EPIDEMIOLOGICAL DESCRIPTION OF CHRONIC OBSTRUCTIVE LUNG DISEASE IN FERGONA VALLEY AND DETERMINATION OF ITS 10-YEAR CHANGING TREND

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Importance. The last ten in the world chronic obstructive pulmonary disease during the year (Epidemiological conditions and environmental conditions have changed dramatically[1, 4, 9, 11, 14]. Taking this into account, it is a world science to develop and modify appropriate prevention and treatment practices on a scientific basis[5, 10, 13], including the changing climatic, ecological and medical conditions of Uzbekistan, is a need, necessity and urgent topic.

The risk of pulmonary hypertension, pulmonary thromboembolism, and/or death from ischemic heart disease and cerebrovascular disease increases dramatically when COAC is combined with COPD [2, 3, 8, 12, 15].

According to the data of 1995, the number of deaths from COPD in Uzbekistan was 1.5-2 times higher than that of the population of the Commonwealth of Independent States (CIS).

In Uzbekistan, the indicators of respiratory diseases of the population took the first place in terms of numbers; the number of hospitalized patients with pulmonological diseases exceeded the number of hospitalized patients with cardiovascular and endocrine diseases, the number of people unfit for work due to COPD increased by 12%, disabled people - by 3%; Therefore, based on the ecological situation, which is predicted to become more and more complicated, the implementation of eco-epidemiological scientific research, especially in Uzbekistan, is a promising and effective preventive direction. In this way, it will be possible to identify and/or predict OSOS in the pre-disease stage and to provide high-quality and effective medical care (preventive programs, strengthening of pharmacocontrol) to the population at risk.

The purpose of the study. It is to determine the medical-ecological scientific bases of distribution, pharmacoepidemiology and prevention of chronic obstructive pulmonary disease in the conditions of the Fergana Valley.

Materials and methods of research. The subjects of the research were the elderly population of Namangan and Andijan geographic-ecological regions of the Fergana Valley and the population of patients with chronic obstructive pulmonary disease.

A total of 2,760 residents were examined (1,279 in Andijan, of which 718 (56.1%) were men, 561 (43.8%) were women; 1,481 in Namangan, including 660 (44.6%) men and 821 (women). 55.4%. When examined by age, the population was characterized as follows: young (18–44 years, 11.5%), mature age (45–59 years), elderly (60–74 years, 34.0%) and elderly (75-89 years old). 98.9% of the examined were residents (permanent residents) and 1.1% were immigrants (R<0.0001); the majority (66.8%) were rural residents a small part (33.2%) were urban residents, of which 99.2% had a higher education, 74.5% had a satisfactory social status, and 79.7% were engaged in manual labor.

In the research, questionnaire, biochemical, instrumental, general clinical, ecological, special andthe following instrumental examination methods were used: ECG, chest x-ray, ultrasound examinations, computed tomography (MRT), spirometry, peak flowmetry and, if necessary, pharmacological functional tests (test with bronchodilator drugs). ECG diagnosis was concluded using ExoKG in the following cases. The special aspects of the use of the radiological examination method in COPD were as follows: X-rays were taken in the right and lateral projections, the diagnostic criteria were the increase in the clarity of the lung tissue, the descent of the dome of the diaphragm, the reduction and limitation of mobility, the expansion of the retrosternal space, the narrowing and lengthening of the heart shadow, the lung fields. and such as hyperventilation of the bronchial tubes, thickening of the bronchial wall and the appearance of infiltration along them

The data of this study are the medical history of patients treated with COPD in state institutions of the cities and districts of Andijan and Namangan region (form #003), patient registration log (form #001/u), medical card of outpatients (form #025/u) , was obtained from the outpatient registration log (form No. 074/u) and the statistical card of patients discharged from treatment facilities (form 066/u).

The prevalence, gender characteristics and characteristics of COPD in patients treated at Namangan emergency medical center 11-year changes, regional specific aspects depending on social factors were analyzed. A similar prospective analytical epidemiological study to compare the obtained results was almost never found in modern conditions and on the scale of Uzbekistan. Most of them have a clinical nature, the methodology is completely different, and the period of investigation was short-term.

