



**BLOOD TRANSMITTED DISEASES AND MEASURES TO PROTECT NURSES
AGAINST THEM IN THE WORK ACTIVITY**

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Abstract: This scientific article describes the types of blood-borne diseases, transmission mechanisms and methods of protecting nurses working in medical institutions from these diseases. Occupational risk factors, preventive measures and occupational safety issues were also analyzed.

Key words: blood-borne diseases, nurse, occupational risk, protection, hepatitis, HIV, sterilization.

Blood-borne diseases are one of the most pressing problems of modern medicine and pose a great threat to the healthcare system. These diseases are transmitted through infected blood and body fluids, causing serious harm to human health. Health care workers, especially nurses, are at high risk due to direct contact with blood during their professional activities. Therefore, the issue of protecting nurses from blood-borne diseases is of particular scientific and practical importance.

Blood-borne diseases are infectious diseases whose pathogens enter the body through blood, serum or other body fluids. These diseases are often hidden for a long time, and as a result of late detection they become chronic and cause serious complications.

The use of disposable gloves, medical masks, protective glasses and special gowns by nurses is mandatory.

Safe work techniques - do not cover needles, do not throw away used needles and cutting tools in special containers, perform all procedures in accordance with established rules.

Disinfection and sterilization - Medical equipment must be disinfected and sterilized in the prescribed manner. Using disposable instruments reduces the risk of infection.

Vaccination and medical control. Nurses should be vaccinated against hepatitis B and undergo regular medical examinations.

Actions in emergency situations - In the event of a needle stick or blood, the wound is immediately washed, treated with an antiseptic and, if necessary, post-exposure prophylaxis is carried out. Health care workers, especially nurses, are in direct contact with patients in the course of their professional activities and often work with blood and body fluids. Therefore, they are considered to have professions with a high risk of contracting infectious diseases transmitted through blood. This article discusses the main blood-borne diseases and measures to protect healthcare workers from them. Blood borne diseases (such as HIV, Hepatitis B/C) are an occupational hazard for nurses and the use of personal protective equipment (PPE), use of sterile equipment, antiseptic techniques, emergency care protocols.



Protective measures for nurses

To reduce risk during work, the following rules must be observed:

Universal Precautions: The blood and body fluids of each patient should be considered a potential source of infection.

Personal protective equipment (PPE):

Always wear gloves if contact with blood is possible.

Use a mask, goggles or shields if there is a risk of face splashes.

Safe handling of sharp objects:

Disposal of used needles is strictly prohibited.

Sharp instruments (needles, scalpels) should be disposed of immediately in special puncture-resistant containers.

Bloodborne diseases (BBDs)

Hepatitis B virus (HBV): causes liver inflammation that can become chronic.

Hepatitis C virus (HCV): Can cause cirrhosis and liver cancer.

Human immunodeficiency virus (HIV): weakens the immune system (AIDS).

Other diseases: Syphilis, malaria, some bacterial infections.

Measures to protect nurses

Personal protective equipment (PPE):

Eldiven (disposable, durable) use.

Wearing a uniform, glasses, masks.

Sterility and antiseptics:

New, sterilized, disposable instruments (needles, syringes) for each patient.

Wash your hands quickly after contact with skin.

Safe working practices:

We re-stitch half-pierced needles, avoiding breakage.

Strict adherence to betting rules.

Environmental cleaning:

Disposal of bloody materials in special containers.



Regular disinfection of surfaces.

Prevention and vaccination:

Vaccination against hepatitis B is necessary.

HIV prevention (PEP – post-exposure prophylaxis).

Emergency protocol:

In case of contact (bites, scratches), immediately wash, treat and inform a doctor.

Nurse training Provide regular training on the hazards of handling blood.

Teach safety protocols and ensure they are strictly followed.

Blood-borne diseases pose a serious threat to the health of nurses. In the prevention of these diseases, strict adherence to the rules of protection during professional activities, the use of personal protective equipment, vaccination and compliance with sanitary and hygienic requirements are important.

The World Health Organization defines violence as “the actual or potentially intentional use of physical force or power directed against an individual, group, or community that results or is likely to result in harm, psychological injury, developmental impairment, or death of the individual”. The increase in violence against health personnel is alarming. There are more cases of attacks, threats, insults, and rape in health and social care institutions than in any other type of organization. According to some authors, nurses are 3 times more likely to become victims of workplace violence than representatives of other professions. The most likely victims of violence may be female medical students, hospital and emergency nurses. Physical attacks on nursing staff are usually carried out by patients. However, there are reports of violence by health care workers, including nurses and doctors, relatives of patients and other strangers. This determined the list of hazard factors for the professional activities of doctors and nursing staff of health care facilities.

There are an estimated 1,000,000 annual cases of infection among healthcare workers [4]. Sharps injuries have been reported as the most common occupational hazards faced by healthcare workers, including doctors, nurses, paramedics, cleaners, and others [5]. Several studies claim that among health care workers (nursing staff, medical staff, laboratory technicians, students, typically trained in health care settings) there is a disparity in the reporting of needle and sharps injuries, with nursing personnel showing the highest rates both internationally and globally. This can probably be justified by the fact that nursing staff constitute the occupational category that spends the most time caring for patients and they have a high incidence of exposure to infection or injury. Of these incidents, at least half are not reported or recorded; the unreported rate ranges from 26 to 85%. One American study indicated that many workers do not report injuries because they underestimate the risk of infection, find the reporting process time-consuming, or for fear of being treated unprofessionally. Work-related musculoskeletal diseases are one of the common occupational hazards among healthcare workers. The disorders are defined as symptoms of musculoskeletal pain that reflect a range of conditions such as neck pain, back pain, shoulder pain, limb pain, carpal tunnel syndrome, myofascial dysfunction syndrome, atypical facial pain, etc. A number of studies have shown that the mechanisms leading to work-related



musculoskeletal pain are multi-etiological. This pain can be attributed to numerous risk factors, including prolonged static postures, repetitive movements, suboptimal lighting, poor positioning, genetic predisposition, mental stress, physical fitness, age, and obesity[12]. It is generally accepted that the physical posture of the physician when providing medical care should be such that all muscles are in a relaxed, well-balanced and neutral position. Postures outside of this neutral position for long periods can cause musculoskeletal discomfort

List of used literature:

1. Abdullaev A.A. Infectious diseases. — Tashkent: Tibbiyot Publishing House, 2020.
2. Kadyrov B.G., Ismailova N.N. Fundamentals of epidemiology for health workers. — Tashkent, 2019.
3. Karimov I.R. Nursing work and occupational safety. — Tashkent: Science and Technology, 2021.
4. Rakhmanov S.S. Viral hepatitis and measures for their prevention. — Tashkent, 2018.
5. World Health Organization (WHO). Prevention of blood-borne infections in health care settings. — Geneva, 2022
6. World Health Organization (WHO). Hepatitis B and C: occupational risks for healthcare workers. — Geneva, 2021.
7. Babenko O.V., Avkhimenko M.M. Ensuring the safety of healthcare facilities in an emergency // Nurse. - 2012; 4:5-11.