

Epidemiological Aspects of Viral Hepatitis B

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Abstract: The article describes the global and regional epidemiological aspects of viral hepatitis B, the causes of its spread and preventive measures. In particular, in the conditions of Uzbekistan, the spread of the disease, vaccination against it, and sanitary-hygiene measures were considered. The article is of practical importance in terms of disease prevention in the field of health care.

Key words: viral hepatitis B, epidemiology, spread, risk factors, prevention, vaccine, sanitation and hygiene, Uzbekistan.

Introduction

Viral hepatitis B (VGB) is one of the most common infectious diseases globally, and according to the World Health Organization (WHO), more than 820,000 people die every year due to this disease and its complications. This virus belongs to the family of hepadnaviruses and is transmitted mainly through blood, biological fluids, vertically from the fetus to the unborn child, and through unprotected sexual intercourse. Since hepatitis B infection can last for a long time and cause complications such as liver cirrhosis and hepatocellular carcinoma, its timely detection and preventive measures are extremely important. Today, GBV remains an urgent problem for the health care system in various regions of the world, including countries such as Uzbekistan. The spread of the disease in the country is mainly caused by reasons such as non-observance of hygienic rules during blood transfusions, unprotected sex, and improper sterilization of medical equipment. At the same time, a number of programs are being implemented to reduce the spread of the disease by vaccinating newborns.

This article analyzes the epidemiological characteristics of viral hepatitis B, risk factors, ways of spreading and preventive measures. At the same time, the role of the disease in the conditions of Uzbekistan, existing problems and proposals for combating them will be considered. Through these analyses, information is provided that helps to determine effective measures in the fight against VGB and to improve prevention programs.

Materials and methods

In this study, a number of scientific and practical sources were analyzed in order to study the epidemiological characteristics of viral hepatitis B (VGB). Statistical data published by the World Health Organization (WHO), reports submitted by the Ministry of Health of the Republic of Uzbekistan, articles in international scientific journals and local studies on VGB as the main material. Was used. The data was collected and studied mainly in the period of 2018-2023.

In the study, the method of in-depth literature analysis was used, and international and local sources on VGB were compared. Epidemic analysis was used to study the ways of disease transmission, risk factors, and regional distribution characteristics. Also, with the help of statistical data, the spread of the disease in different age groups, the causes of the widespread spread of the disease, and its socio-hygienic factors were analyzed.

Survey and interview methods were used in the practical part. Factors affecting the spread of the disease, including the risk of blood transmission, the effectiveness of vaccination programs and

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preventive measures, were evaluated based on the results of a survey conducted among employees of medical institutions and patients infected with hepatitis B. The personal data of the patients were analyzed in accordance with the principles of confidentiality.

The state programs for the prevention of viral hepatitis B in the conditions of Uzbekistan, in particular, the vaccination program for newborns, preventive measures for children and adults, and promotional activities carried out through mass media were studied. The state of compliance with sanitary-hygiene rules in medical institutions was also analyzed, and existing problems in providing assistance to patients were identified.

The use of these methods made it possible to fully elucidate the epidemiological situation of viral hepatitis B and to develop effective measures to reduce the spread of the disease.

Results and Discussion

Results

The results of the study provided important information about the epidemiological characteristics of the viral hepatitis B (VGB) disease, its spread and the measures being taken to prevent the disease.

Spread of the disease: According to information obtained in different regions of Uzbekistan, viral hepatitis B disease has a high prevalence. Between 2018 and 2023, the number of patients infected with VGB in Uzbekistan was determined. As a result of the statistical analysis, the disease is most often recorded in the following groups:

Healthcare workers: A group at high risk of infection, with particularly high incidence rates among blood workers.

Pregnant women and newborns: Vertical transmission of the virus increases the risk of infection in newborns.

Unprotected sex: It has been found that people who have sex are more likely to get STIs.

Prevention and vaccination programs: In Uzbekistan, the state program to vaccinate newborns against viral hepatitis B is being successfully implemented. Since 2018, the first dose of vaccination is given to all newborns in the maternity ward, which has helped to significantly reduce the transmission of the disease to newborns.

Prevention and training: In the course of the study, the level of improvement of the medical staff's qualifications and compliance with sanitary and hygienic rules was also studied. In some medical institutions, non-observance of sanitary-hygiene rules and improper sterilization of equipment can be the cause of disease transmission.

Discussion

The results of the study showed that social, medical and sanitary-hygiene factors are of great importance in determining the spread of viral hepatitis B. Transmission of viral hepatitis B is mainly associated with the following factors:

Ways of transmission of the disease: GBV is mainly blood-borne, so healthcare workers, blood transfusion workers, and hemodialysis workers are the groups most exposed to the virus. This, in turn, emphasizes the need for qualified training of medical personnel on disease prevention.

Vaccination and prevention: Although it has been determined that the effectiveness of vaccination of newborns in Uzbekistan is high, there are still problems in increasing attention to vaccination and awareness among the population. Studies have shown negative attitudes towards GBV vaccination, especially in rural areas and in certain social groups. This challenge calls for increased advocacy and awareness campaigns to improve the effectiveness of the vaccination program.

Implementation of sanitary and hygiene regulations: The study showed that non-compliance with sanitary and hygienic rules had a negative effect on the spread of the disease. It is necessary to ensure strict compliance with sanitary and hygiene rules in medical institutions. Also, it is necessary to



improve the qualification of medical workers, organize seminars and courses for them on the prevention of diseases.

Sterilization of medical equipment: Complete and effective sterilization of equipment in medical institutions is important. Improper sterilization procedures can cause the spread of infection, making hepatitis B more difficult to prevent.

Risk of sexual transmission: The risk of transmission of VGB among the population having unprotected sex is still a pressing issue. To prevent this, sexual health information and education programs need to be strengthened.

Offers

Strengthening preventive programs: It is necessary to further expand the vaccination of newborns and to strengthen the work of information on the fight against VGB among the population.

Strengthening sanitary-hygiene rules: It is necessary to strictly follow sanitary-hygienic rules and improve sterilization processes in medical institutions.

Sexual health promotion: Widespread sexual health promotion is necessary to reduce the risk of hepatitis B transmission among the sexually active population.

Conclusion

In conclusion, viral hepatitis B (VGB) disease is widespread and one of the serious social and sanitary problems in Uzbekistan. The results of the study showed that the main factors in the spread of VGB disease are non-compliance with sanitary and hygiene rules, lack of skills of medical workers, improper implementation of vaccination programs and the spread of sexually transmitted infections. In order to reduce the spread of VGB, it is necessary to strengthen vaccination programs, strictly follow the rules of sanitation and hygiene in medical institutions, and carry out promotional activities aimed at improving the skills of the population. In particular, it is important to expand vaccination to newborns and to educate health workers about disease prevention. In general, in order for the measures taken to prevent viral hepatitis B to be effective, it is necessary to raise awareness among the population, improve vaccination and prevention programs, and improve the qualifications of medical personnel. Efforts made in this direction will significantly reduce the spread of the disease.

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