Results and discussion. The study shows that in the population living in Namangan, COPD was observed at a detection frequency of 44.6% and 55.4%

(R<0.05); the prevalence of the disease in sedentary and migrant men and women was 98.5% and 99.5% and 1.5% and 0.7% respectively (R<0.05); The detection frequency of COPD was 68.5% and 65.4% (R>0.05) in the population of men and women living in the village, and 31.5% and 34.6% (R>0.05) in the urban population, i.e. in rural conditions, the risk of contracting the disease is almost twice as high; * the frequency of COPD in men and women with low and high education was 1.2% and 0.5% (R<0.01), 98.8% and 99.5% (R> 0.05); in the population of men and women with good and satisfactory social status - 23.3% and 19.9% (R> 0.05), 4.7% and 3.7% (R> 0.95); detection rate of COPD in men and women engaged in physical labor - 72.0% and 76.5% (R<0.05); in men and women working in professions with harmful effects - 80.5% and 79.5% (R> 0.05); it was observed in 19.5% and 21.0% (R> 0.09) cases of men and women engaged in mental work.

One of the goals of the research carried out in the conditions of Namangan is to determine the trends of epidemiological indicators of various forms of COPD in the population of men and women aged >18-89 years in 2010-2020. Table 3.1.2 shows the numerical results of the study of such a description of the emphysematous phenotype of COPD.

Over 11 years, the frequency of detection of COPDef in the general population had an insignificant difference and was confirmed by the indicator of 35.7-35.5%. The 11-year trend of COPD was recorded with a decrease of 0.2%. The prevalence of COPD in men and women was found to be 40.4% and 32.8% with a statistically reliable difference (R=0.68).

During the inspection years, this type of COPD was characterized by the following prevalence in men and women: 2010 - 43.3% and 28.9% (R=0.13), 2011 - 35.7% and 38.2% (R=0 .58), 2012 – 33.3% and 38.6% (R=0.000), 2013 – 42.0% and 32.4% (R=0.79), 2014 – 43.9% and 26.8% (R=0.00), 2015 – 39.2% and 33.7% (R =0.92), 2016 – 33.9% and 39.4% (R =0.24), 2017 – 42.9 and 33.0% (R=0.19), 2018 – 41.0% and 33.7% (R=0.16), 2019 – 37.2% and 38.8 % (R=0.72), 2020 – 33.3% and 37.3% (R=0.29).

The 11-year COPD trend was characterized by a 10.0% decrease in the disease in men and an 8.4% "growth" in women.

Bronchitic phenotype of COPD was determined with a prevalence of 48.1% in the population of Namangan aged >18-79 years during 11 years of observation, of which 49.2% in women and 52.9% in men (R=0.71) . The growth rate was 0.6% in the general population, with a trend of 4.7% "decrease" in women and 6.6% "increase" in men. In women, COPD was expressed with a high prevalence of 3.0%. The protective significance of male gender in the development of the bronchitic phenotype of COPD was clinically substantiated (RR=0.94). But the confidence interval G, χ2 and Pearson's R criterion showed that this result was not statistically significant [CIIO–W=0.77; CI – up=1.15; P=0.261].

The 11-year trend of the epidemiological description of COPD was determined in the following difference in the male and female population (Table 3.2.3): 2010 - in men - 46.3%, in women - 53.9% (R=0.12), in the general population 50.3 %; 2011 – 45.2% and 44.1% (R=0.30), 44.7% in the general population (UP); 2012 – 59.5% and 45.8%, in UP – 50.4% (R=0.03); 2013 – 48.0% and 45.6% (R=0.21), in UP – 46.6%; 2014 – 40.9% and 60.7% (R=0.22), in UP – 50.0%; 2015 – 44.6% and 50.0% (R=0.13), in UP – 47.5%; 2016 – 47.5% and 50.0% (R=0.38), in UP – 48.8%; 2017 - 42.9% and 49.6% (0.00035), -47.0% in UP; 2018 – 44.3% and 50.0% (R=0.00167), in UP – 47.8%; 2019 – 46.2% and 45.0% (R=0.99), in UP – 45.6%; 2020 - 52.9% and 49.2% (R=0.71), in UP - 50.9%.

Based on the results of the research, the population "living with chronic obstructive pulmonary disease and bronchial asthma" (ASO population) was separated, studied and evaluated in the conditions of Namangan (Table 3.2.4). Epidemiological indicators and an 11-year trend were determined, which are sharply different from foreign results, with a high rate. According to it: * C

COPD and bronchial asthma combined (ASO) was recorded with a prevalence of 15.3% in the population of Namangan (in men - 14.4%, in women - 16.1%; R=0.001279). This figure was 13.5% higher than the European population and 10.0% higher than the US population.

