



ELSEVIER

Contents lists available at ScienceDirect

The Veterinary Journal

journal homepage: www.elsevier.com/locate/tvj

Attitudes of farmers and veterinarians towards pain and the use of pain relief in pigs

S.H. Ison ^{*}, K.M.D. Rutherford

Animal Behaviour and Welfare, Animal and Veterinary Sciences Research Group, Scotland's Rural College (SRUC), West Mains Road, Edinburgh EH9 3JG, UK



ARTICLE INFO

Article history:

Accepted 2 October 2014

Keywords:

Farmer
Pain
Pig
Survey
Veterinarian

ABSTRACT

A survey of UK-based pig farmers and veterinarians was conducted, in order to investigate attitudes to pain and the use of pain relief in pigs. Survey respondents were asked to indicate which anti-inflammatory drugs they used or prescribed for pigs, how often these were administered, and the level of pain they associated with particular conditions. The survey found that veterinarians used a range of anti-inflammatory products to treat pigs with lameness. While both farmers and veterinarians gave similar pain scores overall, farmers rated gastrointestinal disease as more painful and conversely veterinarians scored lameness higher. Female and younger respondents gave higher pain scores than males and older respondents.

Overall, farmers and veterinarians had a positive attitude towards pain relief in pigs with the majority agreeing that animals recovered more promptly when pain relief was administered. Most farmers agreed that the recognition and management of pain is an important part of pig husbandry, and many expressed an interest in finding out more about identifying pain in this species as well as the treatment options available. The study highlighted potential barriers to the increased application of pain relief in pigs in that almost one-third of veterinarians and two-thirds of farmers did not agree that they discussed pain management with each other, while other respondents indicated that they found it difficult to recognise pain in pigs, and did not know how to treat it appropriately.

© 2014 Elsevier Ltd. All rights reserved.

Introduction

Despite recent advances in the assessment of pain in farm animals (Guatteo et al., 2012; Prunier et al., 2013), the application of appropriate pain relief is thought to be low (Flecknell, 2008). Possible reasons for this mismatch include cost, farming culture or tradition, practicality, the availability of and training in the use of analgesic drugs, and restrictions on the use of such compounds in food producing animals (Mellor et al., 2008). Previous studies examining attitudes towards pain and its mitigation in farm animals have found that, in general, females and more recent veterinary graduates gave higher scores when asked to quantify painful conditions (Raekallio et al., 2003; Huxley and Whay, 2006; Laven et al., 2009; Thomsen et al., 2010). In the case of cattle veterinarians, the use of analgesia for certain conditions was associated with higher pain ratings for those conditions (Huxley and Whay, 2006). Cattle farmers in Denmark scored painful conditions higher than veterinarians, but were less in favour of using analgesia, while veterinarians were more likely to agree that cows benefitted from analgesia (Thomsen et al., 2012).

Although the cost of analgesia remains an issue for cattle farmers in the UK, this barrier to their use could be over-estimated by veterinarians (Huxley and Whay, 2007). Other factors potentially negatively impacting on the increased use of analgesia include a lack of knowledge, and limited drug availability (Whay and Huxley, 2005; Hewson et al., 2007). A number of products are licenced for the treatment of painful conditions in pigs including non-steroidal anti-inflammatory drugs containing the active ingredients meloxicam, ketoprofen, flunixin, sodium salicylate and tolfenamic acid, along with the corticosteroid dexamethasone and the mild analgesic paracetamol.¹ These drugs are all classified as POM-V, so must be prescribed by a veterinary surgeon following clinical assessment of the animal or group of animals.² However, given that veterinary visits for individual cases of pigs experiencing pain would not be economically sustainable, once diagnosed and treated by a veterinarian, further cases of the condition can be treated by the farm staff, a record of which is regularly checked by the attending veterinarian.

¹ VMD, 2011. Veterinary Medicines Directorate: Product information database. <http://www.vmd.defra.gov.uk/ProductInformationDatabase/> (accessed 5 May 2014).

