O-132 Sheep farmer engagement with flock health plans and planning in Northern Ireland: where are we now?

by Crawford, P., Hamer, K., Lovatt, F., Behnke, M. and Robinson, P.

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Material and methods

A mixed methods approach was used to understand farmers' opinions of, and behaviours related to NSAIDs as part of a wider study considering medicine use in the Northern Irish sheep flock. Qualitative data was obtained through semi-structured interviews with 27 farmers and 15 veterinarians, and discussion groups involving sheep-sector stakeholders. Farm medicine records from 52 farms were also analysed. From this quantitative data the quantity of NSAID purchased was calculated and compared with farm antibiotic use and flock size.

Results and discussion

Seventy three percent (38/52) of the farmer medicine records indicated NSAID use. However, uptake of NSAIDs on these farms was highly variable. There was a five-hundred-fold range between the lowest and highest user on a mgPCU⁻¹ basis (0.00156 - 0.79365mgPUC⁻¹). Medicine records indicated that 16 farmers (31%) purchased NSAIDs by the bottle, rather than prescribed individual animal doses. Fourteen (27%) purchased 10ml or less over a one-year period. Meloxicam was the most commonly used NSAID (96%), with small quantities of flunixin (2.6%) and ketoprofen (1.4%) also used. The qualitative data highlighted uncertainty among farmers regarding which medicines provided analgesia. Veterinarians saw potential for increased NSAID use following parturition to displace habitual antibiotic administration, by some farmers, to sheep appearing dull without obvious evidence of infection.

The veterinarians thought that they had a significant role in encouraging farmers to use NSAIDs, particularly in leading by example, despite concerns about the lack of an authorised NSAID for sheep. Some farmers reported observing a positive effect in survival, appetite and speed of recovery, and indicated they would use NSAIDs for future cases. However, not all veterinarians were convinced that farmers perceived a benefit from NSAID use, a view supported by the scepticism expressed by some of the farmer interviewees.

Conclusion and implications

The critical role of the veterinarian as an advocate for the welfare of the sheep and the benefits of NSAIDs has been demonstrated. There remains significant opportunity to increase the use of NSAIDs. An authorised product, with a defined dose schedule and withdrawal period, may further enhance uptake and make promotion of NSAID use simpler.

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Sheep farmer engagement with flock health plans and planning in Northern Ireland: Where are we now?

P. Crawford^a, K. Hamer^b, F. Lovatt^c, M. Behnke^a, P. Robinson^a

^a Harper Adam's University, Telford, United Kingdom ^b University of Glasgow, Glasgow, United Kingdom

^c University of Nottingham, Nottingham, United Kingdom

Corresponding author: Paul Crawford. E-mail: pcrawford@live.harper.ac.uk

Keywords: Health planning; Sheep; Farmers; Veterinarians

Introduction

Flock health planning should be a cyclical process of assessment, evaluation, action and re-assessment. The intention being to improve stockmanship and the use, and stewardship, of veterinary medicines. Done effectively, this should improve animal health and welfare as well as farm productivity and financial returns.

The health plan (HP) became a central facet of the quality assurance schemes (QAS), introduced by the agri-food industry in the United Kingdom in the early 1990s, in response to demands for greater transparency and accountability in food production. While farmers were initially rewarded with bonus payments for QAS membership, within ten years membership become essential for many farmers simply to gain market access. Little is known about the current views of farmers about, and the impact of, HPs, yet HPs continue to be heavily promoted to Northern Irish (NI) sheep farmers.

Material and methods

A mixed methods approach was used to explore farmers' and veterinarians' opinions and behaviours related to QAS and HP as part of a wider study of medicine use in the NI flock. Data was obtained through an online scoping questionnaire, semi-structured interviews with 27 farmers and 15 veterinarians, and discussion groups with wide-ranging industry stakeholders. The association between a farm having a HP and implementation of 12 industry-recommended flock health activities was considered using the Fisher's exact test.