The eco-epidemiological screening conducted in all cities and districts of Andijan confirmed, firstly, that Andijan region enters the regions with high incidence of COPD, and secondly, COPD "high risk", "moderate risk" and "low risk" cities and districts were proved.

According to the 1-year epidemiological monitoring data, three regions representing the risk of COPD were divided in the Andijan eco-geographical region: 1) regions with a high risk of COPD origin: the frequency of COPD spread in the population of this area is 12-15%; 2) Regions with average risk of origin of COPD: frequency of detection of COPD is 6-11.0%; 3) Regions with a low risk of origin of COPD: the frequency of detection of COPD does not exceed 5.0%.

The first region includes five districts and cities: Andijan city, Baliqchi district, Marhamat city and district, Khojaabad district, Korgontepa district. Six districts were included in the second region: Boz, Ulughnor, Shahrikhan, Altinkol, Izbosgan and Pakhtaabad districts. Four cities and districts were included in the third region: the city of Asaka, Bulaqbashi, Jalaguduq district and the city of Khojaabad.

Analyzing the release of harmful substances in the atmosphere in the last 5 years, it was confirmed that the most harmful substances are released into the air in the three mentioned regions. On the scale of Andijan region, in 2011 (analyzed according to the audited years), a total of 85,583 tons of harmful substances were released into the atmosphere from transport, 13,627 tons from industry, in 2012,

from transport - 85,146 tons, from industry - 12,986 tons. It was found that the amount of waste emitted from the city of Andijan is almost 1.5 times more than this indicator in other cities and districts of the region. Also, the lack of sanitary-protection zones in all landfills of Andijan region shows its pathogenic effect on the ecological environment and public health.

The results of retrospective epidemiological monitoring of patients treated in city and district medical institutions of Andijan region for two years confirmed the following.

The detection frequency of COPD was 56.1% in men and 43.9% in women (R<0.05);

• In the population aged ≥20-39, the frequency of COPD was 17.9% (in men - 17.6%, in women - 17.2%; R>0.05);

• In 40-49-year-olds, the disease was observed with a prevalence of 34.0% (in men - 36.6%, in women - 31.37%; R>0.05), in 50-39-year-olds, the frequency of detection of COPD was 25.7% (in men - 25.2%, in women - 26.6%; R>0.05);

• In 60-69 years, the incidence rate was 11.6% (in men - 10.5%, in women - 12.8%; R>0.05);

• The prevalence of COPD in ≥70-year-olds was 10.5% (10.0% in men and 16.4% in women; r>0.05).

In Andijan, the frequency of recurrence of COPD in winter is 32.4% (in January - 15%, in February - 17%, in December - 10.4%), in spring - 26.0% (in March - 13.2%, in April - 10.6 %, May – 2.2%), in summer – 11.0% (in June – 5.7%, in July – 1.%, in August – 3.4%) and in autumn – 20.2% (in September – 3.1 %, in October – 7.6%, in November – 9.5%).

Based on the above, it can be concluded that winter, spring and autumn are the most unfavorable seasons for the recurrence and origin of COPD in the eco-climatic conditions of Andijan; depending on the season, the risk of developing the disease increases up to 3 times (R< 0.01). The analysis by months showed that March (13.2%), April (10.6%) and December (COPD was observed with a frequency of 10.4%) are the months with the most unfavorable epidemiological conditions for COPD. May and July are "relatively sanogenic months" in relation to COPD, and the frequency of detection of COPD in them is 2.2% and 1.95%.

When analyzing the frequency of COPD in the population of Andijan region, the following was determined:

Among the regions with high frequency of COPD or high risk of its occurrence are Andijan city (15.0%), Baliqchi district (10.0%), Marhamat district (11.0%), Ulughnor district (9.0%), Kurgontepa district. (9.0%), Andijan District (8.0%) and Khojaabad District (8.0%);

Among the regions where COPD is observed with low frequency are Shahrikhan district (5.0%), Izbosgan district (4.0%), Oltinkol district (4.0%), Asaka district (1.0%), Pakhtaabad district (6.0 %), Khojaabad district (8.0%), Buloqbashi district (1.0%), Jalakuduq district (3.0%), Boz district (4.0%), Karasuv city and Khanabad city were included (COPD 1.0 % determined without increase).

In most regions with a high frequency of detection of COPD, 0.3%, 1.0%, 0.1% release of organochlorine compounds, silicon, cadmium and organic dust into the environment was confirmed as environmental factors related to the increase in morbidity.

