Epidémiol. santé anim., 1997, 31-32

TEACHING INFECTIOUS DISEASES AND VETERINARY EPIDEMIOLOGY IN THE CZECH REPUBLIC

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La formation en épidémiologie vétérinaire et maladies infectieuses s'effectue en 5ème et 6ème année du curriculum vétérinaire. Les étudiants ont déjà acquis des connaissances de base en microbiologie, immunologie, anatomie pathologique, pharmacologie et ils sont en train d'étudier les matières cliniques. C'est la synthèse de toutes ces connaissances qui les mène à comprendre l'origine, la propagation, l'évolution et l'élimination des maladies infectieuses, c'est-à-dire à saisir les lois de l'épidémiologie générale. Les maladies infectieuses de la liste A de l'O.I.E., les maladies communes à plusieurs espèces animales et les zoonoses représentent le sujet principal de la seconde partie du cours. Si ce type de maladies était présenté aux étudiants suivant les espèces animales cibles, le contexte épidémiologique serait perdu. En sixième année, l'enseignement pratique à la ferme universitaire comprend toutes les interventions de caractère prophylactique et préventif ainsi que l'entrainement à résoudre différentes situations simulées d'importance épidémiologique. Le cours est terminé par un examen d'Etat et ensuite, les diplômés de la faculté peuvent suivre différents types de cours de la formation continue des vétérinaires.

A comparison of the curricula at the Faculty of Veterinary Medicine of the University of Veterinary and Pharmaceutical Sciences in Brno with those used at Western Europe universities revealed considerable differences in the way infectious diseases and veterinary epidemiology (termed epizootiology in our country) are taught. While, at universities abroad, infectious diseases are first part of a microbiology course and then, in the clinical years, of the programmes of individual clinics, at our University they are taught in a separate course dealing with infectious diseases and epizootiology. This is a three-semester study at the end of the whole veterinary medicine course.

The inclusion of this discipline in the curricula was a result of the post-war situation in agriculture and also of the introduction of a large-scale agricultural production. A certain role was also played by some zoonoses which had to be managed in cooperation with the public health service.

The teaching programme in general veterinary epidemiology involves: interactions among animals, aetiological agents and the environment; analysis of epizootiological situation; risk assessment; epizootiological strategy; etc. The special veterinary epidemiology is focussed on infectious diseases presented in the O.I.E. "List A". Due to their high contagiousness, these infections cannot be clinically demonstrated to the students. The programme also covers many of the diseases given in "List B" of the O.I.E. which are often common to several animal species and some may even become dangerous zoonoses. The fact that these infections are included in one discipline allows us to draw conclusions form the knowlege of studies of relevant pre-clinical and clinical disciplines, to highlight important inter-species relationships and to emphasize the effectiveness of comprehensive control measures. The synthesis of all information acquired enables the students, in the context of general epidemiology, to better understand the rules governing the origin, spread, development and control of infectious diseases. The programme is completed with a week's training at the University Teaching Farm. The students learn to monitor the development of a selected infection, to implement preventive and prophylactic measures and to evaluate their results. The course is closed with the state examination. Veterinary medicine doctors, however, can continue their specialist education in postgradual courses.

The outcomes of teaching veterinary epidemiology, a specialised subject based on knowledge acquired in several disciplines during the 6-year veterinary course, have best been shown by the high professional standard of our graduates in the area of infectious disease control. As a result, the Czech Republic has been free from brucellosis since 1964, tuberculosis since 1968, Aujeszky's disease since 1987 and enzootic bovine leucosis since mid-1996 and, at the present time, several other animal infections are successfully brought under control.

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