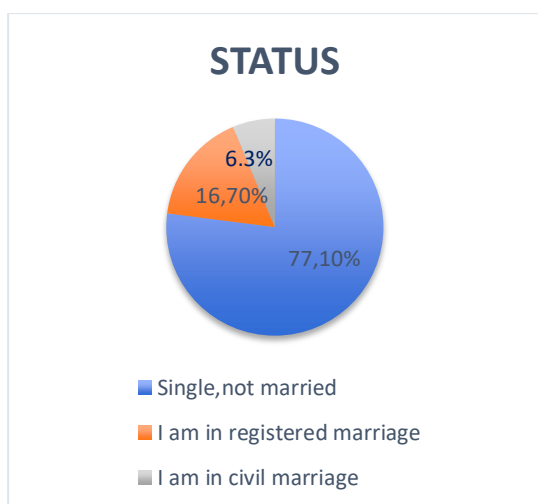


Diagram №4. Marital status?
The recorded being responded as,
77.1%single, not married.
16.7%I am in registered marriage.
6.3%I am in civil marriage.

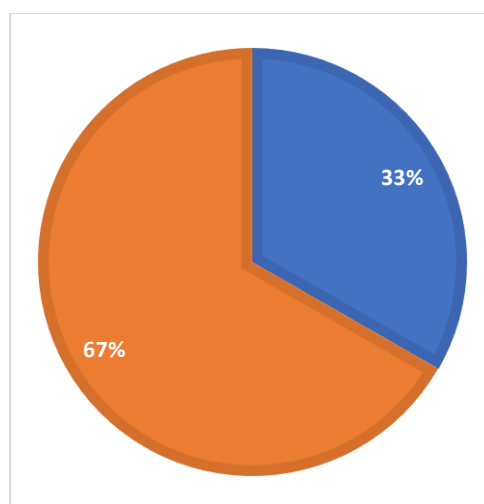


Diagram №5. If you've ever smoked you don't need to worry about lung cancer?
Responses being responded as,
67%FALSE.
33%TRUE.

