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HYGIENIC DEFINITIONS OF WORKING CONDITIONS OF HEMATOLOGISTS

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Abstract
This in the article hematologists labor conditions hygienic in terms of modern scientific literature based on analysis Analysis to the results according to , laboratory employees between biological danger factors advantage to do detected , needle injuries in 25–40% of cases meeting , blood through contagious infections danger height record Also , chemical substances effect in 20–25% of cases observation and ergonomic problems wide prevalence was determined . In the article labor hygiene modern approach — occupational hygiene program system based on risks detection , monitoring and control to do mechanism illuminated. Obtained results hematologists labor conditions improve and professional risks reduce according to scientific based conclusions to release opportunity gives .

Keywords: Hematologist, biologist danger, chemical danger, needle injury, infection, ergonomic problem.

Introduction

Hematology modern medicine important from directions one blood and blood system diseases determination and monitoring main place Hematologists own activity during blood and other biological materials with directly performance because of various professional danger factors face This is coming. risks inside biological factors leader place take over, blood through contagious infections with damage probability increases.

International scientific literature to the analysis according to , laboratory 25–40 % of employees needle injuries is observed , this and professional infection of danger high Also , chemical substances effect in 20–25% of cases meet , far away term negative to the consequences take arrival possible . From this outside , laboratory under the circumstances far time work ergonomic problems and psychological to tensions reason will be .

Last in years labor in hygiene risks management modern approach as an occupational hygiene program system wide is being used . This system danger factors identify , assess , monitor and control to do stages own inside take , professional of diseases prevent to take service does .

With this together , available scientific sources analysis to do hematologists labor conditions hygienic in terms of complex study the necessity shows . This of the article target — hematologists labor conditions modern scientific information based on analysis to do and main danger factors from determining consists of .

First , hematologists in the activity occurring main professional danger factors is determined . In this biological risks (blood and other biological liquids with contact , needle injuries , infections diseases

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danger), chemical hazards (laboratory reagents , disinfectants and toxic substances impact), as well as ergonomic factors (long time one kind in case work , microscope with work , job of the place wrong organization (complex) in a way seeing will be released .

Secondly , international scientific sources , including World Health Organization , Centers for Disease Control and Prevention and Occupational Safety and Health Administration information based on this danger factors spread level analysis Statistical information based on hematologists and laboratory employees between biological of risks advantage , needle of injuries high meeting frequency and chemical and ergonomic of factors negative impact is evaluated .

International organizations , including World Health Organization to the information according to , medicine employees between blood through contagious with infections (HBV, HCV, HIV). damage danger noticeable at the level high . Research according to , every year millions medicine employees needle to injuries occurs and this professional infections main from the reasons is one.International scientific literature to the analysis according to , medicine employees between needle injuries wide widespread is , their general meeting frequency 43–56 % organization Every year world 2–3.5 million needles injury record In the USA and per year approximately 385,000 needles with related injuries This is observed . injuries as a result blood through contagious infections danger there is 0.3 % for HIV , 1.8 % for HCV organization Also , the laboratory employees chemical substances and inconvenient ergonomic also faced with circumstances it comes , this and their to your health far term negative impact shows . Obtained information in hematologists professional danger level complex factors impact with dependence shows .

