



ILLNESS RELATED TO TEMPORARY INABILITY OF WORKERS IN THE ENTERPRISES PRODUCING NITROGEN FERTILIZERS.

M. Ashurova
Y. Muydinova
G. Mukhammadova
Sh. Akhmadjonova

Fergana Public Health Medical Institute
<https://doi.org/10.5281/zenodo.10464482>

Abstract: In this article described the integrated estimation of influence of a complex of the most probable risk - factors in separate age-sexual and professional groups is given and the interrelation between medico-social characteristics of disease working and a way of life in a family is revealed. The differentiated influence of working conditions and way of life on disease of working producing departments is established.

Key words: lifestyle, industrial production conditions, hygienic assessment of incidence, microclimate.

Аннотация: Ушбу мақолада маълум бир ёш, жинс ва касбий гуруҳларга энг эҳтимолий хавф омиллари тўпламининг таъсирини комплекс баҳолаш кўриб чиқилди ва ишчиларнинг касалланишининг тиббий ва ижтимоий хусусиятлари ва оиладаги турмуш тарзи ўртасидаги боғлиқлик аниқланди. Асосий цехларда ишчиларнинг касалланишига меҳнат шароитлари ва турмуш тарзининг табақалаштирилган таъсири ўрганилди.

Калит сўзлар: турмуш тарзи, ишлаб чиқариш омиллари, гигиеник баҳолаш, касалланиш, микроклим.

Protection of the health of the working population is the most important factor of sustainable socio-economic development of the society.

The state of health of industrial workers is largely determined by the content of the work process, working conditions and daily life, especially in areas that include the chemical industry, which places high demands on the body. [1,4].

Nitrogenous mineral fertilizers production industry is one of the important branches of the national economy of Uzbekistan, because its products are one of the conditions for the complete satisfaction of the needs of the entire population and the national economy for agricultural products and raw materials, as well as for successfully solving the problem of providing livestock with feed.

Despite the fact that the production of mineral fertilizers has now become a large industry of great national economic importance, the issues of occupational hygiene, especially taking into account the integrated approach to the assessment of risk factors and the in-depth study of workers' morbidity, are very little covered. [2,3,5].

The purpose of the study.

The main goal of the work was the hygienic evaluation of the leading harmful and dangerous factors; an in-depth study of the morbidity associated with the temporary loss of the ability to

drink; determine the cause-and-effect relationship between risk factors and workers' health; justifying a set of effective health measures to improve working conditions.

Research object, methods and scope.

In order to comprehensively study the morbidity of workers, taking into account a complex of factors (industrial, professional, social, etc.), an in-depth accounting of morbidity was carried out. The study of working conditions and lifestyle was conducted by survey-interview method consisting of 2000 employees (1000 employees in each enterprise).

The following methods were used during the processing and analysis of research materials: sociological, cohort methods, methods of comparative analysis, as well as modern methods of sanitary statistics. In particular, mean values and mean errors were determined during data analysis. t-Student's test, Poisson's formula was used to compare the characteristics of the sample and to evaluate the reliability of the indicator.

The contents of the work and their discussion.

In the studied period, the level of illness of workers with CMV in Fergana "Azot" is 58.5 ± 0.4 cases and 660.7 days of incapacity for work on average, in Chirchik "Elektrokhimprom" it is 58.4 per worker and employee, 825 ± 100 cases and 11.3 and 14.1 days, the average duration of one disease was 11.3 and 14.1 days. Among the diseases, diseases of the respiratory system, diseases of the locomotor system, injuries and poisoning, diseases of the digestive system, diseases of the circulatory system, as well as diseases of the nervous system and sensory organs took the leading places.

Taking into account the above information, in the future we deeply studied and analyzed the leading 6 classes of diseases, because it was these classes of diseases 1 and 2 that formed the level and structure of the morbidity of workers in enterprises with temporary incapacity for work.

The incidence of respiratory diseases in both enterprises was 26.4 ± 0.4 cases and 200.0 days for the 1st enterprise, 16.9 ± 0.4 cases and 179.5 days for the 2nd enterprise. The average duration of case 1 for respiratory diseases was 7.6 and 10.6 days, respectively.

Among the respiratory diseases, the most common nosological forms of workers' illness with VMQ were ORVI, bronchitis, chronic tonsillitis, etc., which was associated with long-term contact of workers with toxic substances (ammonia, CO, nitrogen oxides), the level of which often exceeded FS. If for the 2nd enterprise, in both cases and days of disability, injuries and poisoning took the 1st place (7.0 ± 0.2 days and 103.0 days), then for the 2nd enterprise they took the 5th place (5.0 ± 0.2 cases 79.3 days) per 100 employees and according to the "severity of the disease". "disease, i.e., the average duration of case 1, diseases of the circulatory system and injuries and poisoning took the leading positions among all classes of diseases considered.