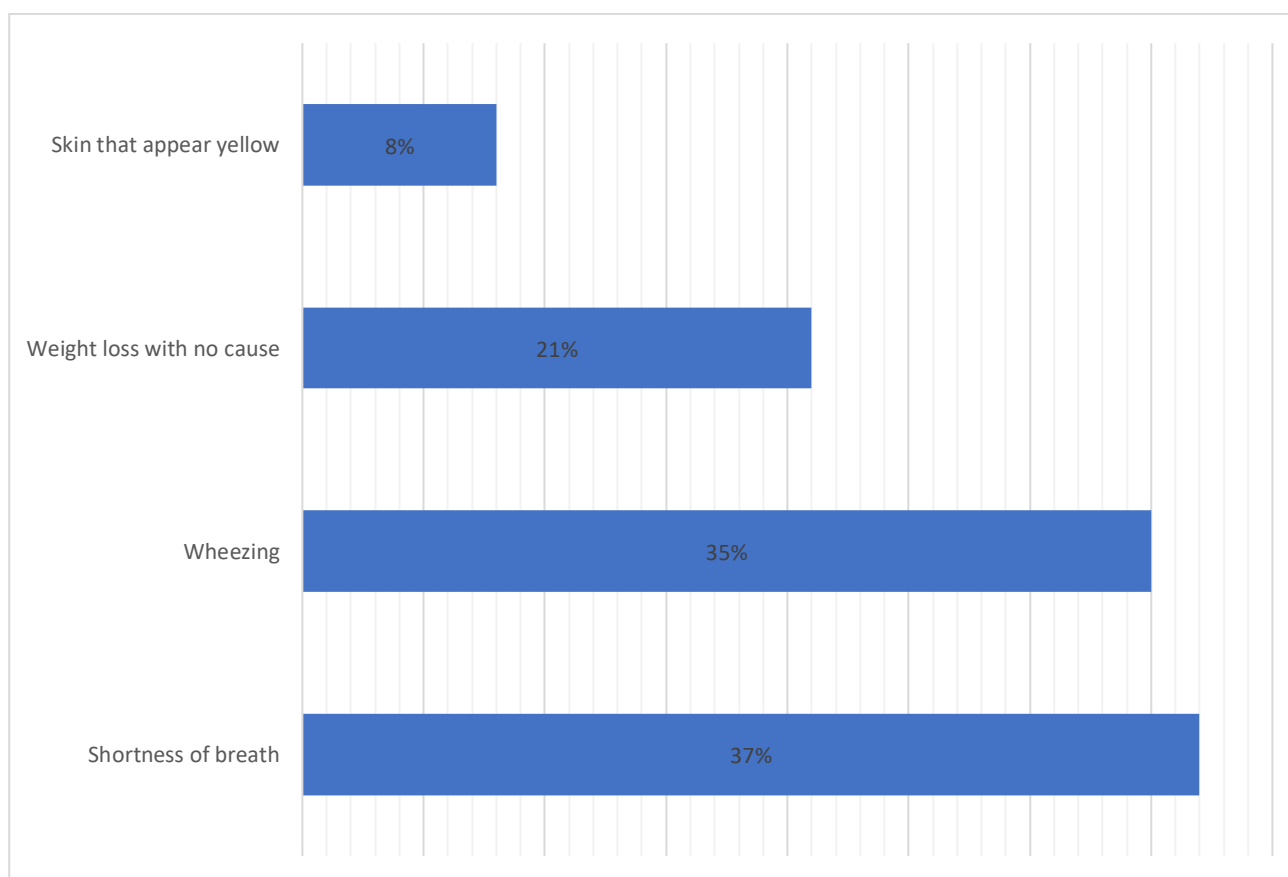
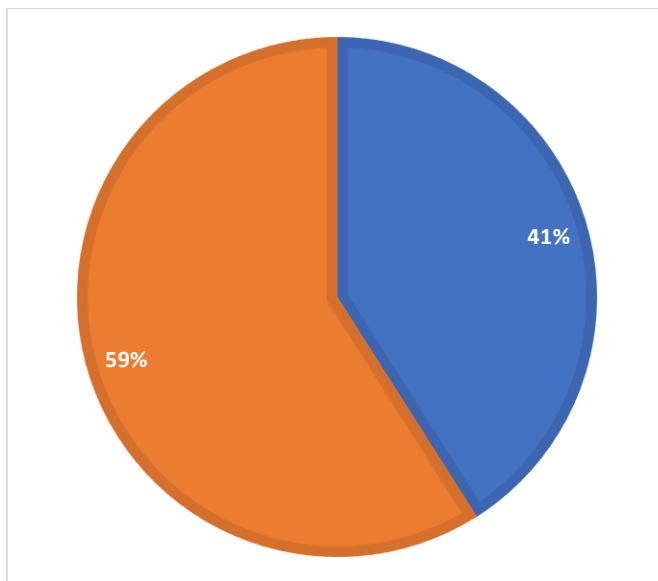
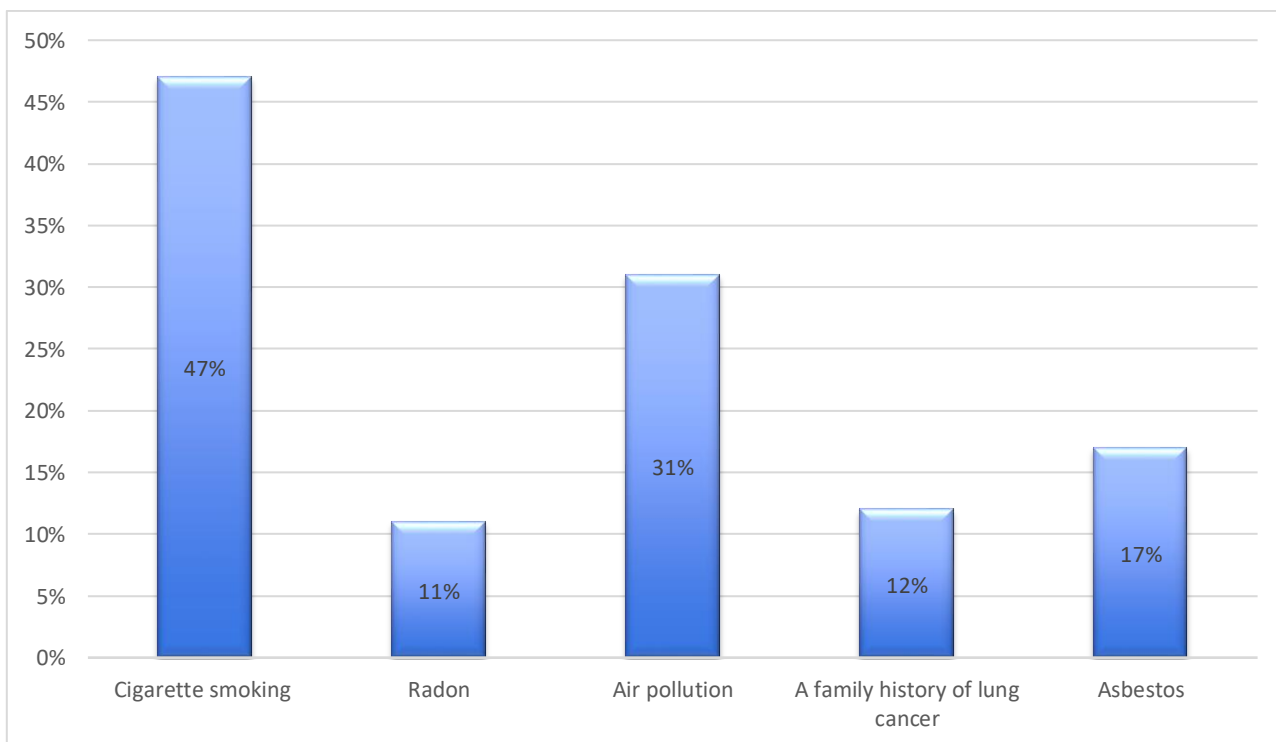


