

## The Importance of Production Dust in the Etiology of Lung Diseases

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**ANNOTATION:** The thirst for production from harmful occupational factors is in many cases the etiology of COPD. The article examined the issues of timely diagnosis, relevance of the issues of treatment and Prevention and the importance of linking the disease to a professionally harmful factor. Workers who work under the influence of a harmful professional factor are more notable due to the increasing problem of labor intensity, quality, environmental pollution, occupational diseases. Our controlled patients have been treated with a diagnosis of COPD. We aim to approach the disease from the point of view of occupational diseases and study the issues of importance in treating the disease, preventing its complications. Patients were treated in the city hospital. When we studied their disease histories, we came to the idea that a deeper study of the etiology of the disease was necessary. Because COPD etiology WHO statistics show that 80% of oosok-related deaths occur in low-and moderate-income countries per capita. Thus, the occurrence of this disease is partly directly related to the lifestyle and conditions of a person, the environmental well-being around him and the possibility of early diagnosis of the disease. Diseases of the pulmonary-bronchial system in most cases, it may be enough to relieve the patient's condition and restore strength, improve his quality of life, eliminate the source of the disease to the goal.

Keywords: Production dust, respiratory organs, occupational diseases, COPD.

**Introduction.** According to the World Health Organization, work-related illnesses and injuries caused 1.9 million deaths in 2016. And the most — 450 thousand people — died from chronic obstructive pulmonary disease. The UK Construction Industry Training Council (Construction Industry Training Council, CITB) has calculated that thousands of builders die each year due to respiratory diseases or face serious problems, with only inhalation of Silicon Dust killing around 500 Britons per year. In the world, this figure reaches 12.9 thousand people. Industrial (or manufacturing) dust is a microscopic solid formed by numerous construction, manufacturing, mining operations. Exposure to such particles significantly increases the risk of serious health problems. Chronic obstructive pulmonary disease is today the third most common cause of death in the world among 45-year-olds.

Chronic obstructive pulmonary disease COPD. It is a very common disease among builders, miners and workers, narrowing the lumen of the respiratory tract in the patient. Several processes are to blame at the same time: partial destruction of lung tissue, accumulation of mucus in the airways and swelling of their mucous membrane. And all this, in turn, occurs due to the inhalation of industrial dust (Quartz, coal, cadmium), welding gases, isocyanates (raw materials for the production of polyurethane). In addition, the causes of COPD can be smoking (both active and passive) and contaminated air (this is especially true in low-income countries where wood or coal is used to heat houses).

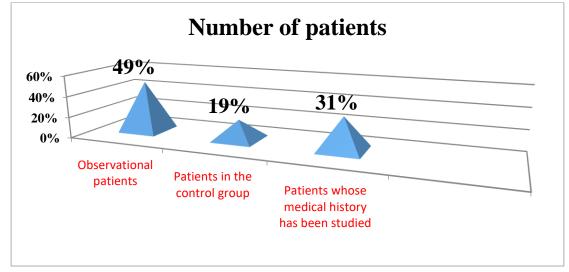
Symptoms of COPD include shortness of breath, especially during physical activity, wet cough (called" smoking cough"), wheezing, and frequent infectious diseases of the respiratory tract.

As with pneumoconiosis, it is very difficult to diagnose Osok at an early stage, since significant disorders and symptoms do not appear immediately. COPD can be confused with bronchitis and asthma — to prevent this, the doctor must pay attention to the nature of shortness of breath, prescribe a blood test for the patient, perform spirometry tests (that is, assess the volume of air inhaled and exhaled and the rate of its passage through the human respiratory tract).

In the Samarkand region of the Republic of Uzbekistan, theoretical ideas on the anthropogenic effects of tobacco dust are successfully expanded and a conceptual model of reducing respiratory diseases in tobacco manufacturers has been developed. Of great importance is the violation of the self-cleaning process of the lungs and the fact that dust gets caught in it and drowns.

**The purpose of the study.** To study the importance of production dust in the etiology of lung diseases. We aim to approach the disease from the point of view of occupational diseases and study the issues of importance in treating the disease, preventing its complications.

**Research materials and methods.** There were 82 patients under our supervision who were in inpatient treatment at the city hospital therapy unit. In addition, the disease histories of patients with 53 lung diseases were studied. The control group received patients with 32 non-occupational dust-related but chronic respiratory diseases. Patient control has been carried out in the last 3 years.



