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FACTORS INFLUENCING THE DEVELOPMENT OF HOSPITAL-ACQUIRED INFECTIONS

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Abstract: The current growth and development of infectious diseases is due to the following factors: Creation of large hospital complexes. Daily and close interaction of diseases. Formation of a powerful and artificial transmission mechanism of infectious agents. This is due to invasive treatment and diagnostic methods. The use of complex equipment that requires special sterilization methods in treatment and diagnostics is also bearing fruit. The activity of the transmission mechanism of infectious agents. Especially in medical institutions, close interaction of patients and doctors, household contact, airborne transmission is possible. A person hospitalized with an undiagnosed infectious disease is the main source of infection. Uncontrolled use of antimicrobial drugs. Formation of microorganisms adapted to various drugs and adverse environmental factors. Decreased resistance and stability of the population to environmental changes and living conditions.

Keywords: infectious diseases, transmission mechanisms, hospital-acquired infections, invasive medical procedures, antimicrobial resistance, drug-resistant microorganisms, population susceptibility.

Hospital-acquired infections are divided into two groups based on etiology: **Obligatory** Obligatory due to the stimulation of pathogenic microorganisms. This group includes "traditional" infectious diseases - childhood diseases, intestinal diseases, etc. These diseases account for 15% of hospital infections. Pathogens can be present in a clean hospital in the following cases:

- a) when a carrier of the pathogen enters the hospital;
- b) if there is a carrier of the pathogen among the hospital staff;
- c) through visitors to patients or donated clothing and food.

Conditional

Conditionally pathogenic microorganisms, as well as those included in the normal human microflora, cause this group of diseases caused by conditionally pathogenic microorganisms. This is determined by purulent-inflammatory diseases. Causes: staphylococci, streptococci, gram-positive bacteria. In some cases, nosocomial diseases are caused by pseudomonads, legionella, rotoviruses. Pathology of the urinary tract, caused by gram-negative microorganisms, blue pus sticks cause infections of the lower respiratory tract. In a psychiatric hospital, intestinal infection occurs, in a gastroenterological hospital, chelonobacteriosis, etc.

Epidemiological features of hospital-acquired infections: a large number of sources of infection development. The predominance of diseases as a source of infection in purulent surgical, burn, urological and tuberculosis hospitals. The presence of exogenous diseases in oncology hospitals, departments of Acquired Immune Virus Diseases is a mechanism of transmission not only by real routes, but also by artificial, artificial, invasive and associated with treatment procedures. The presence of factors and contingents specific to various types of hospitals. The sources of pathogens of hospital-acquired infections are diseases, medical workers, people arriving and departing from diseases. In the spread of staphylococcal and streptococcal infections, aerosol transmission of infection plays an important role. Infectious air causes legionellosis. Bedding is also a factor in the development of anaphylactic shock. Household transmission is associated with diseases caused by gram-negative bacteria.

Transmission factors: Contaminated instruments, respiratory equipment, contaminated hands of workers, etc. Infection caused by etiological agents is transmitted through food. A

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young baby who is breastfed can contract the infection from the mother. Violation of food preparation technology can lead to intestinal infections if workers working in food processing plants are carriers of the infection. The impact of artificial transmission of infection is increasing. We are facing a real aggression of diagnostic and treatment technologies. Parenteral transmission occurs when using dirty syringes and needles, when administering contaminated drugs into the blood. Failure to comply with the rules of antisepsis and asepsis by medical workers, improper disinfection of instruments leads to this situation.

Prevention of artificial damage protection:

- use of disposable instruments;
- control of the operation of dental institutions;
- introduction of new highly sensitive diagnostic methods at blood transfusion stations;
- strict control of the work of endoscopic departments;
- transfusion of plasma and other blood components only when absolutely necessary
- introduction of less traumatic methods in surgical practice.