Diagram №6. What are the symptoms for lung cancer?
Responses being recorded as,
Shortness of breath as 37%.
Wheezing as 35%
Weight loss with no cause as 21%
Skin that appears yellow as 8%.



**Diagram №7. For people who smoke, much of the lung damage that leads to cancer can be repaired if they quit smoking?
Responses being recorded as,
TRUE as 41%
FALSE as 59%**



**Diagram №8. How is lung cancer caused?
Responses being recorded as,
47% for Cigarette smoking.
11% for Radon.
31% for Air pollution.
12% for A family history of lung cancer.
17% for Asbestos.**

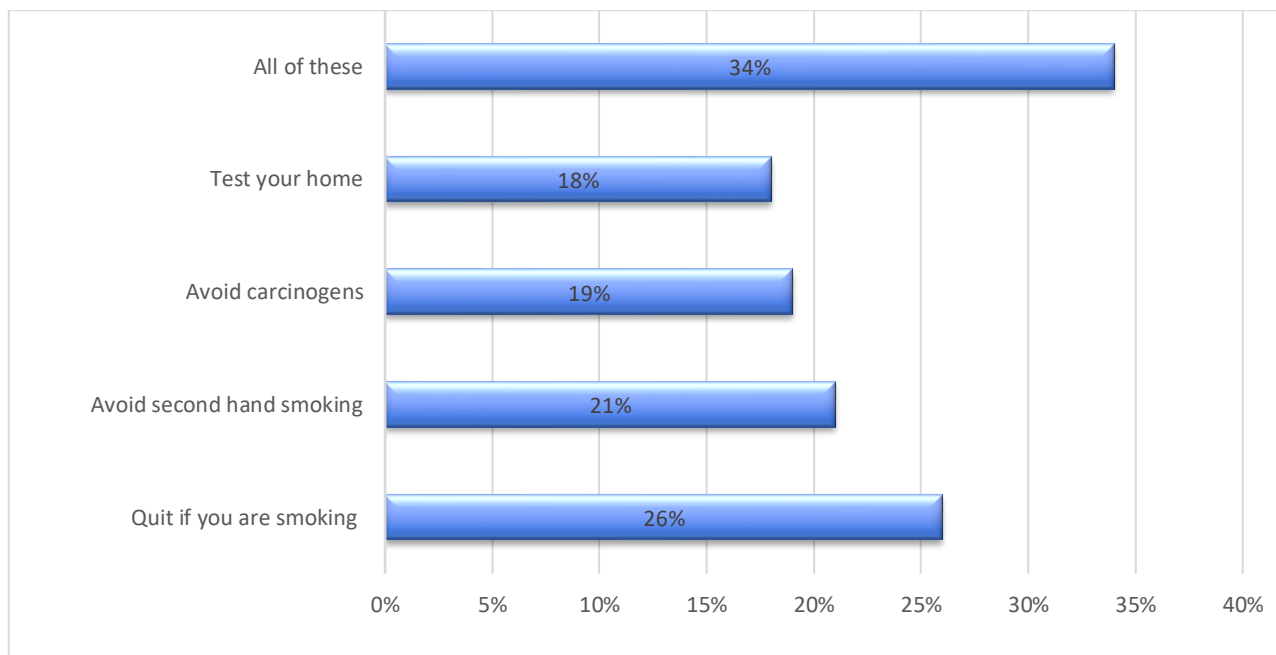


Diagram №9. What do you think to avoid lung cancer?