The direct relationship of professional activity to the frequency of detection of COPD was also confirmed by international studies [8, 12, 14], observed in eco-epidemiological monitoring.

Occupations that increase the risk of COPD can be confirmed in the conditions of Andijan, and they were recorded in extremely high, high, medium and low frequencies depending on the occupation: farmers (COPD is observed with a prevalence of 44.5% and 41.3%), factory workers, workers of the AYOQSh and Residents living close to the health center (the frequency of COPD was determined by 40.0%, 20.0% and 25.0% indicators), enterprise workers and housewives (17.0% and 27.0%), teachers and cooks (11, 0% and 14.0%), engineers and drivers (5.0% and 6.36%), tractor drivers and craftsmen (9.5% and 17.0%).

In general, the results of the research showed that in more than 95.0% of the population with COPD, the disease occurs due to the expression of the "environmental pollution" factor at light, medium and high levels.

In general, the results of the study showed that the frequency of detection of COPD in more than 95.0% of cases depends on ecometioclimatic XO. Taking them into account is of primary preventive and therapeutic importance in preventing COPD "intervention".

Conclusions. All types of chronic obstructive pulmonary disease are detected with a high prevalence (55.4% in men) among the population of the valley who apply for primary and qualified medical care. In the last 11 years, the rate of "growth" of COPD in women has become more "intense" than in men, and the leading factors of this trend are sedentary, education, living in the countryside, social status, hard work and professional harmful habits.

LIST OF USED LITERATURE

1. Avdeev SN, Trushenko NV Triple therapy in the treatment of chronic obstructive pulmonary disease // Pulmonology, 2019. – 29 (2): 199 – 206.

2. Avdeev SN, Trushenko NV New triple combination of beclomethasone dipropionata, glycopyrrolate bromide and farmoterol fumarate in chronic obstructive pulmonary disease // Pulmonology, 2001. Volume 31. No. 3. P. 365 – 371.

3. Alekseeva OV, Demko IV, Schneider IA, Petrova MM Komorbidnost sindroma obstruktivnogo apnoe/hypopnoe sna i chronicheskoy obstruktivnogo bolozni legkix // Zaboykalsky medical journal, 2016. №2. - P. 107-114.

4. Aleksandrov OV Gazovaya therapy and pulmonology // Klin. Medicine, 2004. Volume 72. No. 1.–P. 30–34.

5. Ansev EX, Chuchalin AG pulmonary eosinophilia: diagnosis, treatment // Pulmonology, 2012; (4): 100–115. DOI: 10: 18093/0869–0189–2012–0–106–115.

6. Aysanov ZR, Avdeev SN, Arkhipov VV and dr. National clinical recommendations for diagnosis and treatment of chronic obstructive pulmonary disease: algorithm for clinical decision // Pulmonology, 2017; 27 (1): 13 – 20. DOI: 10. 18093/0869 – 0189. 2017–27–1–13–20.

7. Achakov AI Microsomal oxidation. - M: Nauka, 2005. - S 127.

8. Bogdanov D.Yu., Kondrashova EA, Kulakova NV and dr. Characteristics of risk factors for cardiovascular and cerebrovascular diseases and populations. Primarskogo kraya v zavisimosti ot status kurenia i vozrasta (po dannim epidemiologicheskogo issledovaniya ESSE – RF) // Tikhookeansky medical journal, 2017 (4): 45 – 50.

9. Bistriskaya EV, bilichenko TN Zabolevaemost, invalidnost i smertnost ot bolezney organov dikhaniya v Rossiyskoy Federasiii (2015–2019) // Pulmonology, 2021. –31 (5): 551–561. DOI: 10. 18093/0869–0189–2021–31–5–551–561.

10. Vasileva OS, Kuzmina LP, Chernyak AV, Kravchenko N.Yu., Kolyaskina MM The professional factor and the role of individual vospriimchivosti k razvitiyu i techeniyu broncholegochnix zabolevaniy // Pulmonology, 2021. Volume 31. No. 4. – S. 463–468.

11. Leshenko IV Vozmojenosti i ogranichenia primeneniya ingalyasionnix glucocorticosteroidov v terapii kronicheskoy obstructive obsektivnoi legkix // Pulmonology, 2018. Volume 28. No. 5. – S. 603–612.