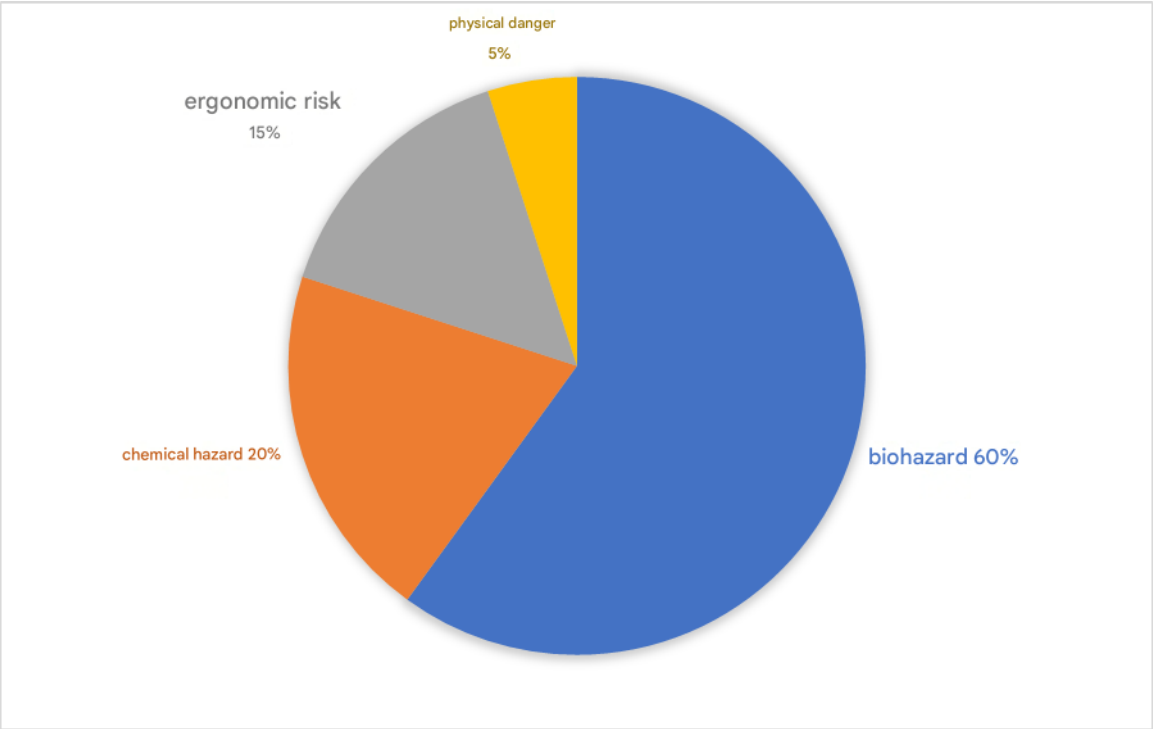

Figure 1. Biological, chemical , ergonomic, physical of factors how much danger to bring relative cited .

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Last in years labor in hygiene professional risks effective management modern approach as Occupational Hygiene Program (OHP) system wide is being used . This system working release and medicine in institutions employees health storage , professional of diseases prevent to take and safe labor conditions to create aimed at complex measures from the complex consists of .

OHP system international organizations , including World Health Organization , Occupational Safety and Health Administration and International Labor Organization by recommendation done It is as follows : main stages own inside takes :

First stage — danger factors hazard identification . This in stages work in place there is was all harmful and dangerous factors is determined . Hematology in laboratories this factors biological (blood) and biomaterials with contact), chemical (reagents , disinfectants) and physicist and ergonomic (noise , lighting , work position) factors own inside This of the stage main purpose — to employees potential damage to deliver possible was all factors complete to list is to take .

Second stage — exposition assessment and monitoring (exposure assessment and monitoring). In this process determined danger factors to employees impact level is measured and For example , the laboratory in the air chemical substances concentration , biological materials with contact frequency or work time duration such as indicators analysis Monitoring process regular accordingly take danger level change following will go .

Third stage — risks control (risk control). This in stages determined risks reduce or eliminate to grow measures working will be released and current These measures are the following own inside takes:technical control (ventilation) systems , closed laboratory systems), organizational measures (work) time optimization , security protocols), individual protection from the means use (gloves , mask , protective clothes). Also , employees regular teaching and security according to trainings Transfer is also important . importance has .

OHP system main advantage is that it is only risks determination with not limited to , but them complex management and control to do opportunity gives . As a result professional diseases danger decreases , employees work productivity increases and healthy labor environment is created .

Hematology in laboratories this the system current to grow especially important is considered , because this in the field biological danger factors high at the level employees permanent accordingly infection danger under works . That's why OHP system for hematologists labor conditions hygienic in terms of improvement the most effective from the methods one as is considered .

Conclusion

Conclusion as telling hematologists labor conditions are laboratory in the environment blood and other biological materials with work in the process to the employee impact provider biological , chemical , physical and psychophysiological factors complex. Hygienic point from the point of view this work biological danger high was labor type It is considered. Often class 3 harmful labor to the conditions enters . Hematologists labor conditions hygienic in terms of biological , chemical , physical and psychophysiological factors impact with is described . Especially , blood with permanent work because of biological danger high Modern Occupational Hygiene Programme system risks identify , assess , monitor and control measures application through professional of diseases prevent to take service does . Developed in the countries this system effective current done if , developing in the

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countries him/her improvement current This is approach to practice wide current to grow medicine employees health in storage important importance has .