² See: NOAH, 2014. National Office of Animal Health: Veterinary Medicine Classifications. <http://www.noahcompendium.co.uk/Compendium/Overview/-42802.html> (accessed 5 May 2014).

* Corresponding author. Tel.: +44 131 6519292.

E-mail address: sarah.ison@sruc.ac.uk (S.H. Ison).

Given that, to our knowledge, the attitudes of pig farmers and veterinarians towards pain and pain relief in pigs in the UK have never been clearly defined, this survey was established to ascertain these attitudes and identify the scale and frequency of the use of anti-inflammatory drugs in the alleviation of pain in this species.

Materials and methods

Questionnaire design

Separate questionnaires were designed for farmers and veterinarians using Snap software (Snap Surveys) in both paper and online (via Snap WebHost) formats. The first section asked farmers about the farm on which they work, and veterinarians about their veterinary practice. Both questionnaires listed the following drugs by active ingredient (brand names were included in the farmer questionnaire): meloxicam, ketoprofen, flunixin, sodium salicylate, tolafenamic acid, dexamethasone and paracetamol. Survey respondents were given the opportunity to identify which drugs they used (both farmers and veterinarians) or prescribed (veterinarians only) for pigs. All respondents were asked to indicate how often ('almost always', 'frequently', 'sometimes', 'rarely', or 'never') they used or prescribed these drugs for lameness in breeding pigs. Veterinarians were given the opportunity to indicate if they had not given advice in relation to lameness, and farmers could record that they had never encountered the condition on their premises.

Respondents were also asked to rate eight different conditions with regard to the pain they considered breeding pigs experienced, on an ordinal scale from '0' (no pain) to '10' (very severe pain). Both farmer and veterinarian questionnaires also listed statements about pain and the use of pain relief in pigs, and asked respondents to indicate their level of agreement ('strongly agree', 'agree', 'neither agree nor disagree', 'disagree', or 'strongly disagree'). Questionnaires also collected other respondent information including: age, gender, percentage of working time spent with pigs, and years of experience working with pigs.

Questionnaire distribution

The questionnaires were piloted on five veterinarians and five farmers working at university pig units before they were distributed throughout the UK between September 2012 and June 2013. Several distribution methods were used in order to maximise the questionnaire's 'reach'. E-mail invitations to participate along with 1-week reminders, containing a link to the online questionnaire, were automatically sent to 129 veterinarians using Snap WebHost. Paper copies, along with a postage-paid envelope, were also sent out to 10 veterinary practices whose websites indicated that they worked with pigs. Twenty-nine members of the Scottish professional pig managers group were also e-mailed a link to the farmer version of the questionnaire, also followed up by 1-week reminders. Paper copies of the farmer questionnaire were included in the December 2012 issue of *Pig World* magazine,³ which at that time had 4200 subscribers, 3000 of which were pig farmers (i.e. farm owners, managers and stockpersons). A small number of paper copies of the questionnaire were distributed to pig farmers at BPEX⁴ meetings, during veterinary visits to farms, and at the Royal Highland Show.⁵

Data analysis

Both online and paper responses were transferred into Excel and analysed using Minitab 15 and Genstat (11th Ed.). Spreadsheets were cross-checked to minimise errors and results were considered statistically significant at $P \leq 0.05$, and tendencies discussed at $P \leq 0.1$. For the frequency of anti-inflammatory use to treat lameness, counts of farmers and veterinarians in each category ('almost always' to 'never') were tabulated and analysed using a chi-square test. Pain scores were analysed for differences between farmers and veterinarians, by gender and age group using ordinal logistic regression. For analysis of agreement between statements relating to perception of pain and use of pain relief, responses were coded between 'strongly agree' (1) and 'strongly disagree' (5), and responses of 'don't know' or 'no response' were treated as missing values, so that differences between farmers and veterinarians could be analysed using Mann-Whitney *U* tests.

