

Annali
dell'Istituto
Superiore
di Sanità

Volume 28, N. 4, 1992

pp. 419-520 **Topics of veterinary public health**

Edited by

A. MACRÌ and A. MANTOVANI

Contenuto/Contents

Sezione I/Section I

TOPICS OF VETERINARY PUBLIC HEALTH

Edited by **Agostino Macrì** and **Adriano Mantovani**

<i>INTRODUCTION</i>	p.	419
Veterinary drug surveillance - Agostino Macrì and Romano Marabelli	»	421
Veterinary pharmacovigilance in the European context - Gérard Keck	»	425
The role of multigeneration studies in safety assessment of residues of veterinary drugs and additives - Alberto Mantovani	»	429
Health aspects of the use of beta-2 adrenergic drugs in animal production - Gianfranco Brambilla	»	437
Veterinary primary health care in Italy - Beatrice Bussi and Patrizia Parodi	»	441
Intersectoral collaboration in animal and human health - Konrad Bögel , Reginald B. Griffiths and Adriano Mantovani	»	445
The state of food hygiene and foodborne diseases: requirements for the future - Zdeněk Matyáš ..	»	451
Hazard analysis critical control point (HACCP) in public catering services: a modified method, combined to bacteriologic assay - Paola Ferrari	»	459
Animals as hosts of zoonoses - Adriano Mantovani and Vittorio Guberti	»	465
Echinococcosis/hydatidosis: socio-economic consequences and economic analyses of control hygiene programmes - Giorgio Battelli and Marco Martini	»	473
A study of factors influencing intestinal parasites in dogs - Marco Martini , Giovanni Poglayen , Nicola Minerva and Antonio Zanangeli	»	477
Evaluation of the size of stray dog population and of related problems in Emilia Romagna - Santino Prosperi , Armando Giovannini , Fabio Ostanello and Tonino Rossi	»	485
Dog-transmitted zoonoses: a serological survey in the province of Bologna - Raffaella Baldelli , Cinzia Cimmino and Monica Pasquinelli	»	493
Bovine spongiform encephalopathy: an overview - Umberto Agrimi , Giovanni Di Guardo and Maurizio Pocchiari	»	497
Intersectoral cooperation training: a tool for health personnel development - Maria Cristina Calicchia , Adriano Mantovani and Maria Scorziello	»	507
The control of human brucellosis in the Campania Region: an updating of knowledge and results obtained by the third year of the programme activities - Raffaele Palombino , Filippo Palumbo , Agnese Petti , Silvana Tagliafierro , Adriano Mantovani and Maria Scorziello	»	511

Sezione II/Section II

RICERCHE E METODOLOGIE/RESEARCH AND METHODOLOGY

Mortality rates among psychiatric patients, during and after the "psychiatric reform", in the area of Rome (Italy) - Francesco Cecere, Massimo Arca, Susanna Pallini, Carlo Alberto Perucci and Paolo Pasquini	p.	523
Anofelismo residuo in Italia: distribuzione nelle aree risicole delle provincie di Grosseto e Siena - Roberto Romi, Carlo Severini, Maurizio Cocchi, Angelo Tamburro, Davi Menichetti, Gaudenzio Pierdominici e Giancarlo Majori	»	527
Il Registro Nazionale degli Ipotiroidi Congeniti - Mariella Sorcini Carta, Cristina Fazzini, Antonella Olivieri, Ilaria Sorcini, Michele Grandolfo, Antonia Stazi, Emanuela Medda, Marco Recchia, Paolo Balestrazzi e Giorgio Giovannelli	»	533
Prevalence of mental disorders in Tuscany: a community study in Lari (Pisa) - Pier Luigi Morosini, Piero Coppo, Franco Veltro and Paolo Pasquini	»	547
Somatomedine/fattori di crescita insulino-simili (IGFs): caratteristiche chimiche e funzionali - Stefania Caiola, Nicolina Di Biase e Angela Maria Buongiorno	»	553
Analisi dell'immunogenicità di un vaccino ricombinante anti-epatite virale di tipo B - Roberto Russo, Franco Ripa, Savina Ditommaso, Carla Zotti e Angela Moiraghi Ruggenini	»	563
Valutazione degli stili di lavoro mediante il metodo dei casi clinici nei dipartimenti di salute mentale della Regione Campania - Pier Luigi Morosini, Francesca Manaresi, Franco Veltro, Rocco Barone e Paolo Pasquini	»	569
Modelli e strategia per controllare la contaminazione atmosferica in grandi aree urbane - Maria Chiara Mura, Emiliano Hernandez, Francisco Valero, Fernando Martin e Sergio Fuselli	»	579
Distribuzione territoriale della mortalità per tumore maligno della pleura in Italia - Maurizio Di Paola, Marina Mastrantonio, Pietro Comba, Mario Grignoli, Pietro Maiozzi e Marco Martuzzi	»	589
<i>RECENSIONI, COMMENTI E SEGNALAZIONI/BOOK REVIEWS, NOTES AND COMMENTS ...</i>	p.	601
<i>PUBBLICAZIONI DELL'OMS/WHO PUBLICATIONS</i>	p.	607
<i>INDICI DEL VOLUME/INDEXES OF THE VOLUME</i>		
Indice degli Autori/Author Index	p.	609
Indice per Materia/Subject Index	»	611
Contenuto del Volume/Tables of Contents of the Volume	»	615