References

1. World Health Organization. The world health report: reducing risks, promoting healthy life. Geneva: WHO; 2002.
2. World Health Organization. Health care worker exposure to bloodborne pathogens: global estimates. Geneva: WHO; 2010.
3. Centers for Disease Control and Prevention. Workbook for designing, implementing, and evaluating a sharps injury prevention program. Atlanta: CDC; 2008.
4. Centers for Disease Control and Prevention. Occupational HIV transmission and prevention among health care workers. Atlanta: CDC; 2023.
5. Republic of Uzbekistan Health storage Ministry of Health in institutions sanitation and hygiene requirements related normative documents . Tashkent ; 2020.
6. Tashkent Medicine Academy of Labor hygiene . Textbook . Tashkent ; 2021.
7. Шеркузиева, Г. Ф., Саломова, Ф. И., & Юлдашева, Ф. У. (2023). Токсичность “Ер малхами” при ингаляционном хроническом воздействии.
8. Юлдашева, Ф. (2018). Socio-Hygienic Study Of The Health Of Children Born With High Weight. International Scientific Journal ISJ &Applied Scince Philadelphia, USA, (11).
9. Тахиров, М. Т., Бекжанова, Е. Е., & Юлдашева, Ф. У. (1991). К обоснованию ПДК зерновой пыли в атмосферном воздухе. Гигиена и санитария, (8), 14-16.
10. Salomova, F. I., Yuldasheva, F. U., Sherkuzieva, G. F., & Sharipova, S. A. (2024). STUDYING THE EFFECT OF IRRATIONAL NUTRITION ON THE STUDENT'S BODY.
11. Шеркузиева, Г. Ф., Саломова, Ф. И., Самигова, Н. Р., & Юлдашева, Ф. У. (2023). Результаты изучения токсичности биологического удобрения «Ер малхами» при ингаляционном хроническом воздействии. Журнал новый день в медицине, 5, 55-58.
12. Sherkuzieva, G. F., Salomova, F. I., & Yuldasheva, F. U. (2023). RESULTS OF STUDYING THE INFLUENCE OF BIO-FERTILIZER “YER MALHAMI” ON THE QUALITY OF WATER BODIES. Central Asian Journal of Medicine,(4), 109-120.
13. Юлдашева, Ф. У., & Имамова, А. О. (2022). Роль спорта в формировании здорового образа жизни у молодежи. Европейский международный журнал междисциплинарных исследований и управленческих исследований, 2(11), 85-89.
14. Salomova, F. I. (2022). Problems of atmospheric air pollution in the Republic of Uzbekistan and the ways of their solution. In Uzbekistan-Japan International Conference «Energy-Earth-Environment-Engineering.
15. Salomova, F. I., Imamova, A. O., Mirshina, O. P., & Voronina, N. V. (2023). HYGIENIC ASSESSMENT OF THE CONDITIONS OF WATER USE OF THE POPULATION OF THE ARAL REGION. Academic research in educational sciences, 4(TMA Conference), 968-973.
16. Imamova, A. O. K., Bobomurotov, T. A., & Akhmadaliyeva, N. O. (2023). IMPROVING THE HEALTH STATUS OF FREQUENTLY ILL CHILDREN IN PRE-SCHOOL EDUCATIONAL INSTITUTIONS AND THEIR PRINCIPLES OF HEALTHY LIFESTYLE. Academic research in educational sciences, 4(TMA Conference), 180-185.

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17. Akhmadaliyeva, N. O., Salomova, F. I., Sadullayeva, K. A., Abdukadirova, L. K., & Imamova, A. O. (2024). RETRACTED: Nutrition of frequently ill preschool children in organized collectives. In BIO Web of Conferences (Vol. 84, p. 01011). EDP Sciences.
18. Imamova, A. O., & Bobonazarova, M. N. (2022, November). Renewable energy sources as a measure to prevent the depletion of the ozone layer. In Uzbekistan-Japan International Conference «Energy-Earth-Environment-Engineering.
19. "Water Resource Use and Protection in Uzbekistan: Current Status and Development Paths." Report of the scientific and practical seminar of the State Committee for Nature Protection , the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan , and the Tashkent Institute of Irrigation and Land Reclamation, March 18, 2013.

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