Results and discussion

Of the recommended activities, only '*Treating cases of footrot promptly with an injectable antibiotic*' was statistically associated with a farm having a HP (P < 0.001); however, this association was negative, meaning farmers with a HP were less likely to follow best practice. Farmers reported a reluctance to pay for veterinary advice, while some veterinarians reported a lack of time to develop HPs for farmers. Farmers predominantly saw the HP as a static physical document rather than a proactive, reflective and collaborative planning process. The perceived quality of their flock's HP varied, and farmers reported it had limited impact on their management practices.

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Veterinarians tasked with completing HPs felt restricted by inadequate and incomplete flock production data, a lack of confidence in the accuracy of farm medicine records and limited knowledge of farm practices; this led some to believe that the HP may fail to address critical issues.

Conclusion and implications

If the HP is to achieve its potential, new ways to engage farmers and veterinarians in an active flock health planning process need to be identified. The focus needs to be shifted from a static, physical document to the intended process of reflective health planning. To facilitate this, user-friendly data capture tools for sheep farmers are needed, as well as sufficient veterinary resources for sustainable active engagement to happen.

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A unique quality assurance and herd health programme for Finnish sheep herds

J. Rautiainen, E. Rautiainen

Lammasmaailma Oy / Sheep World Ltd., Ylöjärvi, Finland

Corresponding author: Johanna Rautiainen. E-mail: johanna@lammasmaailma.fi

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Introduction

Animal diseases and deficiencies in animal husbandry weaken the productivity and profitability of farming and endanger animal welfare. In addition to acute diseases, like parasitic gastroenteritis, coccidiosis, perinatal lamb mortality, mastitis and disturbances in calcium and energy metabolism, subclinical problems occur. Our aim was to draw up quality assurance programme to prevent animal diseases, improve treatment and husbandry practices by influencing the root causes of the problems in a typical Finnish herd with 100 – 600 ewes. Program helps farmers to do right things at the right time with the herd in sheep shed and on different kind of pastures.

Material and methods

To the programme, we applied some of the HACCP principles. Initially, we described the events of the ewe production year and constructed a unified lamb breeding process. We set perspective on ewe, on the assumption that ewe's health and wellbeing form the basis of healthy lambs. We assessed which supportive functions in sheep farming, are necessary to management the production process and for which good practice guidelines (GMP) can be drawn up. Thirdly, we assessed what kind of indicators producer needs to monitor the management of the process.

We identified six stages of production in ewe's production year, which can be treated as sub-processes of lamb husbandry and for which it is possible to establish control points to manage the process. Production stages were named and their outputs were defined: (1) Selection of ewes (2) heat synchronisation; (3) Ewe clinic (scanning, health check, groupping); (4) Feeding in late pregnancy (5) Maintenance of good lactation (6) Weaning lambs (steadily growing lambs). In addition, we identified the necessary support functions, related to the sub-processes, for example, condition scoring, farm biosecurity and feeding plan based on analysed silage. Thirdly, we selected and drew up three types of indicators for producers: Indicators describing the state of the process at key control points (e.g. the length of the tupping period); Indicators describing the utilisation of key support measures (e.g. the use of adaptable pen structures); Indicators describing the success of production (e.g. lamb mortality).

We allso compound to health program Finnish model to control gastrointestinal roundworms (EMOP XII.Turku.2016). Model includes grazing plans for farms. Plans are based on pastures history, their risk assessments in relation to gastrointernal parasites, regular FEC monitoring, lamb weights. Grazing plan is integrated to farms cultivation plan. Now, even advices about regenerative grazing are included, to promote healthy soil and versatile nature.

Conclusion

Quality assurance program we have drawn up (Sheep Health 2020) creates good qualifications for comprehensive management of animal disease risks and compliance with good practices in sheep herds. Instead of partial optimisation, it is more profitable to avoid underperformances an any individual production stage.

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