Overview of pets vaccination in UK using records of SAVSNET

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Introduction

Vaccination forms a major part of the veterinary professions' strategy to improve the health and welfare of companion animals. However, there is a lack of national information regarding vaccination in small animal practice. Here we used data gathered through the Small Animal Veterinary Surveillance Network (SAVSNET), to provide new insight into vaccination behaviour in our large population of companion animals' attending healthcare settings in the UK.

Methodology

Data were collected electronically in near real-time from 101 veterinary practices (245 premises). These data comprised animal signalment, owner's full postcode and the vaccination histories of 77,981 dogs, 34,930 cats and 3,835 rabbits included within the SAVSNET database between 22/11/2013 and 30/09/2015. Vaccination dates ranged between 24/03/1998 and 30/09/2015. The term 'vaccinated' was defined as any animal that had received at least one vaccination and it was recorded in its clinical health records. In dogs, pathogens considered as 'Core' vaccines were canine distemper virus (CDV), canine parvovirus (CPV) and canine hepatitis virus (CHV); in cats, feline calicivirus (FCV), feline herpesvirus (FHV) and feline panleucopenia (FPV); and in rabbits, vaccines for myxomatosis and rabbit haemorrhagic disease (RHD). Proportions and confidence intervals (95%) were calculated using robust standard errors to allow for the clustering within veterinary practices.

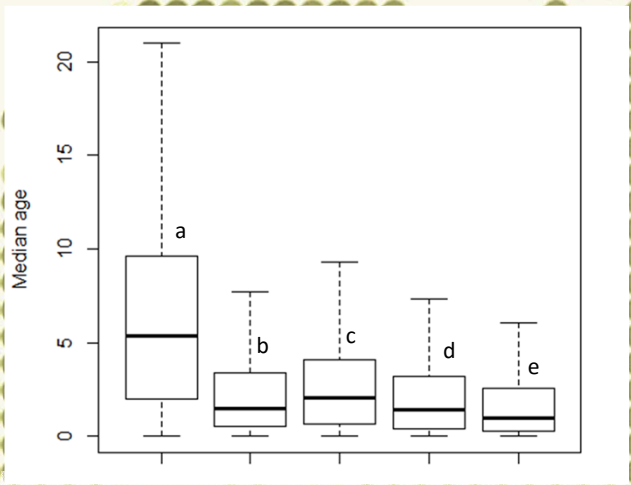

Figure 1. Median age (years) at first vaccination in total population (a), animals that have not been vaccinated (b), populations where full antigen is known (c), animals vaccinated with some unknown (d) and population where full antigen is unknown (e)

Results & Discussion

Overall, 77.9±0.2% of all animals were vaccinated (81.5±0.3% of dogs, 73.1±0.5% of cats and 48.4±1.6% of rabbits). Median age (years) at first vaccination was 0.21±0.01 for dogs, 0.33±0.1 for cats and 0.35±0.3 for rabbits. If we consider the three species together and we just compare taking into account if the animal have been vaccinated and if we known the antigen median age at first vaccination was similar (Fig 1). The number of vaccines per year of life for the population where all the antigens are known are the following ones: 1.159 for dogs, 0.90 for cats and 0.988 for rabbits. If we consider only core vaccines, 0.68 vaccines per year of life in dogs and 0.84 for cats.

Approximately 30% of dogs received one core vaccine in any given four year period, whereas for cats most received four core vaccines per four year period (Fig 2 & Fig 3).

As we can see in the Figures 4 & 5 there was little evidence to suggest animals were being regularly vaccinated at 12 weeks of age.

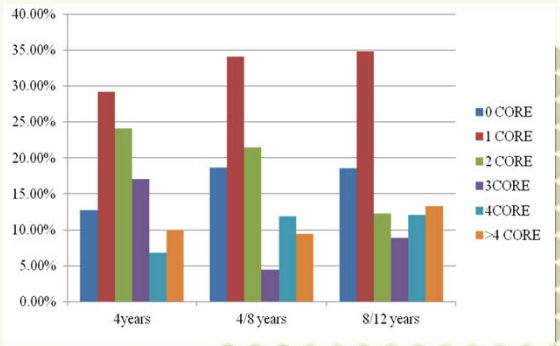

Figure 2. Core vaccine in any given 4 year period in Dogs

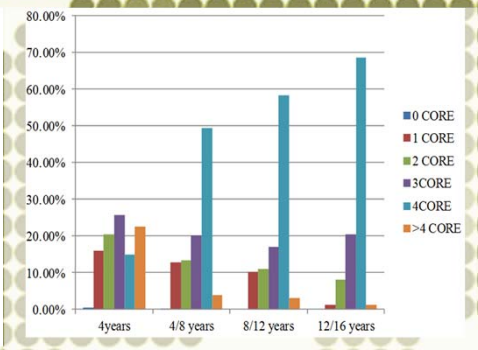

Figure 3. Core vaccine in any given 4 year period in Cats

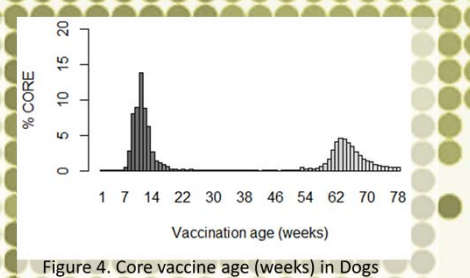

Figure 4. Core vaccine age (weeks) in Dogs

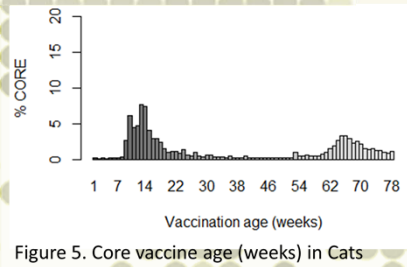

Figure 5. Core vaccine age (weeks) in Cats

0 CORE, 1 CORE, 2CORE, 3CORE, 4 CORE & >4 CORE means the number of CORE vaccines that the animal have received in this period of 4 years.

Conclusions

This pilot study provides evidence that dogs and cats in this population are being vaccinated differently. SAVSNET data will allow us to explore these differences, and how veterinary vaccination behaviour evolves in response to published guidelines.

Acknowledgements

The Ministerio de Educación of Spain is acknowledged by the FPU/MEC doctorate fellowship for Ana Muniesa. The Departamento de Industria e Innovación del Gobierno de Aragón and the Fondo Social Europeo provided financial support to Research Groups A35 of Universidad de Zaragoza for their basic running costs.

16-18 March 2016 Helsingør Denmark

Annual Meeting of the Society for Veterinary Epidemiology and Preventive Medicine (SVEPM)

SAVSNET The Small Animal Veterinary Surveillance Network

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