

Supplementary Materials

Avian scavengers and the threat from veterinary pharmaceuticals

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Supplementary Methods

Veterinary surveys

All interviews with veterinary practitioners in India followed a set and structured format. Interviews sought information on the species of animal treated (categorical yes/no data for a prescribed list of species); information on the relative proportion of "poor", "medium", "commercial" and "other" types of farmers seeking treatment; a list of which NSAID compounds each practice used; a list of conditions treated with NSAIDs; quantitative data on the dose, caseload, number of NSAID prescriptions per month and year of first use of each NSAID. The information was provided verbally and from memory and working knowledge of the veterinarians questioned. Where a range of values were reported for a specific question we used the mid-point of the range as a point estimate. Information on which species suffered from side effects was not requested. However, the majority of domesticated livestock treated by these practices were cattle, buffalo and goats and side effects were likely to have been predominantly observed in these species.

Table S1. Numbers and span of collection dates of liver samples from domesticated ungulates analysed for diclofenac and meloxicam by site-cluster.

Cluster	States	Diclofenac				Meloxicam			
		No. samples	No. >LOQ	1 st sample	Last sample	No. samples	No. >LOQ	1 st sample	Last sample
1	Gujarat	447	18	May 2004	Dec 2007	381	7	Jun 2006	Dec 2007
2	Maharashtra	900	57	Sept 2004	Jun 2010	711	38	Sept 2006	Jun 2010
3	Rajasthan	706	114	Jul 2004	Jun 2010	547	24	Aug 2006	Jun 2010
4	Rajasthan	811	96	Jul 2004	Jun 2010	661	55	Aug 2006	Jun 2010
5	Jammu & Kashmir, Punjab	422	12	Jan 2005	Feb 2010	332	22	Nov 2006	Feb 2010
6	Punjab, Haryana	389	54	Feb 2005	Jul 2010	326	36	Dec 2006	Jul 2010
7	Madhya Pradesh	757	57	Feb 2005	Jun 2010	582	39	Apr 2006	Jun 2010
8	Uttar Pradesh	585	38	Jul 2004	May 2010	305	9	May 2008	May 2010
9	Andhra Pradesh	460	6	Apr 2005	Jul 2010	306	5	Mar 2008	Jul 2010
10	Madhya Pradesh, Maharashtra	166	14	Feb 2005	Jul 2010	141	7	May 2006	Jul 2010
11	West Bengal, Jharkand, Bihar	564	58	Apr 2005	Sept 2009	346	22	Jun 2006	Sept 2009
All	All	6207	524			4638	264		

Figure S1. Smoothed curves representing changes over time in the arithmetic mean concentration (mg kg^{-1} wet weight) of diclofenac in liver samples from domesticated ungulates between 2004 and 2010 for eleven site-clusters, indicated by numerals adjacent to the curves. Curves are shown for periods that include the central 80% of sample collection dates for each site-cluster.

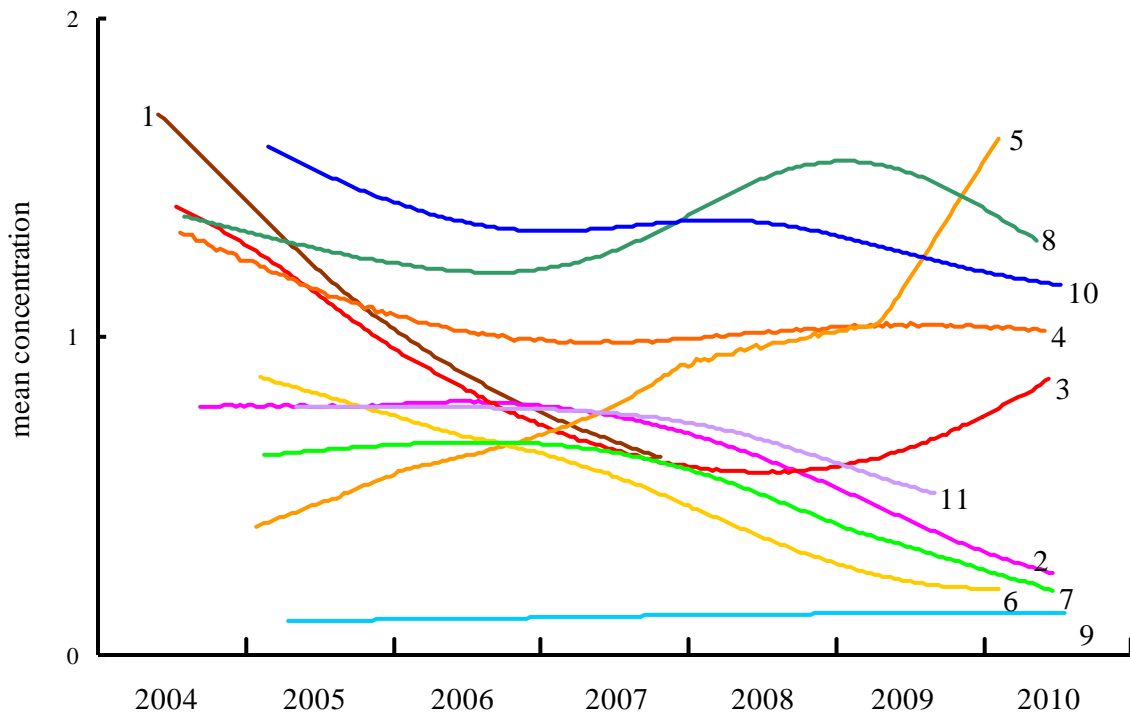


Figure S2. Smoothed curves representing changes over time in the arithmetic mean concentration (mg kg^{-1} wet weight) of meloxicam in liver samples from domesticated ungulates between 2006 and 2010 for eleven site-clusters, indicated by numerals adjacent to the curves. Curves are shown for periods that include the central 80% of sample collection dates for each site-cluster.

