In clinical practice, there is a daily need for valid, up-to-date, information about diagnosis, therapy and prevention. The epidemiological studies using large clinical and laboratory data allow vets to estimate the risk of infection for pets in their area and to perform individualized risk assessments for vaccination or therapy. The current epidemiological concepts explore and assimilate the new information technology services, and some of those resources have already been integrated in companion animal medicine. In this paper we propose a classical and easy to use network designed for companion animal veterinary practitioners whose acronym is PetEpiNetVet (Companion Animals Romanian Epidemiological Surveillance Network). The main objective of PetEpiNetVet is to collect and share the epidemiological data of infectious and parasitic diseases in companion animals: dogs, cats, horses, and exotic animals. The network is designed to provide information, support the utilization of national and regional resources, and improve communication between veterinarians, to contribute to the search for partners, to support the experience exchange and to improve the research in veterinary and biomedical disciplines.

The main objective of PetEpiNetVet is to collect and share in real-time the epidemiological data of infectious and parasitic diseases in companion animals: dogs, cats, horses, and exotic animals. The network will be able to: provide information about syndrome and disease events in companion animals, conduct statistical analyses to identify space-time clusters of events and risk factors (host, environment) for diseases, alert to the occurrence of potential acts of bioterrorism and emerging zoonoses and characterize safety and efficacy of veterinary drugs and vaccines (pharmacoepidemiology). The PetEpiNetVet goals are to help veterinary doctors to discover new pathogens and to adopt the best therapeutic protocol.

For example, NCASP carried a study to evaluate the prevalence of and risk factors for canine tick infestation. Knowledge of the geographic range and seasonal activity of vector ticks is important for determining which people or animals are at risk of acquiring tick-borne infections. Several methods require a large-scale organization and are used to map geographic and seasonal variations in tick distribution. Prevalence of canine tick infestation in 40 states was estimated by analyzing electronic medical records of more than 8 million dog visits to Banfield veterinary hospitals in 2002-2004. In multiple logistic regressions, younger dogs, male dogs, and sexually intact dogs, were at increased risk of tick infestation. Toy breeds were least likely to be infested, but no linear pattern of risk was evident with body weight. Identified risk factors should enable veterinarians to prevent tick infestation in pet dogs.

The current epidemiological concepts explore and assimilate the new information technology services, and some of those resources have already been integrated in companion animal medicine. If we want a betterment and health of all species our actions need to be integrated into concept “one medicine-one health”. This means more sharing of surveillance data and greater cooperation among organizations involved in surveillance.

The goal is to help veterinarians and pet owners develop practical preventive measures to reduce the incidence of these diseases. In most countries, including Romania, the information on zoonoses and other diseases with national importance are managed by governmental agencies (e.g. Health Ministry, Romanian Veterinary and Food Safety Agency). Also, the funds are usually available for research on diseases of economically important livestock. However, investigation of companion animals’ diseases, especially if they are not demonstrably of public health significance, relies on the limited financial support available from welfare societies and charities. Lack of funds therefore can restrict companion animals data collection.

Companion Animals Romanian Epidemiological Surveillance Network is designed to provide information, support the utilization of national and regional resources, to improve communication between veterinarians, to contribute to the search for partners, support the exchange of experience and to improve the research in veterinary and biomedical disciplines. PetEpiNetVet is addressed to field veterinarians, university teachers, research institute staff members, laboratory diagnosticians and advanced students.

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