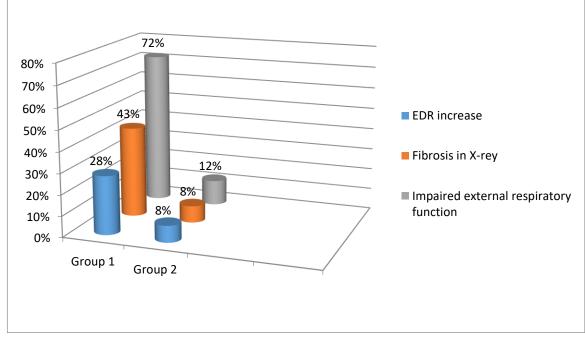
Samarkand City Medical Association No. 1, breathing in the Department of Pulmonologythe age of patients in the group is 34-74 years. The age of patients in the control group is 23-42 years. In Group 1, occupational Anamnesis of a total of 135 patients were studied. Of these, 17% of patients ' working conditions were associated with a harmful factor of production, while 48% of patients experienced active and passive smoking in their Anamnesis.

No active and passive smoking cases were observed in the control group. All patients were examined by lung disease standards. Patients were given general blood analysis, ECG, external nfas function, and chest X-ray. Chest X-ray was examined on the Listem REX - 525r: CLASSIC apparatus, spirography on the SMP-21/01 "R-D" apparatus.

**Results.** We received the following instructions on the results of the observation. In Group 1, leukocytosis, leftward displacement of the leukoformula, and increased EChT rates were observed in 28% of patients in general blood analysis. This suggests that the disease did not show signs of infectious inflammation. Chest renatgenogram showed that 43% of patients developed fibrosis in lung tissue. The same figure was 8% in the control group.

In Group 1, the right deviation of the heart axis in ECG rates was observed in 54% of patients in this case Group 2, this rate was 3%. According to our observation, 68% of patients in Group 1 during these 3 years were in inpatient treatment 2-3 times in 1-2 years. In the case of Group 2 patients, inpatient treatment for 3 years was 6%.

Group 1 patients had very low quality of life indicators, mild physical labor stresses. In cases where the course of the disease was choked by production thirst, however, the impairment of external respiratory function in patients was 72%. In Group 2, the rate was 12%. Even during remission, patients in Group 1 experienced almost constant difficulty breathing, lack of air, and dyspnea complaints remained.



We know that production dust production dust is one of the common negative factors that negatively affect the health of workers. Group 2 patients had better prognosis and course of the disease compared to Group 1.

If the patient's is considered in terms of the presence of occupational disease, the complex of treatment measures may include anti-etiology and pathogenesis measures.

**Conclusion.** Thus, our observations have shown that the course and prognosis of lung diseases associated with dust and smoking are more severe than that of lung diseases that are not related to these causes. Patients Anamnesis, the essence of professional Anamnesis is great in this. Because treatment measures tabbirs are also carried out in relation to this.

Reducing the health effects of inhaling industrial dust is a very difficult task for the industry. The UK Construction Industry Training Board recommends employers assess risks for individual groups of employees before taking any action. To do this, you need to pay attention to the following factors:

• The nature of the work performed. The higher their intensity and the more energy they require, the greater the risk. Energy-intensive tools such as saws, sanding machines, and sandblasters generate a lot of dust in a very short time.

• Work zone. The more closed the gap, the more dust accumulates in it. It should be remembered that when working with energy-intensive tools, even when working outdoors, a high level of dust is retained.

• Time to finish work. The longer workers spend in a dusty environment, the greater the risk.

• Frequency of dust exposure to the body. If a person performs the same task Day by day and produces dust, his health is at risk.

Once the risks are assessed, the Industry Council proposes to take steps to reduce them. This requires some effort from both the employer and the workers.

The competence of the employer includes:

• Use materials - boards, bricks, building blocks - of a more suitable size to require less cutting.

• Buy abrasive substances (small solid particles used for grinding or grinding) that do not contain silicon dioxide.

• Use less powerful tools such as a stone cutter instead of a saw.

\* Reduce the spread of dust that has already formed. This can be done in two ways - with the help of water or ventilation systems. In addition, if possible, it is necessary to wrap the work surface with screens or special screens to prevent dust from flying along the construction site.

• Provide workers with proper clothing that does not collect dust, as well as protective masks and respirators. The type of protective equipment should be selected depending on the dust, and they should be changed regularly.

