New Zealand Veterinary Journal ›
Te Hautaka Tākuta Kararehe o Aotearoa
Volume 59, 2011 - Issue 1: Achieving real change in adoption of new knowledge in the dairy industry

Feature Series Articles: Achieving real change in adoption of new knowledge in the dairy industry

Economic aspects of mastitis: New developments

H Hogeveen, K Huijps & TJGM Lam

Pages 16-23 | Received 18 Jun 2010, Accepted 29 Oct 2010, Published online: 02 Feb 2011

Cite this article https://doi.org/10.1080/00480169.2011.547165

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Abstract

Good udder health is not only important for the dairy farmer but, because of increasing interest of consumers in the way dairy products are produced, also for the dairy production chain as a whole. An important role of veterinarians is in advising on production diseases such as mastitis. A large part of this advice is given around the planning of management to maintain or improve the udder health status of a farm.

Mastitis is a costly disease, due to losses (a reduction of output due to mastitis) and expenditure (additional inputs to reduce the level of mastitis). Worldwide, published estimates of the economic losses of clinical mastitis range from €61 to €97 per cow on a farm, with large differences between farms, e.g. in The Netherlands, losses due to clinical and subclinical mastitis varied between €17 and €198 per cow per year. Moreover, farmers tended to underestimate these costs. This indicates that for a large

proportion of farms there are many avoidable losses. In order to provide good support to farmers' decision-making, it is important to describe the mastitis setting not only in terms of disease, e.g. incidence of clinical mastitis, but also in monetary terms; and to make good decisions, it is necessary to provide the dairy farmer with information on the additional expenditure and reduced losses associated with alternative decisions. Six out of 18 preventive measures were shown to have a positive nett benefit, viz blanket use of dry-cow therapy, keeping cows standing after milking, back-flushing of the milk cluster after milking a cow with clinical mastitis, application of a treatment protocol, washing dirty udders, and the use of milkers' gloves. For those measures that included a large amount of routine labour or investment, the reduced losses did not outweigh the additional expenditure.

The advisor cannot expect that measures that are cost-effective are always implemented. Reasons for this are the objectives of the dairy farmer can be other than maximisation of profit, resources to improve the mastitis situation compete with other fields of management, risk involved with the decision, economic behaviour of the dairy farmer, and valuation of the cost factors by the dairy farmer. For all decision-makers this means that, although financial incentives do have an effect on the management of mastitis, it is not always sufficient to show the economic benefits of improved management to induce an improvement of management of mastitis.

KEY WORDS:

Udder health | economics | decision support | management | motivation

Acknowledgements

A large part of the research described here was carried out as part of the 5-year mastitis programme of the Dutch Udder Health Centre, and was supported financially by the Dutch Dairy Board.

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Source: Journal of Agricultural Economics

Stochastic bio-economic model of bovine intramammary infection

Source: Livestock Science

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Source: Journal of Dairy Science

Challenging the myth of the irrational dairy farmer; understanding decision-making related to herd health

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