

Surveillance

Control and Evaluation of Anti-epidemic Measures

Control and evaluation of anti-epidemic measures is done daily and represents the main work done by the epidemiologist. Daily results are evaluated and can be changed according to a change in disease or patient's condition. The effectiveness of such measures is evaluated from both a medical and an economic point of view. Anti-epidemic measures should be simple, understandable, effective and easy to put into practice.

Epidemiological Evaluation

This represents a complex of obtaining information with the occurrence of certain diseases or disturbances in the population, systemic monitoring of all conditions and factors influencing the development and occurrence of the disease being monitored.

Surveillance

Surveillance represents a number of long-term and complex programmes, in which experts of various medical fields participate together, for example epidemiologists, microbiologists, hygienists, clinicians etc. Other non-medical personnel, such as statisticians, vets and ecologists, may also participate alongside medical personnel. The epidemiologist is usually the initiator and organiser of the program.

Surveillance was initially started in the field of infectious diseases. Recently, it has shown disadvantages in monitoring the mass occurrence of infectious and non-infectious diseases such as tumors, cardiovascular diseases and metabolic disturbances.

Surveillance is put into effect in three successive stages:

1. Obtaining the necessary data such as the number of sick, the number of dead, data from microbiological laboratories on circulation and qualities of etiological agent, clinical information on symptomatology of individual diseases, monitoring of vaccination and collective immunity of population, monitoring of infections with animals, and data of natural sciences on vectors.
2. Analysis of collected data, including evaluation of information and suggestion of measures. Long-term surveillance gives the possibility of making a prognosis of the occurrence of a given disease for the future.
3. Guaranteeing qualified information to all concerned people who can further use it for improvement of their own measures and theories.

Surveillance programmes can be carried out on a large scale such as for districts and regions. In the Czech Republic, surveillance programmes exist for poliomyelitis, pertussis, diphtheria, measles, viral hepatitis, alimentary infections and influenza. Under the general guidelines released by WHO, surveillance of influenza is carried out on an international level.

Links

Related Articles

- Preventive Anti-epidemic Measures
- Anti-epidemic Measures in the Focus of Infection

Bibliography

- BENCKO, Vladimír, et al. *Hygiene and Epidemiology : Selected Chapters*. 2nd edition. Prague. 2008. ISBN 80-246-0793-X.

References