• Keep the workplace clean and quickly get rid of excess debris.

• Turn the workers so that the same person does not work with harmful substances every day.

The U.S. National Institute for Occupational Safety and health (NIOSH) also states that dissemination of information about the risks it poses plays an important role in minimizing the risks caused by industrial dust. The problem is that according to surveys, both employers and employees themselves do not know this well. As a rule, people know that the presence of industrial dust and its inhalation are harmful, but they do not understand exactly what diseases it causes and how often it happens. Therefore, companies do not pay enough attention to industrial dust protection - they are not ready to spend resources on fundamental changes (installation of ventilation systems, application of more convenient building materials and tools). Often the only protective measure is respirators given to workers. However, companies are not very careful to ensure that the type of respirator is suitable for the type of dust and the working conditions of people.

Workers themselves may also react irresponsibly to protective measures, ignore safety guidelines, and avoid wearing protective equipment. This is due to the fact that, according to the institute, people are poorly aware of the danger they face. Therefore, the dissemination of information about production dust - popular lectures at work, information stands and brochures, a demonstration of educational films, interviews with doctors - should occupy an important place in the daily life of companies.

In most cases, it may be enough to alleviate the patient's condition and restore strength, improving his quality of life, to eliminate the source of the disease to the goal.

## Literature used.

1. Мамурова Н.Н., Носирова Д.Э. «Тяжесть течение внебольничной пневмонии в зависимости от сопутствующей патологии». «Тенденции и перспективы развития

науки и образования в условиях глобализации». Выпуск 22. Г.Переяслав-Хмельницкий. 28-февраль, 2017 год. 490-492 стр.

- 2. Косарев В.В., Бабанов С.А. Профессиональные болезни. Москва 2011 год.
- 3. Полякова И.Н. Пневмокониозы. В кн.: Респираторная медицина: руководство. Под ред. Г.Чучалина. Т. 2. М.: ГЭОТАР-Медиа, 2007; с. 335–50.
- 4. Sh.K.Mahmudova, «Kasb kasalliklari». «Yangi asr avlodi», 2011 -yil
- 5. А.И. Икрамов. Врачлар учун умумий справочник. Тошкент -М: GEOTAR-MEDIA. 2010, 283-М: GEOTAR-MEDIA. 284 ВЕТ.
- 6. А.G. Гадаев, Х.Ахмедов. Умумий амалиёт врачлари учун амалий куникмалар туплами. Укитувчи амалий кулланма. Тошкент 2013й. 101-М: GEOTAR-MEDIA. 106 бет.
- Xoljigitova M.B. Mamurova N.N. Maxmatmuradova N.N. Zakiryayeva P.O. Nosirova D.E. «O`pka kasalliklari bilan bemorlarni olib borish» O'quv qo'llanma. Toshkent 2021 yil 70-96 betlar.
- Холжигитова, М. Б., Аралов, Н. Р., Рахимов, М. М., Носирова, Д. Э., & Рустамова, Ш. Ш. (2019). Клиническая и бронхоскопическая характеристика воспалительного процесса у больных хроническим обструктивным бронхитом. Вопросы науки и образования, (25 (74)), 55-63.
- 9. Consilium Medicum №11 2016 Пневмокониоз в практике лечащего врача Автор: О.С.Васильева, Н.Ю.Кравченко Номера страниц в выпуске: 39-40
- 10. Артамонова В.Г., Мухин Н.А. Профессиональные болезни. 4-е издание. Москва 2004 г.
- 11. Мамурова Н.Н., Носирова Д.Э. "Вопросы оказание медицинской помощи при пневмонии с коморбидными состояниями на уровне стационарного лечения". Халкаро илмий амалий журнал «Биология ва тиббиёт муаммолари» №1.1 (108) Самарканд 2019 г.30.11-1.12.2019, 181 бет. Халкаро илмий амалий журнал «Биология ва тиббиёт муаммолари» №1.1 (108) Самарканд 2019 г. 30.11-1.12.2019, Стр 181
- 12. Kholjigitova M. Clinico-Immunological Parallels in Chronic Obstructive Bronchitis in Adolescents //J Pulm Respir Med. 2014. T. 4. №. 206. C. 2.
- 13. Холжигитова М. Б. и др. Клиническая и бронхоскопическая характеристика воспалительного процесса у больных хроническим обструктивным бронхитом //Вопросы науки и образования. – 2019. – №. 25 (74). – С. 55-63.