REFERENCES

1. РУЗИБОЕВА, ЕРКИНОЙ РАВШАНОВНА, and АЗИЗБЕК РАВШАНБЕКОВИЧ КАРИМОВ. "ФАКТОРЫ, ПРЕДРАСПОЛАГАЮЩИЕ К РАЗВИТИЮ РАКА ШЕЙКИ МАТКИ СРЕДИ ЖЕНЩИН ФЕРГАНСКОЙ ОБЛАСТИ ЗА ПЕРИОД 2017-2021 ГГ." *ИНТЕРНАУКА Учредители: Общество с ограниченной ответственностью "Интернаука"*: 31-32.
2. Makhbuba, I. (2025). EFFECTIVENESS OF SIMULATION-BASED EDUCATIONAL TECHNOLOGY IN MEDICAL EDUCATION. *AMERICAN JOURNAL OF EDUCATION AND LEARNING*, 3(9), 487-491.
3. Khaydarova, Buzulaykho, et al. "The Association between ambient air pollution and resistant hypertensive disorders in pregnancy: a case-control study in Tashkent." *Revista Latinoamericana de Hipertensión* 20.10 (2025).
4. Jaloldinovich, M. O. (2025, December). UNDERSTANDING HOSPITAL-ACQUIRED INFECTIONS. In *London International Monthly Conference on Multidisciplinary Research and Innovation (LIMCMRI)* (Vol. 3, No. 1, pp. 73-74).
5. Jaloldinovich, M. O. (2025, November). INFECTION PREVENTION AND SAFETY PROTOCOLS FOR HEALTHCARE WORKERS. In *London International Monthly Conference on Multidisciplinary Research and Innovation (LIMCMRI)* (Vol. 2, No. 2, pp. 261-262).
6. Jaloldinovich, M. O. (2025, December). EPIDEMIOLOGY OF HOSPITAL-ACQUIRED INFECTIONS. In *Scottish International Conference on Multidisciplinary Research and Innovation–SICMRI 2025* (Vol. 2, No. 2, pp. 75-76).
7. Tavakkal o'g'li, Ismoilov Dilmurod. "DEVELOPMENT OF SCIENTIFIC FOUNDATIONS FOR CONDUCTING PRACTICAL TRAINING IN HYGIENE SCIENCE IN HIGHER MEDICAL EDUCATION INSTITUTIONS USING EFFECTIVE AND MODERN METHODS." *SHOKH LIBRARY* (2025).
8. Ракхимов, Т. (2025). PRINCIPLES OF MONITORING AND HYGIENIC EVALUATION OF INDOOR MICROCLIMATE PARAMETERS. *Международный мультидисциплинарный журнал исследований и разработок*, 1(5), 42-45.
9. Aliyevich, A. A. (2025, December). MODERN APPROACHES TO FORMING THE CORRECT UNDERSTANDING OF AIDS AMONG THE POPULATION. In *London International Monthly Conference on Multidisciplinary Research and Innovation (LIMCMRI)* (Vol. 3, No. 1, pp. 310-312).
10. Мараймов, У. М. (2024, December). ОСНОВЫ ГИГИЕНЫ ЗДОРОВОГО ОБРАЗА ЖИЗНИ. In *Russian-Uzbekistan Conference* (pp. 186-188).

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11. Imaraliyevich, O. M. (2021). Features of the Immune System Structure of the Mucosa of the Small Intestine of Mice. *Academia Globe*, 2(05), 42-46.
12. Осбайов, М. И. (2024, November). ВЛИЯНИЕ ЛЕКАРСТВЕННЫХ РАСТЕНИЙ НА ВОСПАЛИТЕЛЬНЫЙ ПРОЦЕСС. In *Russian-Uzbekistan Conference* (Vol. 1, No. 1).
13. Bobomuratov, T., Sattorova, Z., Nasirov, A., Osbayov, M., Kholmurotov, M., Ruzmatova, D., ... & Zokirov, K. (2024). Evaluating the role of ecotourism in supporting conservation efforts. * *International Journal of Aquatic Research and Environmental Studies*, 4(suppl. 1), 83-88.
14. Osbayov, M. (2025). MEDICAL INSTITUTES: THE ROLE OF STATISTICAL DATA IN ORGANIZING SCIENTIFIC RESEARCH WORKS OF STUDENTS. *Journal of Multidisciplinary Sciences and Innovations*, 1(3), 363-366.
15. Imaraliyevich, M. O. (2025, December). WAYS TO INCREASE THE EFFECTIVENESS OF INTERACTIVE ELECTRONIC TEXTBOOKS IN THE SUBJECT OF HYGIENE AND MEDICAL ECOLOGY. In *London International Monthly Conference on Multidisciplinary Research and Innovation (LIMCMRI)* (Vol. 3, No. 1, pp. 221-223).