12. European Lung with Book Occupational risk factors. Available at: https: // www. Erswhiteboool.org/chapers/occupational.risk.factors/ [Accessed/ July; 2018].

13. Miillerova H., Maselli DJ, Locantore N. et al. hospitalized exacerbations of the ECLIPSE cohort // chest - 2015; 147(4):999–1007.

14. Shahab L., Jarvis MJ, Britton S., West R. Prevalence, diagnosis and relation to tobacco dependence of chronic obstructive pulmonary disease in a

nationally representative population sample // Thorax, 2006. Njv 61 - # 12: 1043–104.

15.   Xie J., Li., Wu X., Hou W. Prevalence of pulmonary embolism in patients with obstructive sleep apnea and chronic obstructive pulmonary disease: The overdiap syndrome. Heart Lang–2019. - 48 (3): 261–263.

Resume
EPIDEMIOLOGICAL DESCRIPTION OF CHRONIC OBSTRUCTIVE LUNG DISEASE IN FERGONA VALLEY AND DETERMINATION OF ITS 10-YEAR CHANGING TREND
Impulse Medical Institute

Population of elderly population of Namangan and Andijan geographical-ecological regions of Fergana Valley and patients with chronic obstructive pulmonary disease and its 10-year changing trendwho analyzed the results.

A total of 2,760 residents were examined (1,279 in Andijan, including 718 (56.1%) men, 561 (43.8%) women; 1,481 in Namangan, including 660 (44.6%) men and 821 women. (55.4%).

The authors say that in the last 11 years, the rate of "growth" of COPD in women has become "more intense" than in men, and the leading factors of such a trend are confirmed as sedentary, education, living in rural areas, social status, hard work and professional harmful habits.

РЕЗЮМЕ
ФАРҒОНА ВОДИЙСИ ШАРОИТИДА ЎПКАНИНГ СУРУНКАЛИ ОБСТРУКТИВ КАСАЛЛИГИ ЭПИДЕМИОЛОГИК ТАВСИФИ ВА УНИНГ 10 ЙИЛЛИК ЎЗГАРИБ БОРИШ ТЕНДЕНЦИЯСИНИ АНИҚЛАШ
Импульс тиббиёт институти

Муаллифлар Фарғона водийсининг катта ёшдаги Наманган ва Андижон географик-экологик ҳудудлари аҳолиси ва ўпканинг сурункали обструктив касаллиги билан касалланган беморлар популяцияси ва унинг 10 йиллик ўзгариб бориш тенденцияси натижаларини тахлил қилганлар.

Жами бўлиб 2760 нафар ахоли текширилди (Андижонда 1279 нафар, шундан эркаклар 718 нафар (56,1%), аёллар 561 нафар (43,8%); Наманганда 1481 нафар, шундан эркаклар 660 нафар (44,6%) ва аёллар 821 нафар (55,4%).

Муаллифларниг таъкидлашича сўнгги 11 йилда ЎСОКнинг «ўсиб »бориш суръати аёлларда эркакларга нисбатан «шиддатлироқ» тус олган ва бундай тенденциянинг етакчи омиллари сифатида ўтроқлик, маълумотлилик, қишлоқда яшаш, ижтимоий ҳолат, оғир меҳнат ва касбий зарарли одатлар тасдиқланди.

РЕЗЮМЕ
ЭПИДЕМИОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА ХРОНИЧЕСКОЙ ОБСТРУКТИВНОЙ БОЛЕЗНИ ЛЕГКИХ В ФЕРГАНСКОЙ ДОЛИНЕ И ОПРЕДЕЛЕНИЕ ТЕНДЕНЦИИ ЕЕ ИЗМЕНЕНИЯ ЗА 10 ЛЕТ
Импульс медицинский институт

Авторы проанализировали результаты обследования пожилого населения Наманганской и Андижанской географо-экологической областей Ферганской долины и популяции больных хронической обструктивной болезнью легких и ее 10-летнюю тенденцию изменения.

Всего обследовано 2760 жителей (1279 в Андижане, из них 718 (56,1%) мужчин, 561 (43,8%) женщин; 1481 в Намангане, из них 660 (44,6%) мужчин и 821 женщин (55,4%).

Авторы отмечают, что за последние 11 лет темпы «роста» ХОБЛ стали «более интенсивными» у женщин по сравнению с мужчинами, а ведущими факторами такой тенденции считают малоподвижный образ жизни, проживание в сельской местности, социальный статус, тяжелый труд и профессиональные вредные привычки.