Diseases of the musculoskeletal system and connective tissue took the next place in terms of diseases associated with temporary loss of working capacity of workers of nitrogen fertilizer production enterprises (6.4 ± 0.2 cases and 73.6 workers per 100 days in Enterprise 1 and 5.9 ± 0.2 cases and 91.4 days in Enterprise 2, respectively. The average duration of 1 case for this disease class was 11.5 and 15.5 days. Accordingly, radiculitis, osteochondrosis, lumbago and arthrosis constituted the main cases of temporary disability in this class of diseases.

The main risk factors for the occurrence of pathology in the musculoskeletal system of workers working in the production of mineral fertilizers were physical stress associated with

lifting weights, the work is carried out in a mandatory standing position and is associated with walking, in addition, sudden changes in temperature and humidity are noted in many workplaces.

Diseases of the circulatory system, among the cases of temporary disability of workers in the studied enterprises, 2.8 ± 0.1 cases and 45.3 days per 100 workers, and 6.4 ± 0.2 cases and 91.5 days per 100 workers, respectively, in the 2nd enterprise. to workers.

The severity index for diseases of the circulatory system was 14.3-16.2 days, respectively. The highest incidence rates of temporary disability were recorded for diseases of the circulatory system, mainly due to hypertension, rheumatism and cardiovascular disease.

Diseases of the digestive system took the next place in the composition of cases of temporary disability by enterprises (3.6 ± 0.2 cases 42.0 days - for the 1st enterprise and 5.6 ± 0.2 cases and 80.8 days for the 2nd enterprise disability for).

The average duration of 1 case of temporary disability due to diseases of the digestive system was 11.6-14.4 days.

It should be noted that if the diseases ranked 1-3 in most cases are related to working conditions and social conditions in enterprises, then the formation and emergence of the next 3 classes of diseases are related to the conditions and lifestyle of workers.

Conclusions:

1. As a result of the study of hygienic working conditions at two large nitrogen mineral fertilizers producers in Fergana, "Azot" and "Elektrokhimprom" in Chirchik a number of unfavorable production factors were identified, their impact on the workers' organism was determined by the nature of the technological process, the state of equipment placement and its imperfect organization.
2. In case of temporary incapacity for work of employees of both enterprises (Fergana and Chirchik), the main diseases were respiratory organs, locomotor system, blood circulation system, digestive organs, nervous system and sensory organs, injuries and poisoning.
3. Respiratory diseases took the leading place in the morbidity of workers (26.4 ± 0.4 cases and 200.9 days; 16.9 ± 0.3 days and 179.5 days), among workers of Azot and "Elektrokhimprom" enterprises, which associated with long-term contact of workers with toxic substances (ammonia, CO, nitrogen oxides), the level of which often exceeded FS.

Due to diseases of the circulatory system (mainly hypertension 4.2 ± 0.1 cases and 59.7 ± 0.4 days), the highest rates of disability of workers are associated with nervous overload (high level of responsibility for the smooth flow of the technological process, concentration, fast execution, etc.), high noise level (increase of the permissible values by 6 db or more), as well as the presence of harmful habits and an unfavorable psychological climate in the family is important.

Offers:

1. The system of prevention of occupational diseases and reduction of general diseases of enterprises working with nitrogen mineral fertilizers should be gradually built and include interrelated measures of a technical and sanitary, sanitary-hygienic and social-medical nature.
2. Technical and sanitary measures should include the following: improvement of technological equipment, compliance with the rules of continuity of the technological process, timely and high-quality preventive maintenance of equipment; increase the hermeticity of equipment and communications; installation of local mechanical ventilation equipment and improvement of their efficiency in places where steam, gas and dust are released.

References:

