JOURNAL OF MULTIDISCIPLINARY SCIENCES AND INNOVATIONS
GERMAN INTERNATIONAL JOURNALS COMPANY
ISSN: 2751-4390
IMPACT FACTOR (RESEARCH BIB) : 9,08. Academic reserach index

SANITARY AND PARASITOLOGICAL ASPECTS OF PREVENTIVE AND ANTI-EPIDEMIC MEASURES

Bayhanova Nasiba
Andijan State Medical Institute

Abstract: The system of preventive and anti-epidemic measures is a component of targeted management of the epidemic process. Environmental factors are an integral part of the epidemiological ecosystem and are capable of playing the role of regulators of the interaction process of its components, activating or inhibiting them. Such regulatory functions are carried out by influencing, first of all, its extraorganismal part, living on various objects of the environment. Changes in the state of environmental factors, capable of activating the interaction of the members of the parasitic system, should be considered as prerequisites for the complication of the epidemic situation. [1]. For example, the redistribution of helminthiasis pathogens in the soil during floods and natural disasters create prerequisites for the complication of epidemiological situations.
Keywords: parasitic diseases, sanitation, epidemic control, helminths, protozoa, public health, surveillance.

INTRODUCTION

Preventive measures are a system of state, social, hygienic and medical measures aimed at ensuring a high level of health and preventing diseases. Measures related to the neutralization of possible sources of infection (invasion) and suppression of possible routes of spread (transmission) of diseases include: protection of the natural environment (soil, water sources, etc.) from contamination with human and animal feces, wastewater and its sediment; improvement of populated areas (construction and reconstruction of sewerage, water supply, etc.); control over the compliance of environmental objects with regulatory indicators for safety for public health; sanitary supervision of the territory and water supply of populated areas, of the production, transportation and trade of food products; veterinary sanitary supervision at slaughterhouses, meat-packing plants, markets and livestock farms; detection and sanitation of carriers of pathogens of parasitic diseases, promotion of knowledge on personal disease prevention among people [1].

MATERIALS AND METHODS

Anti-epidemic measures are a set of sanitary and hygienic, medical and preventive and organizational (administrative) measures aimed at localizing and eliminating foci and preventing transmission routes of infectious diseases. The measures include: active identification of patients and carriers of pathogens, registration and treatment, hospitalization if necessary, dispensary observation after treatment; neutralization or destruction (as indicated) of animals - sources of invasion; neutralization of epidemiologically significant objects of the natural environment from the invasive principle (pathogens of parasitic diseases); control and supervision of environmental objects as factors of disease transmission; a wide range of sanitary and preventive measures in populated areas. In the system (complex) of general preventive and anti-epidemic measures for parasitoses, in addition to the analysis of the incidence and morbidity of the population, examination of epidemiologically significant objects, identification of sources of invasions, treatment and dispensary observation, health education, development of comprehensive plans for the prevention of parasitic diseases, elements of a sanitary and parasitological nature are

important, presented below.

RESULTS AND DISCUSSION

Anti-epidemic measures [2]:

- epidemiological survey of the outbreak when cases of intestinal protozoa are detected;
- sanitary and hygienic and disinvasion measures, impact on transmission factors (disinfection of feces of patients and parasite carriers, disinvasion of manure and manure runoff, etc.);

preventive measures:

- analysis of data on contamination of environmental objects with pathogens of protozoa;
- sanitary and parasitological control in the premises of children's institutions, public catering organizations, etc.;
- protection of water bodies from pollution by wastewater, surface runoff;
- sanitary and parasitological control over the quality of drinking water and water of surface water bodies;
- organization of technology for keeping animals, ensuring their protection from possible infection with protozoa;
- assessment of the effectiveness of anti-epidemic measures.

In case of geohelminthiasis.

Anti-epidemic measures [3]:

- epidemiological survey of the outbreak (micro-focus) upon detection of geohelminthiasis;
- sanitary and parasitological monitoring of epidemiologically significant objects of the environment;
- control over the safety of food plant products;
- laboratory control of soil quality;
- disinfestation of soil, sewage;
- inadmissibility of using feces as fertilizers;
- deregistration of the micro-focus in case of negative results of sanitary and helminthological control of the soil.

Preventive measures:

- analysis of the results of sanitary and parasitological studies of epidemiologically significant objects of the environment;
- sanitary and parasitological control over disinfestation of wastewater discharged from sewage treatment plants, as well as wastewater sludge, including that used for irrigation and fertilization;
- assessment of the effectiveness of anti-epidemic measures [4].

CONCLUSION

Preventive and anti-epidemic measures are most effective when they address both the sanitary and parasitological dimensions of disease ecology. Parasites exploit weaknesses in environmental health systems, social behavior, and public infrastructure, making them persistent threats in both endemic and emergent contexts. Integrated approaches — combining water and sanitation services, vector control, laboratory diagnostics, and health education — are essential for long-term control and outbreak prevention. Strengthening parasitological expertise within public health institutions is a strategic necessity for building resilient healthcare systems capable of withstanding future epidemic threats.

REFERENCES

1. Ziegelbauer, K., Speich, B., Mäusezahl, D., Bos, R., Keiser, J., & Utzinger, J. (2012). Effect of sanitation on soil-transmitted helminth infection: systematic review and meta-analysis. *PLoS Medicine, 9*(1), e1001162. https://doi.org/10.1371/journal.pmed.1001162

2. Strunz, E. C., Addiss, D. G., Stocks, M. E., Ogden, S., Utzinger, J., & Freeman, M. C. (2014). Water, sanitation, hygiene, and soil-transmitted helminth infection: a systematic review and meta-analysis. *PLoS Medicine, 11*(3), e1001620. https://doi.org/10.1371/journal.pmed.1001620Википедия+1Википедия+1

3. World Health Organization. (2015). *Water, sanitation and hygiene for accelerating and sustaining progress on neglected tropical diseases: A global strategy 2015–2020*. Geneva: WHO Press. https://www.who.int/publications/i/item/9789241508157Википедия+1Википедия+1
4. Centers for Disease Control and Prevention. (2020). Parasites – General information. Retrieved from https://www.cdc.gov/parasites/index.html