Results

Fifty-two questionnaires were completed by veterinarians: 34 online (responses from the e-mailed link to the questionnaire), 18 on paper (from postal questionnaires sent to 10 practices). A total of 64 were returned by farmers: 10 online, 54 on paper (12 from

Table 1

Demographic profile of survey respondents.

Age group	Farmers				Veterinarians			Total
	Male	Female	No reply	Total	Male	Female	Total	
25–44	16	0	–	16	11	17	28	44
45–64	35	4	–	39	18	2	20	59
>65	6	1	–	7	4	0	4	11
No reply	–	–	2	2	–	–	–	2
Total	57	5	2	64	33	19	52	116

the Scottish Professional Pig Managers' Group, 45 through *Pig World* Magazine, and nine from other sources). Assuming the number of veterinarians working with pigs in the UK taken from our database ($n = 129$) was accurate, the response rate for veterinarians was approximately 40%. If we estimate the farmer questionnaire reached approximately 3000 pig farmers, the response rate for farmers was 2%. Table 1 illustrates respondents by age, gender, and occupation. Of the veterinarians surveyed, 20 worked in mixed practice, 17 in large animal practice, nine in pig practice, two for a pig production company, and one in a small animal practice, for a pharmaceutical company, and in academia, respectively. One respondent did not indicate where they worked.

Veterinary respondents worked with pigs between 1% and 100% of their time (mean, $60.2 \pm 41.3\%$), and had between 1 year and 45 years experience of working with pigs (mean, 18.6 ± 12.4 years). Fifty farmer respondents worked on breeder–grower–finisher farms, eight on breeder–weaner farms, two on breeder–grower farms, three had no breeding sows, and one respondent did not say. The mean size of the breeding herd on the farms on which respondents worked was 635 ± 1482 (37,493 total breeding pigs). Farmers typically spent between 5% and 100% of their time working directly with pigs (mean, $66.2 \pm 30.8\%$), and had between 3 and 62 years of experience of this type of farming (mean, 30.8 ± 12.5 years).

Use of anti-inflammatory drugs

Veterinarians used a greater range of drugs than farmers, with all respondents identifying at least one, whereas 24.6% of farmers did not identify any drug treatment (the majority used only one; Fig. 1). The most frequently used drug by active ingredient was meloxicam, followed by dexamethasone, ketoprofen, flunixin, sodium salicylate, paracetamol and tolafenamic acid (Table 2). The distribution of responses from farmers and veterinarians on the use of these compounds for lameness is illustrated in Fig. 2. Veterinarians used anti-inflammatories more frequently than farmers for lameness

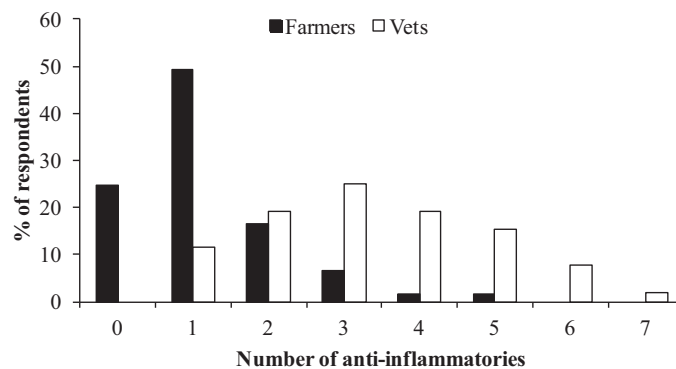


Fig. 1. Numbers of anti-inflammatory drugs used by farmers and veterinarians responding to survey questionnaire.

³ See: www.pig-world.co.uk/.

⁴ See: www.bpex.org.uk/.

⁵ See: www.royalhighlandshow.org/.

Download English Version:

<https://daneshyari.com/en/article/5797825>

Download Persian Version:

<https://daneshyari.com/article/5797825>

[Daneshyari.com](https://daneshyari.com)