- 1.Аверьянов В.Н. Гигиеническая оценка условий жизни населения - основа планирования оздоровительных мероприятий / В. Н. Аверьянов, Н.Н. Верещагин, В.М.Боев, В.Н.Дунаев. Фаровон яшаш жойи жамоат саломатлигининг калитидир: Тўплам/ Ф.Ф.Эрисман номидаги федерал гигиена илмий маркази. - Воронеж, 2004. – 12-Сон. - 114-116 бетлар.
- 2.М.Д.Ашурова, А.Хошимова. Влияние условий труда на отдельные показатели состояния здоровья работающих. ФерПИ Илмий-техника журналы, № 4 Фарғона -2015- 69-73 бетлар.
- 3.Измеров, Н.Ф. Условия труда как фактор риска развития заболеваний и преждевременной смертности от сердечно-сосудистых патологий / Н.Ф.Измеров, Г.Р.Сквирецкая // Касалликларнинг олдини олиш ва саломатликни мустаҳкамлаш, - 2003. - №. 5. - 11-13 бетлар.
- 4.Механтиева Л. Е К вопросу о состоянии лечебно- профилактического питания работающих в производстве минеральных удобрений / / Амалий ва назарий Биология ва тиббиёт журналы. "Биотиббиёт тизимларида тизимларни таҳлил қилиш ва бошқариш". - Том 5. - № 4.- 2006. - 679-680 бетлар.
- 5.Мещакова Н.М. Динамика нарушений здоровья у работников современных химических производств / Н. М. Мещакова, М. Р. Дякович, С. Ф. Шаяхметов //Бюл. Шарқ.- Россия Фанлар Академиясининг Сибир филиали илмий марказининг Сибир филиали. – 2012. - №. 2. - 87-91 бетлар.
- 6.М.Абдуллаева, Ё.Муйдинова, Ш Тоиров "Влияние терапии экватором и тассироном на клиническую симптоматику и функциональное состояние эндотелия сосудов у больных неспецифическим аорто-артеритом" Наука молодых. Научно практический журнал Г.Москва 09.10.2015г 210 - 215 с <https://cyberleninka.ru/article/n/vliyanie-terapii-ekvatorom-i-tessironom-na-klinicheskuyu-simptomatiku-i-funktsionalnoe-sostoyanie-endoteliya-sosudov-u-bolnyh>
- 7.Морфометрическая характеристика лимфоидных узелков (пейеровых бляшек) тонкой кишки в онтогенезе Н.У Абдукаримова, Х.А Ганиева, Г.М Сафарова,
- 8.Ё.Г.МуйдиноваUniversum:медицинаифармакология,4-4 <https://cyberleninka.ru/article/n/morfometricheskaya-harakteristika-limfoidnyh-uzelkov-peyerovyh-blyashek-tonkoy-kishki-v-ontogeneze>
- 9.TIRIK MAVJUDOTLARNI O'RAV TURGAN EKOLOGIK MUHITNING, INSON TOMONIDAN SALBIY TOMONGA O'ZGARISHI
- 10.P.Raxmatullayeva «Новости образования: исследование в XXI веке» 1 (9), 635-638 <https://nauchniyimpuls.ru/index.php/noiv/article/view/7049>
- 11.ECOLOGICAL ENVIRONMENT AND ITS IMPROVEMENTS IN THE FERGANAX Sadullaev, A Muysinov, A Xoshimov, I Mamarizae 2021 Статьи в Академии
- 12.Оптимизация и эколого-гигиенические аспекты водоснабжения населенных пунктов (обзор литературы) Азизова Ф.Л., Акромов Д.А.,ШеркузиеваГ.Ф "Journal of clinical and preventive medicine" (Klinik va profilaktik tibbiyot jurnali) Научный журнал №1. Фергана.-2022.-С.56-60 <http://repository.tma.uz/xmlui/handle/1/2749>

13. Распространении паразитов нецентрализованного водоснабжения Азизова Ф.Л. Central Asian journal of medical and natural sciences. Volume:03 Issue:06/ nov-dec 2022 issn:2660-4159-C.186-189
<https://www.cajmns.centralasianstudies.org/index.php/CAJMNS/article/view/1191>
14. Подготовка воды в военно-полевых условиях Теоретические проблемы экологии и эволюции Ф.Т.Абдувалиева VII Любичевские чтения «Качество воды и водные биоресурсы» VII. Тольятти.-2020.-с.213-214
15. https://api.scienceweb.uz/storage/publication_files/179/65/54a2fc1f1405__179-full-60e68cfcbbbe8.pdf#page=214
16. Ichimlik suvining sifat monitoringi natijalari Азизова Ф.Л. Материалы международной научно-практической онлайн конференции
17. «Гигиена окружающей среды и охрана здоровья населения, имплантируемые биоматериалы, проблемы и их решения». Фергана.-2022.-С. 180-186
<http://repository.tma.uz/xmlui/handle/1/2094>
18. Қизамиқ Касаллигининг Юқиш Йўллари Ва Юзага Келувчи Асоратлар Ё. А. Абдуғаниева, А. З. Каримова, Ф.Ф.Каримжонов Website: <https://sciencebox.uz> ISSN: 2181-3464 Website: <https://sciencebox.uz> ISSN: 2181-3464 Jild: 02 Nashr:12 2023 yil
19. Атмосфера Ҳавосининг Ифлосланиши Оқибатида Тирик Мавжудотлар Организмида Юзага Келувчи Салбий Ҳолатлар Ё.Ф.Муйдинова, Ф.Т.Абдувалиева, Т.Г.Рахимов Website: <https://sciencebox.uz> ISSN: 2181-3464 Website: <https://sciencebox.uz> ISSN: 2181-3464 Jild: 02 Nashr:12 2023 yil
20. Ecological environment and its improvements in the fergana valley Xamidullo Sadullaev, Abdusamad Muydinov, Avazbek Xoshimov, Ilhomjon Mamarizaev “ Barqarorlik va yetakchi tadqiqotlar onlayn ilmiy jurnali”
2021/11/19 Том 1 Номер 5 Страницы 100-106