The record being responded by the following,

26% as quit if you are smoking.

21% as avoid second hand smoking

19% as avoid carcinogens

18% Test your home

34% All of these.

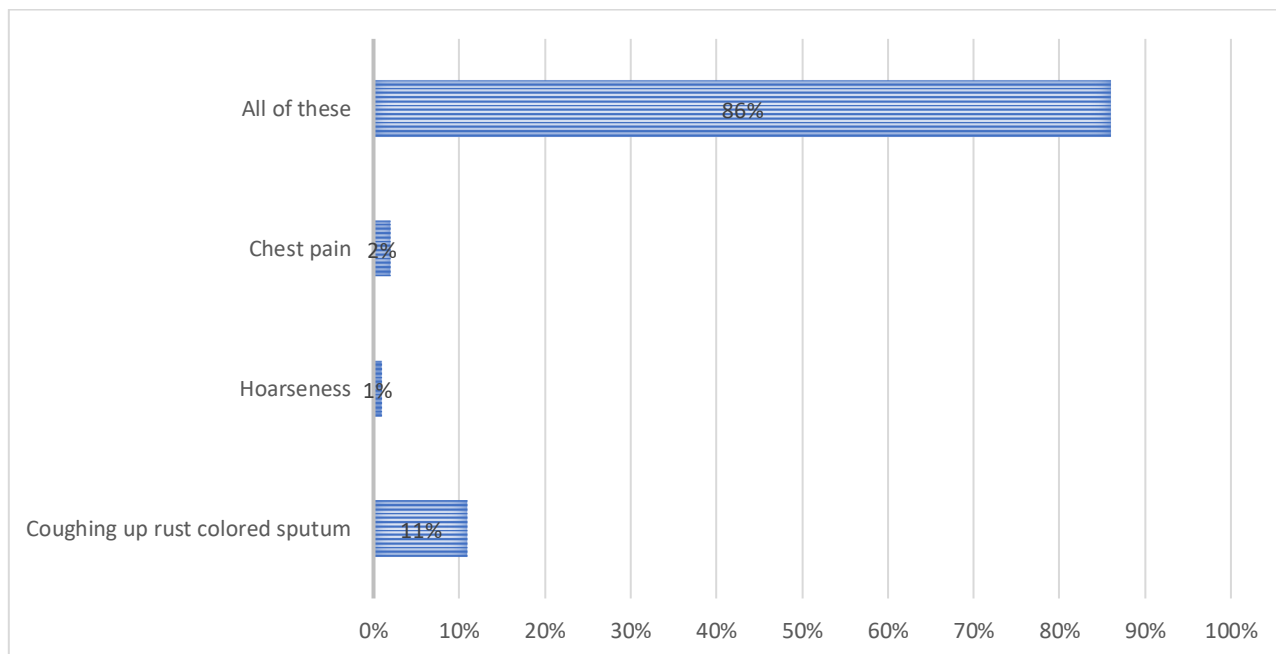


Diagram №10. How can you check yourself for lung cancer?

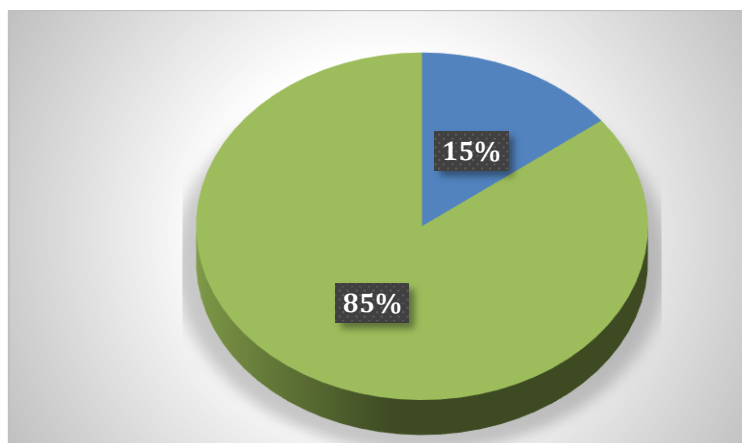
Response being responded as,

Coughing up rust colored sputum as 11%

Hoarseness as 1%

Chest pain as 2%

All of these as 86%



**Diagram №11. There is nothing people can do to lower their chance of getting lung cancer?
Record being responded as,
85.4% as TRUE
15% as False.**