Sezione I/Section I

TOPICS OF VETERINARY PUBLIC HEALTH

Edited by
A. Macrì (*) and **A. Mantovani (**)**

() Laboratorio di Medicina Veterinaria, Istituto Superiore di Sanità, Rome, Italy*

*(**) Laboratorio di Parassitologia, Istituto Superiore di Sanità, Rome, Italy*

INTRODUCTION

The World Health Organization and the Food and Agricultural Organization have defined Veterinary Public Health as a "component of public health activities devoted to the application of veterinary skills, knowledge, and resources to the protection and improvement of human health". Veterinary medicine, in contrast, is "the branch of medicine concerned with the health of animal species other than man". "Good veterinary practices" are finalized to protect consumers, workers of farms and animal-related industries, environment and animals from zoonoses, communicable animal diseases of economic importance, chemicals improperly used in animal disease control, illegal substances used to enhance animal production, drug-resistant pathogens, food of animal origin of impaired quality, environmental pollution by farm wastes and dead animals, occupational diseases, economic losses, risks associated with man/animal/environment coexistence and ethic, social and economic implications of ill-being of animals.

Veterinary medicine has a historical and cultural tradition rooted in the ancient world when the veterinarian played a crucial role in the society. Animals, in fact, have always represented an important "economic" factor for both their working abilities (civil and military) and for food supply. In the "industrialized world", this situation lasted until the early years of the present century when mechanical means gradually replaced animals as draft sources and their chief role became the production of foodstuff (meat, milk, eggs, honey) and of other products of animal origin (hides, wool, etc.); to all this, fishing and fish farming products must be added. At the same time, animals were increasingly used as "pets", whilst man's receptiveness to the safeguard of animals' rights has greatly increased, so that now a proportion of the public opposes hunting and animal experimentation. This present situation has posed new problems which contributed to a quantitative modification of the role of veterinary public health activation. In view of its nature and function, veterinary medicine is prevalently a preventive medicine involved in the control of communicable animal diseases and, first of all, of zoonoses. In performing these activities, the veterinarian is helped by the possibility of intervening even in a drastic way. In this connection, it is appropriate to stress that important geographic areas were completely cleared from certain diseases through the application of "stamping out". This method was initially named "Lancisi's method" as it was first introduced in 1700 by Giovanni Lancisi, a papal archiater, to control rinderpest. An essential contribution to the modification of the criteria followed to prevent the diffusion of diseases was first given by vaccines and, later on, by the massive use of antibacterial drugs for both therapeutic and prophylactic purposes. The introduction of vaccines in veterinary medicine led to the solution of a number of health problems, but it constituted also an ideal test ground for the application of biotechnologies. It is in fact obvious that the large-scale use of vaccines in animals allowed much information to be acquired on the application of them in human medicine.

Starting from the 50's, pharmaceutical industry initiated the production of drugs of prevalently veterinary interest, and some methodologies of intensive farming, which are defined as "hard", specifically require a massive use of antibacterial drugs to control the diffusion of infectious diseases. Practically, drugs in farming activity have become an important economic factor in farming management. Such a situation, on the one side, allowed the increase of animal production whereas, on the other side, created new health problems which are still waiting complete solution. Adverse effect on animals' health are in fact reported, such as stress, presence of drug residues in foodstuffs of animal origin, and environmental pollution by zootechnical effluents.

Special attention should be given to problems connected with pet animals. These undoubtedly contribute to enhance the well-being of human population that is sometimes afflicted by psychological distress and, on some occasions, this can be substantially relieved by the presence of companion animals. The coexistence of animals and man, however, may pose health problems which should be prevented by taking strict hygienic measures which, anyway, must be known by the animals' owners. It is therefore imperative to establish a correct health education system addressed to veterinarians who, in turn, should transmit it to the public. Besides the steadily increasing number of pets, straying has conspicuously developed. This is a serious problem which already affects a number of geographic areas and which implies relevant risks for both human and animal health and for the environment.

We should also consider the occurrence, or even better, the discovery of "emerging" diseases for which no certain elements are available that would allow to evaluate the risks for animals and man. Such diseases drew the attention of important research teams that are actively operating and, probably, the work being done will help clarify the behaviour of some human pathologies.

This volume has been prepared by an interdisciplinary group including biologists, physicians and veterinarians who recognize the uniqueness of public health in its different expressions, among which veterinary public health. Besides some general items, which are intended to be read in a modern way, emerging problems are discussed such as urban zoonoses control, drug surveillance, modern technologies concerning the hygiene of food of animal origin, the surveillance of occupational diseases of farm workers and allied categories, and emerging pathologies.

The Editors

Agostino Macrì and Adriano Mantovani