Discussion. When analyzing the efficiency of knowledge assimilation, the compared options, in contrast to the analysis of minimizing costs, are characterized by greater or lesser, but not equivalent, efficiency. In this regard, it is important to assess the degree of feasibility of the analysis, depending on the level of reliability of the data. The test results were expressed in points. Participant's results were calculated using Microsoft Excel software. The assessment of the effectiveness of the assimilation of knowledge was calculated based on the application of the proposed methodological recommendation in practice. Thus, each participant of the survey, on average, increased his theoretical and practical level of knowledge in the field of lung cancer and its prevention by almost half.

Conclusion. Plan for the diagnosis and treatment of cancer is a key component of any overall cancer control plan. Its main goal is to cure cancer patients or prolong their life considerably, ensuring a good quality of life. In order for a diagnosis and treatment programme to be effective, it must never be developed in isolation. It needs to be linked to an early detection programme so that cases are detected at an early stage, when treatment is more effective and there is a greater chance of cure. It also needs to be integrated with a palliative care programme, so that patients with advanced cancers, who can no longer benefit from treatment, will get adequate relief from their phys-

ical, psychosocial and spiritual suffering. Furthermore, programmes should include a awareness-raising component, to educate patients, family and community members about the cancer risk factors and the need for taking preventive measures to avoid developing cancer.

Where resources are limited, diagnosis and treatment services should initially target all patients presenting with curable cancers, such as breast, cervical and oral cancers that can be detected early. They could also include childhood acute lymphatic leukaemia, which has a high potential for cure although it cannot be detected early. Above all, services need to be provided in an equitable and sustainable manner. As and when more resources become available, the programme can be extended to include other curable cancers as well as cancers for which treatment can prolong survival considerably.

Recommendation.

Will Choose these lifestyles to prevent lung cancer

- Don't smoke.
- Avoid using second hand smoking
- Test your home for radon.
- Avoid carcinogens at work.
- Eat a diet full of vegetables and fruits.
- Exercise regularly.

Reference.

1. Mao, Yousheng et al. "Epidemiology of Lung Cancer." Surgical oncology clinics of

North America vol. 25,3 (2016): 439-45. doi:10.1016/j.soc.2016.02.001 <https://pubmed.ncbi.nlm.nih.gov/33165004/>

2. Jones, Gavin S, and David R Baldwin. "Recent advances in the management of lung cancer." *Clinical medicine (London, England)* vol. 18, Suppl 2 (2018): s41-s46. doi:10.7861/clinmedicine18-2-s41 <https://pubmed.ncbi.nlm.nih.gov/33165004/>

3. Махсумов М. Д. и др. Impact of COVID-19 on education system in the world and in Uzbekistan // *Образование: прошлое, настоящее и будущее.* – 2020. – С. 94-95.

4. Nasim, Faria et al. "Lung Cancer." *The Medical clinics of North America* vol. 103,3 (2019): 463-473. doi:10.1016/j.mcna.2018.12.006 <https://pubmed.ncbi.nlm.nih.gov/33165004/>

5. Wu, Fengying et al. "Lung cancer in China: current and prospect." *Current opinion in oncology* vol. 33,1 (2021): 40-46. doi:10.1097/CCO.0000000000000703 <https://pubmed.ncbi.nlm.nih.gov/33165004/>

6. Rodriguez-Canales, Jaime et al. "Diagnosis and Molecular Classification of Lung Cancer." *Cancer treatment and research* vol. 170 (2016): 25-46. doi:10.1007/978-3-319-40389-2_2 <https://pubmed.ncbi.nlm.nih.gov/33165004/>

7. Collins, Lauren G et al. "Lung cancer: diagnosis and management." *American family physician* vol. 75,1 (2007): 56-63. <https://pubmed.ncbi.nlm.nih.gov/33165004/>

8. Мирхамидова С.М., Динмухаммадиев Н.А. Особенности распространенности онкологических заболеваний // *Молодой ученый.* – 2016. – №. 20. – С. 84-87.

9. Jonna, Sushma, and Deepa S Subramaniam. "Molecular diagnostics and targeted therapies in non-small cell lung cancer (NSCLC): an update." *Discovery medicine* vol. 27,148 (2019): 167-170. <https://pubmed.ncbi.nlm.nih.gov/33165004/>